

**The academic experiences of Grade 12 top achievers in maintaining  
excellence in first-year university programmes**

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“WE MUST travel on the inside before we can travel on the outside, because the journey of growth and success is first an internal one. The first person you lead is you – and you can’t lead effectively without self-discipline.”

*The Maxwell Leadership Bible (NKJV)*

Doing something is Dangerous, doing nothing is Worse; the Best thing is to be done with the Self.

Thoko Poppy Mahlangu (PhD, South Africa)

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## DECLARATION

I, Thoko Poppy Mahlangu, declare that:

**The academic experiences of Grade 12 top achievers in maintaining excellence in first-year university programmes**

is my original work, all sources that have been used or cited have been acknowledged and that I have not submitted this work for degree purposes at any tertiary institution.

Signed: .....

Date: .....

T.P. Mahlangu



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PhD

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## ABSTRACT

The purpose of this study was to explore, understand and explain the academic performance and experiences of Grade 12 top achievers in first-year university programmes. The study also aimed at exploring the perceptions and expectations of these students with regard to teaching and learning. The study was conducted with 2011 and 2012 matric top ten learners from Mpumalanga province in South Africa.

In this study, I used mixed methods research. Accordingly, a questionnaire was administered; this preceded the qualitative part of the study in which I used a standardised, open-ended interview and document analysis. The study subsequently revealed that in their first year at university generally, first-year students' experiences and academic performance are important for students' transition into university, persistence and academic success.

In this study I move from the basic premise that first-year students enter the university (system) with individual characteristics such as self-conception, language proficiency, study skills, socio-cultural orientation and socio-economic backgrounds, as well as attitudes towards academic work. Consequently, the first-year student finds the transition from school to university to be one of the most difficult tasks to accomplish.

The study reports on the experiences and academic performance of first-year students at different universities and studying different courses or degrees. One of the major findings of the study is that although some of the participants (top achievers) complained about the lack of support on the part of universities, the results revealed that there was what I call 'compelling forces' at different universities that assisted top achievers/participants in maintaining the momentum in their academic performance.

**KEYWORDS:** academic performance; academic experiences; achievement; top achievers; experiences; perceptions; first-year university; attribution theory; support structures; university programmes

## ABBREVIATIONS

CHE	Council for Higher Education
DBE	Department of Basic Education
FET	Further Education and Training
FET College	Further Education and Training College
GET	General Education and Training
HE	Higher education
HEIs	Higher education institutions
LoLT	Language of Learning and Teaching
MDE	Mpumalanga Department of Education
NCS	National Curriculum Statement
NSC	National Senior Certificate
QA	Quality Assurance
QUAL	Qualitative
QUAN	Quantitative
SA	South Africa
SC	Senior Certificate





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## CHAPTER 1

### INTRODUCTION AND OVERVIEW

#### 1.1 INTRODUCTION

The intention of this study was to investigate the academic performance of Grade 12 top achievers in Mpumalanga province. Since they are no longer at school, these top achievers were traced at their different higher education institutions (HEIs) (i.e. universities). This then suggests that the study took place within the university context, which then places it in the higher education field. To be more specific, the study investigates the way these Grade 12 top achievers from Mpumalanga province perceive university teaching and learning and what their expectations of the university were in their first year of study. Furthermore, the study investigates the way the top achievers develop and maintain academic excellence in their first year at university. In that context, the study also seeks to understand how the top achievers have utilised the support structures for learning at the university in their first year so as to accelerate and sustain their excellent academic performance.

A lot has happened in the South African education system, especially since the democratic government came into power in 1994. Prior to 1994, there was little or no curriculum reform and haphazard implementation. Since 1994, however, many significant changes have taken place in the education system, which have to some extent compromised the assessment, standard and quality of our education. These changes brought about a number of differences in terms of the Grade 12 learners as products of the system (that is, Grade 12 as marking the end of the formal schooling period), because since then our Grade 12s have had different experiences in their 12 years of formal schooling, especially in teaching and learning. These different experiences emanated from how teachers in various schools interpreted the changes in the curriculum.

What has become evident is that even in those cases where schools are known to be excellent and produce good quality results, the quality and level of achievement in these schools cannot necessarily be compared to that of the past. The question that we may pose here is: What went wrong? On that note, we also need to ask ourselves another question: ‘Will the top achievers in Mpumalanga be able to maintain their level of excellence into tertiary education and even beyond?’ In other words, we need to ask ourselves: Are our top achievers able to cope in the demanding HEI academic environment? Comparatively speaking, are we able to

look at and analyse the performance of our current Grade 12 top achievers against the performance of the top achievers of, for instance, the past ten years. Although this is not the focus of this study, this might to a great extent assist policy makers and even HEIs in setting standards for programmes or courses.

Watkins, Mboya and Sachs (2001:143) note that after the excitement of the early days of the coming to power of the Government of National Unity in the new South Africa had died down, it became clear that a major problem for the new leaders was the low standard of living of the great majority of black South Africans. However, according to Watkins et al. (2001), a major hurdle cited in raising those standards was the low level of educational attainment and the low quality of schooling provided for the majority of this community. For this reason, provincial departments of education should take the initiative in providing bursaries for the top ten matric achievers in every academic year.

Miller, Bradbury and Lemmon (2000:166) maintain that it is widely acknowledged that assessment methods, such as final examinations, are far from neutral and may strongly influence both the content and form of a learning process that culminates in an assessment that yields an index of success or failure. To find out how true and valid Miller et al.'s (2000) statement is, I had to come up with strategies that might assist in tracing post Grade 12 academic performance and find out how the assessment at Grade 12 has yielded an index of success as anticipated by this study. On the other hand, Kahn (2001:169) attests to the fact that disparities still face black learners in the South African school system. Furthermore, Kahn (2001) stresses that these disparities present challenges to higher education specifically and industry generally with respect to equity targets. I need to mention here that I am challenged by Kahn's (2001) position that the main indicator of success for individuals and schools is the Senior Certificate examination which is conducted by each province and moderated by Umalusi.<sup>1</sup>

Naidoo (2006:10) contends that despite their limitations, examination (or assessment) results are of great importance to any country, impacting on the nation's self-image. The fact that the National Senior Certificate<sup>2</sup> (NSC) examination plays an important role in the entire

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<sup>1</sup> Umalusi is the Council for Quality Assurance in General and Further Education and Training. As a statutory organisation, it monitors quality in General and Further Education and Training.

<sup>2</sup> National Senior Certificate is a qualification at level 4 on the National Qualifications Framework (NQF) and was awarded for the first time in 2008 to Grade 12 candidates who complied with the requirements set out in the national policy document, The National Senior Certificate: A qualification at level 4 on the NQF.



education system cannot be denied. Naidoo (2006) further states that this examination concludes the twelve or more years of schooling and is regarded as the entrance to higher education. In other words, the NSC is a pivotal issue for all citizens of this country. In the same vein, Lolwana (2006:25) emphasises that a senior certificate or matric has become a “positional good”, the value of which depends on how many others have it. Ultimately, Cosser (2006:253) maintains that according to the South African education system, Grade 12 learners who have achieved a Senior Certificate in essence have a number of options open to them; they can opt for higher education institutions, or enrol with other further education and training (FET) institutions (such as FET colleges) or proceed straight to entering the labour market.

Miller et al. (2000) also argue that part of the current attempt to transform higher education is to ensure that students from a broad diversity in terms of educational, linguistic and cultural backgrounds can be accommodated within a common system. Therefore, this does not only mean that selection and admission policies should take account of educational inequalities but also that those students who are admitted have access to educational programmes that enhance their learning potential (Miller et al., 2000). However, I did not want to confine this study to high school academic background but I used the academic performance or Grade 12 results as a point of departure in answering the question on how the top achievers performed at tertiary institutions compared to their matriculation results. Therefore, I need to indicate that the major focus of this study was on students’/top achievers’ academic experiences within the field of higher education as based on their previous academic performance (i.e. matric).

It is therefore not surprising to note that some researchers (Du Rand & Viljoen, 2000) have also realised that students studying in South African HEIs are vulnerable to changing “epistemic contexts and postures”. In the study on students’ experiences of challenges and threats, Van Heerden, Myburgh and Poggenpoel (2001:158) used the concept of “epistemic posture” which relates to the manner in which people “do knowing” and their presumptions concerning the “epistemic meta-narrative”. Hence, Van Heerden et al. (2001) argue that changing epistemic contexts and postures lie at the heart of the change in HEIs. Again they (Van Heerden et al., 2001) insist that it is within these changing epistemic contexts that students have certain expectations of their lecturers. Arguing further, they (Van Heerden et

al., 2001) also pointed out that one cannot take it for granted that students' expectations correspond with the epistemological changes that are taking place in an institution.

In this section I tried to draw a link between the high school academic background and the most important assessment level, namely, Grade 12, achievements and its direct influence on performance at HEIs and the present scenario at such institutions. Although the study focuses on the academic experiences of first-year university students based on their achievements in Grade 12, we should bear in mind that the high school academic background or experiences might have a significant influence on achievement.

An overview of the study is presented in this chapter. It is divided into eight sections. Section 1.1 introduces the subject and the purpose of the study. Sections 1.2 and 1.3 present the background of the study and the context of South African examinations, respectively. The problem statement and the research questions of the study are presented in sections 1.4 and 1.5 respectively. Section 1.6 covers the rationale of the study. Section 1.7 and 1.8 present the theoretical framework and ethical consideration discussion, respectively. Finally, section 1.9 contains the chapter outline.

## **1.2 BACKGROUND**

Fourie (2001:84) maintains that when teaching is assessed, we want to assess both what it hopes to help students achieve and whether it achieves this. Thus, we want to know to what extent the teaching and the course will have a sustained impact on the manner in which students think and act (Fourie, 2001). In other words, does the teaching as such assist and motivate students in any way to learn something we consider to be significant and relevant?

Fourie (2001) attests to the fact that students are thus a potentially valuable source of information with regard to their lecturers' teaching performance. Although the study does not focus on lecturers as part of the subjects, the information that the students provide on their lecturers would significantly contribute to addressing the research questions and therefore assist in making relevant recommendations.

According to Grobler and Myburgh (2001:4), it is a fact that the learners in our schools should not only be given knowledge but also cognitive skills (thinking skills) which will enable them to cope satisfactorily with new, increasingly more complex or difficult problems. Furthermore, Grobler and Myburgh (2001) argue that it has become important for the teacher

to try and obtain answers on how he/she can help learners towards excellent academic achievement, as this seems to be of great significance for the development of a positive self-concept in learners. They (Grobler & Myburgh, 2001) also highlight the fact that there are different factors that could play a vital role in academic achievement. Grobler and Myburgh (2001) raised this argument based on the research findings of Myburgh, Grobler and Niehaus (1999), who found that some of the factors influencing academic achievement include IQ, self-concept, time concept and background characteristics. On that note Grobler and Myburgh (2001) state that, the timely completion of assignments promotes the attainment of scholastic and cognitive skills and capabilities. Again, as indicated by Grobler and Myburgh (2001), this timely addressing of assignments can refer to effective time management, which is said to be one of the aspects of the everyday management of life. On that note, Grobler and Myburgh (2001:4) state that time and the conceptions thereof are “inseparably associated with achievement and success”. Hence, Grobler and Myburgh (2001:4) conclude that this conception about time expresses the relationship between mental health, time management, the experience of success and a healthy self-concept. In relation to a time concept that is said to be associated with achievement and success, Grobler and Myburgh (2001) then ask the question as to what a relevant time concept is that may strengthen academic performance and mental health.

Aspects that specifically pertain to this study include time management, cognitive skills (thinking skills), and the experience of success. I would contend here that students may find it difficult to produce excellent academic results if they are not fully equipped to manage their study time. The point raised by Grobler and Myburgh (2001) is crucial, since I am tracing the academic experiences of top achievers in their first years of study at university or a HEI. These are those learners who performed above the level of minimum requirements and were awarded trophies and bursaries by the Mpumalanga Department of Education.<sup>3</sup> The credit for this achievement must, in addition to their own efforts, surely also go to their respective educators, who in the end ensured that their learners produced excellent results. Hence, the study looks at the matriculation results as its point of departure.

As a researcher I am of the opinion that many factors contribute to learners and students producing excellent results. For instance, in high schools educators follow up on assignments that are due for submission, punish learners in order to control their behaviour, and call the

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<sup>3</sup> Mpumalanga Department of Education refers to the department responsible for pre-primary, primary and secondary education, from Grade 0 to 12 in Mpumalanga province.

parents to the school in cases where the learner does not co-operate with the educator(s). However, this is not the case when one is at a tertiary institution. Consequently, this study attempted to investigate the way students utilise the support structures available at university in order to better their academic achievement. Therefore, this will also form part of the tasks that this study will have to carry out in order to come up with strong, valid and reliable results.

As a researcher, I concur with the point raised by Grobler and Myburgh (2001) that because of political and social innovations and the impact of these changes on education structures, leaders in South Africa are putting new and even higher demands on academic performance. Moreover, the need for higher achievement is also demanded by the modern technological society. Seen in this light and in view of the fact as mentioned earlier that time concept is related to achievement and success, how can learners be successful if they are unable to manage their study time effectively. Hence, Grobler and Myburgh (2001) conclude that the challenge is that most South African learners are not fully equipped for academic achievement, having for example, a wrong self-concept and inappropriate time concept. This then brings me to the question as to how the subjects of the study, namely, top matric achievers, managed to produce excellent results if, as some researcher believe, learners at high school are insufficiently equipped.

In terms of this debate, Paras (2001) believes that the reasons for failure can also be explained by examining the reasons for success. One of the challenges Paras (2001) mentions concerning higher education is the fact that, despite the admission requirements being relaxed, the curriculum has not changed. In his study, Paras (2001:70) found that one of the possible reasons for a sudden decrease in the pass rate is that the curriculum has not changed to coincide with the admission policy. Although this study focuses solely on the academic achievements of the learners who performed excellently in their matriculation examination and their perceptions, experiences and performance at first-year university level, I will not overlook other factors that may come up that could also have an influence on the academic performance of students.

On that note, Malefo (2000:40) maintains that the literature on black students' academic performance in predominantly white universities has revealed many factors which have been investigated and found to have an impact on those students' performance results. According to Malefo (2000:40), such factors can be divided into two main research categories, which

typically characterise studies on black students in white universities; namely, studies of psychological constructs within the individual and studies of environmental factors imposed on the individual. With this statement, Malefo (2000) has in fact delineated the theoretical framework that I have adopted for the purpose of this study. Malefo (2000) further elaborates that some of the factors involved in the academic achievement of black students in predominantly white universities include students' background factors such as educational background, the socio-economic status of parents, motivational aspects, attribution of success, expectations for performance and family environment.

Malefo (2000) also raises another category which relates to students' attitudes and behaviours, for example study habits, academic integration which includes adaptation, and problems linked to emotional difficulties like homesickness and interpersonal relationships, student accommodation at university, self-image and levels of preparation. Another category that Malefo (2000) alludes to is the faculty attitudes and behaviours, which include the teaching style of the faculty, arrangements for contact with students outside of lectures and faculty concern for student development. However, this notion is not accepted as a fact by some researchers because Malefo (2000) also contends that some researchers have strongly discredited the belief that academic performance depends solely on cognitive factors and have looked toward the intertwining of socio-emotional, intrapsychic and other non-cognitive variables in the pathway to academic success or failure for black students.

In research on students, especially top achievers, who face challenges in their studies as a result of the institutions being too demanding or students being unable to adjust, there have been differing opinions among researchers. For example, Malefo (2000) argues that several studies have made significant contributions to the notion that institutions need to change to accommodate greater diversity rather than to expect students to adapt to institutional practices. This argument is further supported by Kleemann (1994) and Fraser and Killen (2003), who argue that it is both imperative and useful for students and universities to focus attention on the institutional problems that hinder student success. On that note, Fraser and Killen (2003:254) state that South African universities are changing in many important ways; for example, entry standards are changing, programmes are focusing more specifically on the outcomes that learners are required to achieve and student populations are becoming more diverse. Moreover, these changes are occurring within a climate of increased accountability.

Furthermore, Fraser and Killen (2003) stress the point that it is imperative for universities to consider the standards of their academic programmes and the progression rates of students. According to these authors, (Fraser & Killen, 2003) factors like standards of academic programmes and progression rates have produced a number of ideas about what should be happening in universities if a diverse student group is to be successful in outcomes-based programmes that maintain high standards. Fraser and Killen (2003:254) also comment on the fact that some teachers argue that university entry standards are the most significant contributory factors of success, while others argue that non-academic factors must also be considered. In line with this point, Kleemann (1994) used student interviews and Richardson's model of the three stages an institution becomes involve in when adapting to diversity, to examine the institution's adaptation to diversity and student performance. In this study, Kleemann (1994) identified five factors that are important to student achievement and success through to degree completion (i.e. graduation); namely, academic skills and support, social support, family and community support, opportunity orientation and financial support. As a researcher I support the statements made by the above-mentioned researchers, (Kleemann, 1994; Fraser & Killen, 2003) because the proposal they are making would also assist in addressing some of the research questions that have motivated this study.

Based on the argument above, one reason among others given by Ferreira (1995) for university drop-out is that the transition from school to university is too drastic. Ferreira (1995:154) contends that this may be attributed to a difference in approach in that schools concentrate on the acquisition of knowledge whereas universities require the application of knowledge combined with independent study. As part of this study, it is therefore essential to determine what universities currently do to bridge the gap between school and university, if anything, and to further ascertain the effectiveness of those measures.

### **1.3 SOUTH AFRICAN EXAMINATION CONTEXT**

Debates and arguments have been raised concerning the Senior Certificate (SC) and the standard attached to it. Cosser (2006:259) views the SC as a passport to future endeavour, or as serving as a key gate-keeping function in the South African education system. Similarly, Ndhlovu, Sishi and Deliwe (2006:8) maintain that, historically, examinations have been a filtering mechanism designed to distinguish those who should not enter higher education from those with endorsements. Ndhlovu et al. (2006) further state that the SC has also been a

filter in this respect, and a signal to employers that a key schooling hurdle has been overcome by learners.

Many researchers (Kanjee, 2006; Naidoo, 2006) argue that public examinations are a core feature of education systems in the world. Kanjee (2006:72) stresses the point made by the World Bank (2001) that in Africa alone at least 65 examinations are currently administered at different levels (i.e. primary schools, secondary or senior secondary schools) across 25 countries. Kanjee (2006) further indicates that the specific purpose and use of examinations vary across and within the different countries.

Kanjee (2006:72) cites Kellaghan and Greaney (2003), who note that examinations are generally used to

- control and monitor standards
- identify and select learners to enter the next grade level
- certify learners at the end of schooling, and
- in some instances, act as an accountability tool for teachers and schools.

Like any other country in the world, national public examinations feature prominently in the South African school system. However, at present these examinations are administered at the end of formal schooling and consequently command the greatest interest and focus. According to Kanjee (2006), this is not surprising given the significant impact these exams have on the lives of learners. The matric certificate (i.e. the NSC) is issued upon completion of level 4 of the National Qualification Framework (NQF) to learners who have satisfied the requirements of the qualification. Umalusi is the statutory body charged with assuring the quality of all assessment activities in both the General and the Further Education and Training bands (GET and FET), within which the matric exams fall (Kanjee, 2006).

Kanjee (2006:76) notes that the primary purpose of the matric exams is to certify:

- The ‘successful’ acquisition of specific competencies after twelve years of schooling.
- Learner competence to enter into the higher education (HE) sector.

According to Kanjee (2006), the former purpose is especially important since this clearly signals the intention of the state not only to maintain the responsibility of providing quality

education to its citizens but also to ensure that this responsibility is adequately fulfilled. Ultimately, Kanjee (2006:73) indicates that the typical scenario pertaining to the matric exams in South Africa can be described as follows:

- Preparation for exams usually begins in Grade 11 and includes a trial exam usually administered towards the end of Grade 12.
- Exams usually begin mid to late October and end some time in November.
- The results are released before the end of the year amid a huge frenzy of expectation, jubilation and disappointment.
- Results are first announced by the Department of Education (DoE), usually at a press conference, before being made public.
- At both the national and provincial level, the primary focus is on the results, usually the pass rate.
- Education departments in each province confer special awards to their ‘top ten learners’ (those obtaining the highest total scores in the province).
- The release of the results is generally followed by a host of responses and critique in the national and local media from both the general public and the academic community.
- A few months after the December release, the ‘matric’ issue fades into the background until the next set of exams and this scenario is generally repeated year after year.

The third point from the bottom in the above scenario serves as my point of departure in addressing the objective of this study. In other words, this study also seeks to trace the academic performance of these top ten learners at their different HE institutions. I therefore investigate these learners’ perceptions and experiences and also explore the factors that contributed to their achievement. In this study I also attempt to find explanations for their successes or failures. This research will eventually assure quality in that it will try to explore quality processes within the HE sector after these learners have produced quality ‘matric’ results. In other words, there will be some formal tracing of students from the Grade 12 results and the results of these learners in their first year at university, irrespective of the HEIs they have been registered with.



In 2010, the pass rate in Mpumalanga province was reported as having improved from the previous year's results. *The Star* (2011) reported that despite the teachers' strike which extended over three weeks and the disruptions caused by the World Cup, the matric pass rate in Mpumalanga province improved by nearly 10 percentage points over that of 2009. The Provincial Education MEC attributed this increase to interventions such as a winter school programme and a spring holiday programme, the implementation of a 'Dial-a Tutor' programme, as well as radio lessons and weekend classes and study camps (*The Star*, 2011).

This study is further motivated by the study conducted by Huysamen (2000), which found that for both educationally disadvantaged and non-disadvantaged students, first-year percentage marks were better predictors of subsequent performance than were matriculation marks. Hence, this study also explores the contributory factors in relation to matric results and academic performance at university or HEIs, as identified by the students themselves.

Botha, McCrindle and Owen (2003:132) maintain that in the South African education system, at the end of their school career (Grade 12), students write a standardised, independently set, matriculation examination and the results of this examination are used as the main criteria for admission to tertiary institutions. Based on these facts, Botha et al. (2003:133) also expressed the view that "if students meet the entrance criteria set by the HEIs, why then are they not progressing in their chosen course of study?" They also state "Are the entrance expectations and acceptance standards too lenient?" To answer both questions as expressed by these researchers also required some intensive study on the achievement of first-year university students, as a means of tracing what went wrong, if anything did, in light of their excellent performance in the final phase of their schooling.

On that note, Ochse (2003) argues that, unfortunately, some of the factors that contribute to student dropout and failure (such as poor academic background) are difficult if not impossible to rectify at a tertiary level. However, Ochse (2003:67) makes the claim that various major psychological theories have appeared to offer some hope in that regard. According to Ochse (2003:67), these theories include expectancy-value theory, self-concept theory and efficacy theory, as well as self-worth theory which postulate that mutable cognitive factors like self-concept, self-esteem and expectations of success have an important impact on motivation and performance. Hence, Ochse (2003) is of the opinion that these theories postulate that actual ability or lack thereof does not solely determined success or failure. Furthermore, Ochse (2003) argues that our performance is also determined by our

perceptions of our ability (whether accurate or inaccurate) and our expectancies which influence our motivation and persistence. Ochse (2003) concludes by warning that students who are not successful may be crippling themselves by perceiving themselves as not having the potential or ability and not believing they will succeed. Based on the argument above, the concepts of perceptions and expectations are dealt with in more depth in this study since they form part of the primary research questions on which the major focus is placed.

#### **1.4 PROBLEM STATEMENT**

In spite of arguments related to the limited fiscal resources that prevent unrestricted access to tertiary institutions, the Mpumalanga Department of Education has always made provision for its top ten (high achievers) ‘matric’ learners to study at any tertiary institution of their choice. These learners are offered a full bursary which pays for their tuition.

One might ask why it is imperative for me to trace the academic experiences and performance of the Mpumalanga province top ten ‘matric’ learners in their first year at university. This was motivated by the vision of the Higher Education Quality Council (HEQC), which is to ensure

... a quality driven higher education system that contributes to socio-economic development, social justice and innovative scholarship in South Africa whilst the central objective of the HEQC is to ensure that providers effectively and efficiently deliver education, training, research and community service which are of high quality and which produce socially useful and enriching knowledge as well as a relevant range of graduate skills and competencies necessary for social and economic progress (CHE 2000:5)

I was interested in conducting this study with these learners in their first year at university because, as De Wet and Van Niekerk (2001) argue, the first year of study is the point of entry into tertiary institutions for students and it often determines whether a student will continue with higher education. Accordingly, for the purposes of this study, I investigated in detail the academic experiences and performance of the Mpumalanga province top ten matric learners, or “high achievers” as they are referred to in some studies (Grobler & Myburgh 2001).

Because of the importance of the context of this study, it is necessary to indicate that this study traces the performance of these top achievers in the understanding that their Grade 12 marks might not be a true reflection of their academic potential. In other words, examining the interrelationship of Grade 12 performance and achievement at university level is beyond

the scope of the proposed study. Suffice to say that this study will not be arguing the standard of the Grade 12 teaching and examination. Although one cannot dismiss any findings based on empirical research conducted by different scholars, for purposes of this study the focus was limited to academic performance within the higher education context. This is done to allow the study to focus on in-depth investigation and exploration of the factors determining academic performance in the first year at university, since these factors are complex and interwoven and dependent on the local context and conditions in which the university operates.

Many studies (Grobler & Myburgh, 2001; Hay & Herselman, 2001) have noted with deep concern the fact that South African higher education has undergone various changes in terms of new policies and legislation, an increasingly diverse student population and stakeholders in governance structures, declining enrolment figures and new methods of programme delivery in the past. However, Hay and Herselman (2001) also argue that in addition to adapting to these changing conditions higher education has had to compete in “a competitive global and national environment” where students have different institutions and delivery methods to choose from, but there is only one pool of potential students. Furthermore, Hay and Herselman (2001:131) maintain that in this competitive environment academics are required to show the quality of what they are doing and pay attention to its effectiveness, while academics on the other hand have differing opinions regarding the quality assurance system. This system is viewed as a form of managerial control by some, while others feel improvement can be ensured by such a system.

Quality assurance (QA), as defined by many researchers (Tovey, 1994; Greenwood & Gaunt, 1994; Harvey, 2007; Mammen, 2006), is concerned with the prevention of error and its aim is assurance; it does not have to do with the checking of finished products, or with the target being ‘zero defects’. In other words, ‘quality’ is dynamic and is not easily caught in something static. From quality, multiple dimensions emanate, which remain in constant motion and form a profile based on many different measures (Mammen, 2006). In the above context, the fact that these students (i.e. top achievers) have produced excellent results in their Grade 12 exams does not mark the end of ‘quality’ or ‘quality assurance’; their progress in the education system (i.e. to HEIs) is also part of the quality or quality assurance processes that need to be followed up. Accordingly, this study intends to explore the academic performance of top achievers and determine how they maintained and sustained their

excellent academic performance in HEIs. Hence, Sallis (1993, cited by Mammen, 2006: 890) observes that QA

... is a before and during the event process ... quality is designed into the process to attempt to ensure that the product is produced to a pre-determined specification. Simply, quality assurance is a means of producing defect- and fault-free products ... quality assurance is about consistency, meeting product specification or getting things right first time, every time.

This study was therefore initiated to investigate the way Mpumalanga province matric top ten learners performed in their first year at university, after having performed excellently in their Grade 12 (matric) examinations. Accordingly, I traced the academic experiences of these learners at their chosen HEIs and also find out how they coped in their chosen courses or programmes of study and what the challenges pertaining to teaching and learning at different universities were. Hence, the primary research question of the study investigates the way the top achievers maintained the level of academic excellence in their first year at a tertiary institution. Therefore, my focus on tracing the academic performance stems from the definition of QA as expressed by Mammen (2006), namely, that QA is a before and during the event process for the respondents in this study (i.e. education) before entering HEIs and even during their studies at HEIs. In this context, students' perceptions and expectations of the HEIs are explored in order to obtain a clear understanding of and valid answers to how these top achievers maintained excellent academic performance and if not what might have been the cause.

Ultimately this study attempts to find out in depth about the students' experiences of the courses or programmes they have selected and the explanations that the students give for their performance, namely, the reasons they attach to their successes or failures. Another angle that many studies have focused on and which this study also considered is to find out what factors influence the students' performance at tertiary institutions.

A point that also contributes positively to this study is that raised by Watson, Brand, Stead and Ellis (2001:43), who stress that it is necessary for South African researchers to investigate the potential utility of career decision-making self-efficacy in understanding tertiary students' career behaviour. For Watson et al. (2001), career decision-making self-efficacy would seem to be a particularly useful construct for understanding the career behaviours of the South African multicultural population.

Another argument raised by Watson et al. (2001) is that the career development of South Africans continues to be challenged by a lack of opportunity to explore and commit themselves to stable careers, by unstable and unpredictable environmental factors and by a lack of role models and support systems. Watson et al. (2001:46) further mention the absence of any South African research on career decision-making self-efficacy. This constitutes a call for researchers to explore this area in their studies. In concurring with the argument raised by Watson et al. (2001), this study attempts to explore the meaning students attached to their successes; hence an intense investigation of their studies would assist in analysing the factors that contributed to their decision to choose those programmes or courses. As Glencross, Kulubya, Mji, Njisane, Dabula and Qwele (2000:131) put it, there are important variables that influence tertiary students to study certain subjects or courses. According to Glencross et al. (2000), recent research studies have identified a complex matrix of interacting contributory variables; namely, cognitive, affective, environmental and contextual. Hence, in their study, Glencross et al. (2000) found that the three most critical factors that affect students' participation in tertiary Mathematics were the students' own decision, a liking for Mathematics and, lastly, as a pre-requisite for another course. This then compels me to also look at the support systems that are available for students in different tertiary/HEIs and how they are used to best benefit students academically.

There are many articulations by various scholars that have challenged me to engage in this study. For example, Rollnick, Green, White, Mumba and Bennett (2001:13) point out that the concept of attitude, though elusive, is core in predicting the success or failure of university students. In other words, according to Rollnick et al. (2001), the way students feel about their studies appears to influence positively or negatively whatever academic history they bring with them. The truth or validity of Rollnick et al.'s (2001) statement will only be confirmed after an in-depth study on or investigation of the students' perceptions of HEIs' quality in their teaching and learning process and the students' experiences of their courses or programmes; that is, whatever academic knowledge that students might be lacking that might be traced through this study. Furthermore, Rollnick et al. (2001:25) stress that students in their first year at tertiary institutions are in the business of learning to operate as successful students, which is one of the most important agendas of any access programme. Thus, as a researcher I have for the purposes of this study focused on first-year university students because these students will provide the best valid information pertaining to academic transition and experiences of HEIs (i.e. universities).

In conducting the current study, I was more interested in the students' experiences and perceptions in their first year at university, since this is said to be a complex and difficult process. Thus, Ruth (2000:187) maintains that it is acknowledged and accepted that students' experience at first-year level is a critical factor in academic success. In his study conducted on first-year students, Ruth (2000) argues that failure to seriously consider the absence of a certain skill or ability but still expect a certain level of achievement simply prepares the person for failure. Ruth (2000) continues by arguing that matric results are highly contested and criticised as an indicator of capability, potential and actual knowledge acquisition.

An examination of the quality of teaching at HEIs would in one way or another respond to some of the research questions that this study poses. However, Harvey (1995) argues that the determination of quality at tertiary level is not that easy as there are "no simple, discernible end-products in higher education as higher education is an ongoing transformative process that continues to make an impact long after any formal programme of the study has been completed". However, for the purpose of this study, evidence pertaining to the quality of teaching and learning that HEIs offer in their programmes would also be revealed by the results that the top achievers will present. An investigation of the quality of teaching and learning would not only assist the researcher in answering the research questions but would also have an influence on debates and policy on the quality of the assessment processes in HEIs. However, it should also be indicated that this is not a way of putting pressure on educational institutions but rather a way in which HEIs would be accountable for their products. Hence, the quality of teaching in each institution versus the assessment practice would determine the quality of the end-products, namely, graduates. The fact that, people learn from a variety of contexts and at their own pace cannot be ignored, but what is important is in the end being able to ensure that learning can be accurately measured.

Hoy, Bayne-Jardine and Wood (2000) contribute to this discussion by highlighting the fact that quality is inherent in the product – indeed, quality is itself a product, not a process. The argument raised here is that to view it otherwise is to misunderstand the nature of quality. According to Hoy et al. (2000:3), quality results from the system that produced it, and is ultimately an attribute of that system and of the product itself; a product of its processes, its people and the way the people work together. Furthermore, Hoy et al. (2000:3) point out that quality stems from the way in which the product takes shape as it moves through the system.

In the above context, the study also seeks to investigate the support that is provided by HEIs to their first-year students so as to accelerate and sustain excellent academic performance. Seymour (1995:78, in Du Toit, 2001:22), emphasises the importance of measuring or assessing a process in order to improve it. According to Seymour (1995, in Du Toit, 2001), the literature on quality contains many wise epigrams on measurement: “If you can’t measure it, you can’t understand it; if you can’t understand it you can’t control it; if you can’t control it you can’t improve it”; “every process generates the data to improve it” and “what gets measured, gets done” (Seymour, 1995:78, in Du Toit, 2001:22). Hence, the study explores the support that is or was provided to students by HEIs and also measures it against the level of their academic performance. In other words, the empirical findings in this study will also reveal how the support provided by HEIs contributed to students’ academic performance.

The issue of ‘support’ is raised in this study because, as the literature review shows, Van der Westhuizen (2002:70) maintains that quality assurance is being addressed in different ways and there is an unacceptable mixture of attention to improvement and accountability and innovation or change, as well as assurance and control. However, according to Greenwood and Gaunt (1994:31), the achievement of quality is a never-ending search for continuous improvement. I also believe that for higher education institutions to support students academically in whatever way would lead to their innovations being more successful, thus breeding quality (i.e. in their students’ performance). In other words, if students are not academically supported by their institutions in the learning process, the chances of them producing excellent results like they did at high school are very slim. In other words, the lack of academic support for students can sometimes result in either poor performance on the part of students or change of courses, or worse, students dropping out.

To answer this research question, information on whether students receive any support and how they make use of the available support structures in their first year at HEIs is crucial. In this regard students were required to indicate the manner in which they were received by their institutions in their first year, including information on special programmes that are designed and implemented by their faculties or departments. However, this does not exclude informal avenues of support that might be available in an institution for the welfare of students.

Another argument that also contributed to this study is that made by Ferreira (1992), who warns that the matriculation exemption certificate has been criticised for giving rise to exaggerated emphasis on examination results and a preference for the kind of school work

which lends itself to written and quantitative evaluation. This matriculation exemption certificate that Ferreira (1992) refers to allows a student to register for a degree at a university. However, one of the major problems Ferreira (1992:28) indicates is that learners are not given career-based education to prepare them for participation in the job market, hence further research could investigate the factors that influenced students' decisions to study the programmes they registered for. Again, Ferreira (1992:33) notes that it has been suggested that the matriculation exemption certificate can no longer be considered a guarantee that the prospective student has mastered the minimum requirement for some university courses. As Ferreira (1992) puts it, the first year should be a transitional year leading to independent study and the maximisation of the students potential.

What interests me is to ascertain whether, after excellent achievement at high school, these top achievers really perform as expected at HEIs, based on their initial performance in Grade 12. Another issue here relates to whether the variables that influence high school learners to perform well and achieve good grades are the same as those influencing university students to do well at university. If not, what might be the reasons for the decline in their performance at university or HEIs? In this regard, the study would also assist in verifying whether the high school top achievers who were awarded bursaries by the Mpumalanga Provincial Department of Education maintained these standards at the different HEIs (i.e. universities) that they are enrolled in. As a researcher I am concerned about whether we are able to expect outstanding performance from Grade 12 top achievers in their first year at university and further on when progressing to other levels.

It is safe to say that the work of the high school educators often goes unnoticed by the public and even the Department of Basic Education. In talking about the lives and narratives of top achievers, one encounters people located between two extreme poles; that is, learners at school level are motivated by educators who keep an eye on their studies, while in HEIs like universities there is too much freedom. Accordingly the question may be asked, who is really behind these students' successes at university level, because at school level we have educators who are always able and willing to offer support to learners?



## 1.5 RESEARCH QUESTIONS

The primary research question can be formulated as follows:

### **How do Grade 12 top achievers maintain excellence in first-year university programmes?**

The aim of this study is reflected in the following research questions:

- What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?

The key words used in the question above are ‘top achievers’, ‘perceptions’, ‘expectations’ and ‘teaching and learning’. To answer this question, I therefore have to look at possible perceptions and expectations of these students and how did the students anticipate and accommodate teaching and learning in a higher education environment. All these are seen as other elements that contribute to students’ academic performance.

- How do Grade 12 top achievers respond to the challenges of the first year at university?
- How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?

The third question calls for the researcher to have lengthy and in-depth conversations with all the top achievers. If the researcher is able to trace all top achievers at their different HEIs it would be an added advantage because they would provide necessary information by speaking from different backgrounds and experiences at their institutions.

- How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?

The main attribute in this research question is ‘support’. This question is based on attribution theory, which was adopted for the theoretical framework of the study. This theory is based on the argument that the causes of success and failure as perceived by an individual share some common properties, namely, locus, stability and controllability with intentionality and globality as other possible causal structures (Weiner, 1985). This needs to be thoroughly investigated because the literature review for the theoretical framework indicates that

academic achievement involves a complex inter-relation of students' abilities and the educational environment.

## **1.6 THE RATIONALE OF THE STUDY**

Kotta, Case and Luckett (2014:514) acknowledge that while equity concerns from the 1980s onwards into a democratic South Africa resulted in a policy which allowed black students increased access to HEIs, this physical access has not necessarily translated into academic success.

Studies conducted in South Africa on higher education indicate that most students are not academically successful at university, in other words they leave the universities before completing their academic programmes or degrees (Ramrathan, 2013; Viljoen & Deacon, 2013). According to Kotta et al. (2014:515), this has not improved despite the academic support programmes that education practitioners have developed in order to foster academic success especially for black students.

The statement above reveals that many studies that have been conducted on university students have focused on student retention and dropout (attrition). Moreover, Viljoen and Deacon (2013) report that only 15% of students graduate successfully and this makes South Africa a country with one of the lowest graduation retention rates worldwide. This is a serious challenge to South Africa because it refers to the overall percentage of students who enter university. Nevertheless, there seems to be little literature on the academic experiences of first-year top achievers in HEIs (especially universities). My argument is also based on the concern raised by Nel and Kistner (2009), who reported that little is known about the academic performance of first-year students who have completed the NSC examination. This then has further increased my interest and curiosity to continue and further supplement this untapped area of research.

Modipane (2011) reports that various studies conducted in different parts of the world and in South Africa on the transition experiences of first entering students, reveal that first-year university or college students encounter challenges that often lead to them quitting their studies for different reasons ranging from loneliness or homesickness to lack of funds to sustain their stay at college or university. My overriding rationale for this study relates to my concern for top achievers who might also not be coping with the academic demands of the university despite having performed outstandingly in their Grade 12 examinations. Opinions

expressed about such students may be generalisations, or based on anecdotal evidence, or on what ‘others’ feel they are, rather than on empirical evidence based on enquiry into what students did, experienced, expected and thought. Modipane (2011) acknowledges that both students who enter institutions with a highly selective entrance policy and those who enter institutions with an open admission policy are “challenged in unique and demanding ways during their first year”.

The most significant weakness in studies on the academic performance of first-year university students is that although evidence of the importance of the matric aggregate on academic performance has been supplied by previous studies (McKenzie & Schweitzer 2001; Van Eeden, De Beer & Coetzee, 2001) my argument is that the first-year academic experiences at university may make a major contribution to how students adapt, cope with and manage their studies. I believe this is the one element that most of the studies do not address. It is against this background that I sought to ascertain whether and how students’ perceptions of their learning environment influence their academic performance in the first year of study. Therefore, addressing students’ academic experience discourse implies exploring their experiences at university and finding out as to what they perceive enabled them to become successful students.

The rationale for deciding on top achievers’ first-year academic experiences at university also derives from my personal experience. I have a cousin who because of excellent performance in Grade 12 some years back was among the Mpumalanga’s top ten matric students and was also awarded a bursary to study at one of South Africa’s top university. However, despite his academic achievement in matric, he did not complete his degree, citing as a reason the difficulty he had in coping with the university environment in the first year of study. My experience as both a full-time and part-time university student (graduate) initiated many questions with respect to academic experiences and academic performance in the first year of study and as to which factors might positively contribute to first-year students’ success at university. Therefore, this study intends to make a contribution to both my personal knowledge and the knowledge on HEI students’ success in their first year of study. The findings of this study will not only enrich the extant information on this subject but may also stimulate further research studies in the area both nationally and internationally.

## 1.7 THEORETICAL FRAMEWORK

In a study conducted by Mpofo and Oakland (2001:20), it was found that research on students' academic achievement has often focused on defining the nature of relevant process variables and predicting the degree to which they help explain variance in academic achievement.

Cheong, Elias, Nor, Mahyuddin and Uli (2004) argue that many researchers contend that academic achievement involves a complex inter-relationship between students' abilities and the educational environment. The argument raised is that to a certain degree, students' success is said to be affected by instruction which is seen as an important environmental factor, while it is also a fact that there are some students who still perform poorly despite clear, unambiguous, quality instruction (Cheong et al., 2004). In their paper Cheong et al. (2004:83) point out that students who perceive themselves as having little control over their own learning will not perform better even if they follow the lessons given by efficient instructors.

Since this section examines the theoretical framework to be used in this study, it is important for the researcher to give some background as to why it was chosen for this study. The theoretical framework was chosen from among others to address the three main research questions. As mentioned in the problem statement, the topic of interest to the researcher is the maintenance of excellent academic achievement by the top achievers from Mpumalanga in HEIs, therefore the research questions should be able to produce data that could suggest meaningful attributes for academic performance at HEIs.

To generate further discussion on and facilitate understanding of the problem statement, attribution theory has been adopted for the purposes of this study. Attribution theory is also known as explanation theory. This theory relates to what we attribute our successes and failures to. In defining attributions, Nokelainen, Tirri and Valimaki (2007:66) quote Heider (1958), who states that the different reasons that people give for particular results, such as success or failure in a task, are called attributions. In performance settings, the factors involved in attributional thinking, such as specific reasons for success and failure, have been shown to be related. To simplify this further, Schunk and Meece (2008) point out that attribution or causal explanation is what a person believes the cause of an outcome is, even though it may or may not be the real cause.

Many researchers (Weiner, 1985; Vallerand & Richer, 1988; Polaki & Nenty, 2001; Tomai & Forbus, 2008) maintain that attribution theory, which attempts to explain the causes of behaviour, was developed by the theorist Fritz Heider in 1958. This theory tries to clarify the causes of people's behaviour and ascribe or explain the reasons why people behave the way they do. Hence, as Weiner (1985) states, Heider (1958) proposed the first systematic analysis of causal structure. Heider, the theorist, is called the originator of the attributional approach in psychology; hence he is constantly mentioned in the context of the current theory (Weiner, 1985; Vallerand & Richer, 1988).

Heider (1958, in Weiner, 1985:551) makes a fundamental causal distinction as follows: "In common-sense psychology (as in scientific psychology) the outcome of an action is felt to rely solely on two sets of conditions, which are factors within the person and factors within the environment". Nevertheless, Wilson, Damiani and Shelton (2002) attest to the fact that Bernard Weiner (1986) was among the first theorists to apply attribution theory to the factors of academic achievement. While early attribution theory focused on the internal-external dimension of causality (i.e. whether people attribute an event to themselves or to something external to themselves), Weiner (1985) emphasised the importance of additional, independent dimensions, notably stability (i.e. whether people see the cause as stable and unchangeable or unstable and changeable) (Wilson et al., 2002). Nonetheless, I believe that the current study could come up with other dimensions because Weiner (1985) and other researchers based their argument on both a dialectic and an empirical perspective.

Attribution theory posits that the causes of success and failure as perceived by the individual share three common properties, namely, locus, stability and controllability, as well as intentionality and globality, which are other possible causal structures (Weiner, 1985). On the other hand, Vallerand and Richer (1988:704) state that Weiner's attribution theory originally suggested that there were two dimensions of causality, namely, locus of control (which is now termed locus of causality) and stability. They (Vallerand & Richer, 1988) further maintain that later on Weiner suggested a third dimension, namely, intentionality, which has been reconceptualised and is now termed control. In the same vein, Wilson et al. (2002:93) note that Weiner argued that the stability dimension is the most relevant to expectations about future achievement and is thus a promising target of interventions. Based on his position, Weiner (1985) then made the assumption that changing people's attributions as the effects of

low effort (i.e. internal, unstable) or bad luck (i.e. external, unstable) would raise their expectations about their future achievement.

In line with the study conducted by Polaki and Nenty (2001), Vallerand and Richer (1988:704) mention that according to this current position, Weiner suggests that causal attributions can be categorised according to a 2 x 2 x 2 (internal/external locus of causality x stability/instability x controllability/uncontrollability) orthogonal taxonomy. One example relates to task difficulty, which can be seen as being external, stable and uncontrollable, while the effort involved may be seen as being internal, unstable and controllable (Weiner, 1985) (see figure 1.1). Vallerand and Richer (1988) make a claim that, generally, current research is in favour of the taxonomy. As regards to how true this claim is as it relates to the strength of Weiner's (1985) three-dimensional taxonomy, as a researcher I had to obtain valid and reliable data that would support the existence of such a taxonomy since I have adopted the attribution theory.

Weiner's model is made up of four attributions, namely, effort, ability, luck and task difficulty. These attributions were initially categorised in two dimensions, namely, locus of causality and stability. According to Weiner (1985), the locus of causality is the performance result influenced by internal factors which are under the control of the performer (e.g. ability or effort). In opposition to this are the external factors which are outside the performer's control (e.g. task difficulty or luck). The second dimension, according to Weiner's model, is the stability dimension, which is also the performance result/outcome caused by stable factors which are regarded as fixed and which do not change with time (e.g. ability or task difficulty). In this category we also have unstable factors, which are defined as those factors which can differ with time (e.g. effort or luck). Based on intensive research, Weiner (1985) then introduced a third dimension, namely, controllability (see fig.1.1). This has assisted in explaining the affective consequences of attributions that appear to be within a person's control or not; the argument being that, if an attribution can be internal/external, stable/unstable, it can also be either controllable or uncontrollable on the side of the performer.

### Locus of Causality Dimension

	Internal attributions	External attributions	
Stable attributions	Ability	Task difficulty	Stability dimension
Unstable attributions	Effort	Luck	
	Controllable	Uncontrollable	

Figure 1.1: Weiner's adapted orthogonal taxonomy on the attribution theory

Source: Weiner (1985)

What Weiner (1985) has advocated through his model would indeed assist this study, since its objective is to investigate the attributes that different first-year university students attach to the success or otherwise of their studies. As I have tried to simplify this model in the above discussion, it should now be clear to my readers why it advances this study. Hence, the questionnaire used in this study covered a list of examples of tentative causes of 'success' that students might cite as main contributors to their successes. It is hoped that, in the event that there are some omissions in Weiner's (1985) orthogonal taxonomy of attribution theory this study will indicate such, or otherwise state that it suffices to inform other similar studies.

Based on the attributions mentioned in figure 1.1 Weiner's (1985) position promotes an attribution theory of motivation and emotion, where achievement forms the theoretical focus. In this case, the most important causes of success and failure in achievement-related contexts are identified. However, for the sake of this study I focus on success in achievement as the point of departure. Thus, this study progresses from a description of the causes of different perceptions to the outcomes of the causal structure, and then from the causal structure to an examination of the entire process of action. As Weiner (1985) confirms, without causal analysis, adaptation is not possible.

In the context of this study, I therefore believe that it is important also to refer to the statement made by Weiner (1985:555) that phenomenal causality – the causal world as perceived by the viewer – is represented by attributional decisions. Weiner (1985) further argues that the perceived causes of outcomes will certainly differ from person to person, as well as within an individual over occasions. This investigation attempts to establish and validate where the first-year students who form part of this study will locate the meaning of

the causes of their achievement. It is hoped that this study will provide enough grounds for theory building. As Weiner (1985:559) puts it, causal attributions influence the expectancy of success. (Please refer to table 1.1 in this regard.)

Tomai and Forbus (2008) allude to another aspect that will positively contribute to this study; that is, that the aim of attribution theory, as developed by Heider (1958), is to investigate the circumstances that will lead a perceiver, through an attribution process, to ascribe some behaviour, event or outcome to an internal disposition of the person involved, as opposed to an environmental condition. Hence, according to Tomai and Forbus (2008:1), attributions depend on the perceiver's knowledge. As such, Tomai and Forbus (2008:1) in their paper define foreknowledge as the extent to which the person was aware that an action would result in the outcome, prior to execution. For this study, this would mean that students' efforts prior to their writing examinations might serve as evidence for having some foreknowledge that they really need to be thoroughly prepared before they write. In other words, if students did not study before the examinations, or put all the necessary strategies in place, the chances are they had no foreknowledge concerning examinations and the results that they would obtain after that. Tomai and Forbus's (2008) argument is relevant to this study because, as they further state, it is the perceiver's judgement of the knowledge the person possesses that is evaluated.

In their study, Tomai and Forbus (2008) attribute responsibility based on foreknowledge in the absence of intentionality. These authors (Tomai & Forbus, 2008:1) point out that according to Shaver's model, "foreknowledge may be what the agent is thought to know (epistemic) or what the perceiver thinks the agent should have known (expected)". These two concepts, namely, 'epistemic' and 'expected' raised by Tomai and Forbus (2008) play a significant role in this study, since I am interested in students' academic knowledge from Grade 12 onward to the higher education level and their expectations when they reach HEIs.

In order to better understand Weiner's attribution theory and the way it relates to academic performance, Table 1.1 portrays the behaviours and attribution and the way high and low achievers relate to different environments in their performance.



Table 1.1: Behaviour, attribution and motivation

	<b>Top/high achiever</b>	<b>Low achiever</b>
Motivational orientation	High motivation to achieve success Low motivation to achieve failure Focuses on pride of success	Low motivation to achieve success High motivation to achieve failure Focuses on shame/worry that may result from failure
Attributions	Attributes success to stable/internal and controllable factors Attributes failure to unstable/external and uncontrollable factors	Attribute success to unstable/external, uncontrollable Attributes failure to stable/internal and uncontrollable factors
Goals adopted	Task-oriented goals are usually adopted	Outcome-oriented goals are usually adopted
Task choice	Seeks out challenges and able competitors/tasks	Avoids challenges; seeks out very difficult or very easy tasks/competitors
Performance	Performs well in evaluative conditions	Performs poorly in evaluative conditions

Source: Adapted from Roscoe (2012)

The explanation outlined in Table 1.1 presents some behaviour that this study can look at as basic in investigating the academic performance of high achievers in their first year at university. The above-mentioned behaviours will assist the study in making clear distinctions between the high and low achievers, since this study focuses on high school top achievers at first-year university level. I believe that studies similar to this one have sufficiently focused on different variables that high achievers attribute their academic performance to. Therefore, the proposed study intends to present a true picture concerning the academic performance of high/top achievers and the meaning they attach to their academic success. Hence, it is worth mentioning here that Weiner's model of achievement attributions stipulates that an individual's causal attributions of achievement behaviours affect motivation and subsequent achievement behaviours, persistence at task and future achievement expectancies, as well as the pride or shame that is felt following success or failure (Weiner, 1985).

## **1.8 ETHICAL CONSIDERATION**

### **1.8.1 Introduction**

Research ethics is well defined by Blaxter et al. (1996b, in Bell, 1999:39):

Research ethics is about being clear about the nature of the agreement you have entered into with your research subjects or contacts. This is why contracts can be a useful device. Ethical research involves getting the informed consent of those you are going to interview, question, observe or take materials from. It involves reaching agreements about the uses of

this data, and how its analysis will be reported and disseminated. And it is about keeping to such agreements when they have been reached.

### **1.8.2 Informed consent**

Christians (2000:138) contends that social science tradition emphasises that research subjects have the right to be appraised about the nature and consequences of the investigation in which they are involved. Christians (2000:138) also states that generally appropriate respect for human freedom includes two important conditions. Firstly, subjects must always voluntarily agree to participate and, secondly, this agreement must be based on having obtained full and open information.

My ethical responsibility included, firstly, requesting permission to conduct research from the Mpumalanga Department of Education. After permission was granted I then approached the participants, asking them to take part in this study of their own free will and I also provided them with consent forms, which contained additional information about the objective of this study and clearly spelt out what was required/expected of them (Christians, 2005). I also ensured that the language used in the forms was understood by the participants – an issue that is stressed by Silverman (2000).

Furthermore, I adhered to the ethical guidelines for keeping participants informed and ensuring they were not deceived in any way by ensuring that the participants had an idea of what the study entailed. This allowed them to decide for themselves whether or not they wanted to be part of the study.

### **1.8.3 Privacy and confidentiality**

Christians (2000:139) stresses the fact that the primary safeguard against unwanted exposure of participants' identity and their information is confidentiality which must be assured. For instance, all personal information ought to be secured or concealed and made public only by observing the principle of anonymity.

In this study, the identity of participants, companies and organisations was protected through the use of pseudonyms, hence the names of persons, schools and organisations will not be disclosed in this study. Christians (2005) asserts in this regard that codes of ethics maintain the protection and safeguarding of people's identity in the research setting. However, as Brannen (2004:318) indicates, the questionnaires will not be anonymous but will contain

codes that will be linked to the students' names, which will enable the researcher later to identify and contact these students for follow-up interviews.

To avoid any fictitious, falsified or erroneous data, the interviews were recorded and all the raw data, recorded interviews, interview transcripts and analysed data were made available to the supervisor to verify their accuracy.

In order to ensure the validity of the study, after having done the data analysis and interpreted the findings, I provided my written report on the transcribed narratives to the participants so that they could, where possible, correct and confirm items. Moreover, professional etiquette uniformly agrees that no individual should be harmed or embarrassed as a result of insensitive research practices (Christians, 2000:139).

## 1.9 CHAPTER OUTLINE

The rest of the research report will proceed as follows:

**Chapter 1** covers the introduction, background, aims of the research and the research questions. It also covers the rationale of the study.

**Chapter 2** presents an analysis of both the local and international literature on the academic performance of first-year students at HEIs, especially universities, as well as the most important contributory factors to academic performance. A description of the performance attributes and their relevance to the research is also outlined. After some intensive study and an analysis of different views on the basic aspects of the study, a synthesis will be made on the conception of academic performance and HEIs. This chapter is also intended to investigate support opportunities that universities offer their students as a strategy to assist in maintaining excellent academic performance.

**Chapter 3** presents the methodology section which describes the design of the study. In this chapter, the data collection strategies and tools that were used in carrying out this study are discussed in detail.

**Chapter 4** covers an analysis of the quantitative data obtained from the questionnaire, as it preceded the qualitative data obtained from the interviews. This analysis is done separately in line with the design of this study (i.e. so as to complement the qualitative data).

**Chapter 5** covers the analysis of the second phase of data collection. Data from the interviews was used to develop the source material. In this chapter a picture is drawn of what students attribute to their academic performance based on the interviews.

**Chapter 6** presents a discussion on the findings of the qualitative study (i.e. interviews) and the documents or records of students' results. It also covers a discussion of the recurring themes raised during the interviews.

**Chapter 7** presents a discussion of the findings, the conclusion to the study and makes a number of recommendations. A report based on the important topics in this research is then presented on the basis of the findings drawn from the data.

## CHAPTER 2

# UNDERSTANDING THE CONCEPTUAL AND OPERATIONAL MEANING OF ACADEMIC PERFORMANCE IN THE FIRST YEAR AT UNIVERSITY

### 2.1 INTRODUCTION

This chapter presents a survey of the literature, both national and international, used in this study. The literature review was an ongoing process in this study, that is, it was done before and during the planning stage and continued throughout the study period. As Punch (2005) puts it, the purpose of reviewing literature on a continuous basis is for the literature to become a fruitful source of input to the whole research process. Academic performance in HEIs is explored intensively. In addition, the factors associated with academic achievement are also discussed based on the empirical literature. It should also be emphasised that the main constructs of the study will be determined by the literature review.

In short, Chapter 2 of this study presents an important review of both the theoretical and empirical literature on academic performance especially in the first year of study at HEIs (i.e. be it college or university). Research conducted by other researchers on academic performance generally gives meaning to this concept as it is used throughout this study. Therefore, the review of such relevant literature is aimed at contributing to a clearer understanding of the nature and meaning of the problem that I have identified, which then helps to reduce the chances of selecting misleading, irrelevant or outdated information or data. Hence, the meaning of academic performance is given, as well as the factors that determine academic performance, based on both theoretical and empirical research studies. The chapter also indicates in depth how different factors contribute to the academic performance of students and the challenges that HEIs might experience in cases where there is no support available to improve students' chances of academic success.

In tracing and exploring students' academic performance and experiences in their first year of study, I specifically reviewed research studies relating to academic performance. The main purpose was to ascertain what the literature says about academic achievement/performance in the first year at university, the experiences of students, the factors that students attach to their academic performance and the challenges experienced by students in their first year and how they respond to those challenges. For clarity of presentation and discussion, this chapter starts by presenting a conceptual clarification of all the important concepts used in the study.

Potgieter and Davidowitz (2010:75) maintain that the South African education system has undergone major changes which began with the Department of Education adopting an outcomes-based approach to education as the foundation for the curriculum in South Africa. New curricula were introduced for all subjects taught in the Further Education and Training (FET) phase<sup>4</sup> (Grades 10–12) including Mathematics and Physical Science. Hence, there have been many debates on the impact of the new curricula for Grades 10 to 12 in terms of the preparedness or readiness for tertiary studies of the 2009 cohort in subjects like Mathematics, Chemistry and Physical Science (Potgieter & Davidowitz, 2010).

On that note, Schoer, Ntuli, Rankin, Sebastiao and Hunt (2010:10) indicate that South African universities rely heavily on marks obtained from standardised school-leaving examinations, namely, the former Senior Certificate/SC examinations (prior to 2008) and the new NSC examinations (awarded from 2008 onwards) in the admission process. They (Schoer et al., 2010) further argue that universities regard these certificate pass averages as indicators not only of the applicants' current knowledge, but also of their potential and ability to progress successfully in their studies in the future. Owing to the fact that school-leaving examinations are quality controlled and standardised nationally, the marks are seen as reliable indicators of ability or potential for universities countrywide when students are compared against one another across time (Schoer et al., 2010). According to Schoer et al. (2010) this allows universities to rank new applicants according to their academic ability at university level based on observed correlations between previous students' marks in school subjects and their academic performance at university. Therefore, I believe that the study would not be necessary if the marks obtained in Grade 12 were beyond doubt reliable signals of ability for studying at university.

In contrast, Cross and Carpentier (2009:7) argue that admitting only top-performing learners into tertiary institutions simply perpetuates existing levels of inequality in South Africa and creates a "form of educational apartheid". Based on the argument above, Schoer et al. (2010) contend that measures of cognitive ability are high-school marks, though there are other non-cognitive abilities that are equally significant for succeeding at university, including persistence, motivation to succeed and self-discipline (Kleemann, 1994; Fraser & Killen, 2005).

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<sup>4</sup> Further Education and Training (FET) phase means Grades 10–12 according to the National Curriculum Statement.

On that note, Matoti (2010) and Potgieter and Davidowitz (2010:81) argue that tertiary educators need to be informed about students' existing level of knowledge, conceptual understanding and skills development so that they can adjust their teaching models, that is, their offering of teaching and learning opportunities, appropriately to take these into account. As, David Ausubel, in his well-known axiom of learning, states, "the most important single factor influencing learning is what the learner knows. Ascertain this and teach accordingly" (in Potgieter & Davidowitz, 2010:81).

It is against this background that I explored the factors that students have identified and attach meaning to in their academic performance. Accordingly, a study like this is much more interested in tracing students' academic performance rather than the students themselves. As the students who are in the South African context falling into the 2011/2012 NSC cohorts disclosed and demonstrated their academic ability as witnessed by their matric or Grade 12 performance. Although the focus of this study was only the top achievers from one province (i.e. Mpumalanga) the findings will assist to generate some data on students' academic performance in first-year university that is currently lacking, thus contributing significantly to HEIs in terms of students' academic experiences of their first year of study (learning).

## **2.2 CONCEPTUAL CLARIFICATIONS**

To ascertain that there is a common understanding of all sections of this study, it is imperative to begin by clarifying the concepts as they are used in the study. However, some researchers suggest that the definition of concepts should be delayed until they emerge from or crop up in the data. In my opinion, it important to clarify the concepts I have used at the outset in order to help other researchers or readers understand the research problem and the research questions of the current study. For the purpose of this study, the following concepts are therefore explained and briefly discussed in this section: academic performance, top achievers, perception and experience.

### **2.2.1 Academic performance/achievement**

Bell (2012:1) maintains that success in educational institutions is measured by academic performance or how well a student meets the standards set by local government and the institution itself. Bell (2012) further maintains that as career competition grows ever fiercer in the working world, the significance of students doing well at school has caught the attention of legislators, parents and government education departments alike.

In order to come up with a better understanding of the concept of ‘academic performance’, it is important to firstly clarify the concept of ‘performance’, which is derived from the verb to ‘perform’. According to Waghid (2010:1055), to perform means to ‘show’ and ‘demonstrate’ what one is doing. Aligning this definition to this study, it would mean that performance here refers to what the students can demonstrate academically in their learning process (i.e. be it success, or good or poor academic performance).

Academic performance refers to how students deal with their studies and how they then cope with or accomplish various tasks given to them by their teachers. Interestingly, academic performance is defined as the outcome of education – the degree to which a student, teacher or institution has achieved their educational goals (Merriam-webster.com/dictionary). Furthermore, academic performance is usually measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most significant procedural knowledge or declarative knowledge, such as facts and skills.

Likewise, Rickson (1997, in Sikhwari, 2007:524) views performance in any context as achievement relative to some standard and he (Sikhwari, 2007) further stresses that academic performance and other spheres of learning can be measured by a variety of yardsticks or measuring instruments, the result of which is some type of combination of types of scores, placement, ranks or grades. Accordingly, performance or achievement has to do with some success in an activity that was undertaken.

Interestingly, Nunns and Ortlepp (1994:203) also maintain that one of the problems with past research was that academic success was too broadly defined (i.e. passing an academic year) rather than focusing on particular university subjects. For the purposes of this study, I believe that students’ performance in different subjects in their first year at HEI eventually informs their academic performance level in general. However, this does not in a way oppose the position of Nunns and Ortlepp (1994). On the other hand, Bell (2012) argues that although education is not the only road to success in the working environment, much effort is made to identify, track, evaluate and encourage the progress of students in schools. Bell (2012) further highlights the fact that parents care about their child’s academic achievement, owing to the belief that good academic results will provide more career choices and job security.

In contrast to Bell (2012), Peterson, Rubie-Davies, Elley-Brown, Widdowson, Dixon and Irving (2011:1) argue that the significance of educational success is often implicit in the



excuses, complaints and laments of students, teachers and parents when faced with poor academic performance. From my reading, I understand Peterson et al.'s (2011) argument to refer to the fact that the only time there is concern about academic performance is when the blame for poor performance is shifted onto somebody. In other words, when students perform well it goes unnoticed. For the purposes of this study, students were given the opportunity to cite all the factors they thought might have contributed both positively and negatively to their academic performance or success in their first year of study.

I am attracted to the views of Bell (2012) in particular, who states that success in educational institutions is measured by academic performance or how well a student meets the standards set by local government and the institution itself. It is therefore against this backdrop that the study aims to explore the academic performance of first-year university students and find out how they met the standards set by the universities. Based on the discussion above, it is indeed appropriate to agree with Bell (2012) that the only yardstick that can be used to trace the academic success of students is their academic performance. Although 'academic performance' is a broad concept, in this study it refers to all available and demonstrable evidence that can be produced on the students' level of academic achievement in the first year at HEIs. In other words, this study is located within the scope of academic achievement in the first year of study at HEIs (universities). Examining academic performance at other levels of study (second year and beyond) is beyond the scope of this study. Nevertheless, the factors determining academic performance are discussed in detail in the next section in order to create a general understanding of what academic performance or achievement involves.

The tracking of academic performance and academic experiences fulfils a number of purposes. Bell (2012) maintains in this regard that aspects of achievement and failure in a student's academic career need to be evaluated in order to enforce improvement and make full use of the learning process. Ultimately, results are said to produce a framework for talking about how students fare at school and a constant standard to which all students are held.

### **2.2.2 Top achievers**

Eiselen and Geysers (2003:119) emphasise that unlike an at-risk student, an achiever is never defined as one belonging to a specific socio-economic or demographic group. To them (Eiselen and Geysers, 2003) being an achiever usually refers to academic performance, namely

- having obtained a high mark or average (e.g. a distinction) in a specific subject or a number of subjects
- being amongst a specific percentage or number of top performers.

Furthermore, Hong and Lee (2000:128) define (high) achievers as students in the upper quartile of scores obtained. On the other hand, Caldwell and Ginthner (1996) define them in terms of the top number of performers. These researchers (Caldwell & Ginthner, 1996; Hong & Lee, 2000) state that the top or high achievers are the learners or students who perform outstandingly. In other words, these are those learners who outshine their counterparts in academic achievement, as they are always on top.

By contrast, those who are not high achievers are referred to as at-risk students. Kawakami (1994, in Eiselen & Geysers, 2003) defines an at-risk student as one who is in danger of failing to complete his/her education and who lacks sufficient appropriate skills, knowledge and attitudes to function as a responsible citizen in his/her community. In addition, Eiselen and Geysers (2003) note that “at risk” is most commonly related to school dropouts. Furthermore, at-risk students are described as those who “because of limited English proficiency, poverty, race, geographic location or economic disadvantage face a greater risk of low educational achievement or reduced academic expectations” as outlined in Educate America Act of 1994 (Eiselen & Geysers, 2003).

For the purpose of this study, ‘top’ or ‘high’ achievers also refers to ‘top ten’ learners, as they are labelled at secondary or high school level. Again, it is also imperative to highlight that in the context of South African education, the term ‘learners’ refers to those who are school going while the term ‘students’ applies to those at HEIs. Therefore, these two terms will be used in order to avoid confusion when referring to the two different groups. This study traces the academic performance of top achievers at HEIs as informed by the school (i.e. Grade 12) achievement.

It is therefore important to mention that the term ‘top achievers’ in this study is used to distinguish students who have performed well from those who are always above the ceiling (i.e. performing above the minimum requirements). Although students (top achievers) are located on the basis of their academic performance in Grade 12, for the purpose of this study these students were followed up at their HEIs in order to explore their perceptions, thoughts and experiences in their first year at the university level.

### 2.2.3 Perception

Tait, Van Eeden and Tait (2002) argue that key to understanding what perception means is to recognise that it is a unique interpretation of a condition or a situation, but is not an exact recording of it. According to Tait et al. (2002:177), perception is, briefly, a very complex cognitive process that develops a unique picture of the world, a picture that may be quite different from reality. Furthermore, it is noted that attitudes, perceptions and expectations could have an impact on learners' approach to and the success of their studies.

In defining the term 'perception', Moeng (2004:11) refers to Tshikeso (1996:12), who maintains that perception refers to the interpretation of the meaning of a situation by an individual and is based on his/her past experiences. It is also documented that perception is the expression of the individual's propositions, facts, opinions or beliefs about a particular situation (Moeng, 2004). In other words, this is said to be the person's picture or own interpretation of a situation.

In support of the definition above, Schilling and Schilling (2005:109) believe that by the time first-year students arrive on campus, they have a myriad of expectations swirling around in their heads about what college will be like. Schilling and Schilling (2005) reveal that for some students, these expectations have been building for a long time; college has been a family goal for them almost from birth, while for others the idea of college is more recent and their expectations may be less specific and differentiated than those of students who have parents or siblings who have been orienting them to college long before they set foot on a college campus. Nevertheless, Schilling and Schilling's (2005) main position around this issue is that no first-year student arrives with a truly blank slate.

In response to the views of the writers on perception, I concur with Schilling and Schilling (2005) in that the perceptions that accompany students to universities or colleges might sometimes be as a result of the family background on educational matters or even the influence from the communities (i.e. through friends or educated neighbours). It is a documented fact that no student comes to a university or college without some perceptions of some kind about the university itself and even learning and the environment as well. It is therefore pertinent for purposes of this study to identify and thoroughly investigate all the perception that students have/had when in their first year of study.

Since perception influences expectations, Schilling and Schilling (2005) further note that the psychology literature reveals that expectations are very important in shaping human behaviour. According to Schilling and Schilling (2005), researchers have found that merely indicating an expectation results in better performance, and the higher the expectations, the higher the level of performance. On that note, Schilling and Schilling (2005) conclude by stating that expectations can influence students' willingness to take on, actively engage in and persist in responding to intellectual challenges.

Based on the definition above, Sedumedi (2002) advises that a survey of learners' needs, perceptions and problems in South African universities should be carried out to obtain a more in-depth understanding on how students see their role in the education system. According to Sedumedi (2002:168), given the divergent ideological interests on factors determining students' achievement that are at stake, it seems particularly important to understand the perceptions of the stakeholders involved in determining which route the transformation should take. The major stakeholders in this regard are students, because they are the most affected by the conditions at the university, hence it is important to understand what their perceptions and opinions of transformation are (Sedumedi, 2002). I concur with Sedumedi's (2002) statement that considering students to be the major stakeholders in any transformation might yield positive results at an institution, because students' perceptions, beliefs and opinions are very important as they are the most affected by conditions at the university. Therefore, I believe that this is one fact that we cannot overlook if the main priority of institutions is student success.

Like Sedumedi (2002), Peterson et al. (2011) also admit that research is limited on who students think is responsible for their learning. According to Peterson et al. (2011:2), a number of studies have looked at factors that influence or predict student success (e.g. teacher-student relationships, ability, effort, self-regulated learning, parental involvement) but there is a dearth of literature on the value students place on these influences. Importantly, Peterson et al. (2011) point out that there is little doubt that students who do take responsibility for their learning (i.e. success or failure) perform better. The interviews that were conducted afforded the students an opportunity to cite the factors that contributed to their academic performance in their first year at university, irrespective of the programmes they were enrolled in. Where students shifted the blame to external forces, this was thoroughly investigated.

Based on the above discussion, it is important to mention that the students' perceptions as to who is responsible for their learning, as alluded to by Sedumedi (2002), were also investigated and explored as the students had to identify attributes that contribute(d) to their academic performance. It is, therefore, against this background that the study aims to explore students' perceptions on their first-year university study.

Taking this argument further, Johnston (2010) warns that whilst each individual who has experienced university will have his or her own memories and perceptions of first-year transition, and these may be very powerful influences in their lives, that alone should not be the primary warrant for careful study of the first-year experience (FYE).

Since perceptions are accompanied by some expectations, based on their position Schilling and Schilling (2005) then advise that in order for the expectation–experience gap to be eliminated or narrowed, institutions must develop strategies which are intended to create and maintain high and simple expectations for first-year students. In their view (Schilling & Schilling, 2005), that includes knowing what first-year students' expectations are and transforming them by challenging them with experiences that result in a rigorous academic and collegiate experience. However, a challenging educational environment can be created only if an intentional and concerted effort to do so is made by faculty, administrators and staff.

In response to the views of the writers on perception, it is pertinent to reveal that for the purposes of this study, the concept of perception is located in the comprehension of the expectations that students come with to the university in their first year of study. From my reading, I understand that there are many factors that may contribute to the students' perception of university especially in their first year of study. Therefore, owing to the fact that it falls within the scope of this study, it is also necessary to examine and analyse the interrelationship between these factors. In other words, the study also seeks to investigate and explore the way in which students' perceptions have influenced their study and their transition from school to the first year of university study.

#### **2.2.4 Experience**

The term 'experience' is derived from the Old French and the Latin word *experientia*, from 'experiens', 'experient', (thefreedictionary.com). Experience also refers to acquiring knowledge or skill that emanates from direct involvement in events or activities. In support of

this definition, experience means the results denoted as fact or the state of having gained knowledge through direct observation or participation or having been affected by an action (Merriam-webster.com/dictionary). Again, for other scholars, experience refers to a particular process of personal encounter or wisdom gained practically from what one has observed, undergone or encountered; it also means undergoing something or the knowledge attained.

In defining the term ‘experience’, Beard and Wilson (2006:16) refer to *the Oxford Dictionary* definition which states: “The fact of being consciously the subject of a state or condition; of being consciously affected by an event; a state or condition viewed subjectively; an event by which one is affected and knowledge resulting from actual observation or from what one has undergone.” From my reading, I understand experience as involving a state of being part of the event (i.e. engagement with) and also coming to an understanding of the event through the knowledge and skills gained through such an encounter.

I subscribe to the definition used by Beard and Wilson (2006) since it reveals that experience has to do with being consciously involved and affected by a state or condition. For the purposes of this study, students are requested to share their experiences of first-year university since they have been engaged in their studies. In other words, these students would not be talking as observers but in fact would be telling their stories based on the background they have consciously gained while in their first year. Thus, many researchers believe that experience not only refers to a simple matter of exposure to an action or event, but also denotes that in it there is an element of the experience that needs to become internalised and positioned in relation to one’s existing knowledge and experiences.

Nevertheless, experience as a general concept comprises the things that you learn when you do a particular job/activity or it could be the result of something that happens to you (Longman WordWise Dictionary, 2006). This could include knowledge of something or a skill acquired by participating in or being exposed to an event or action. This explanation would seem to be clearer and more relevant to the study, since students were asked to reveal or disclose their experiences of HEIs, as they engaged in various academic and non-academic activities.

The word ‘experience’ also means the knowledge that you get from life and from being in different situations (MacMillan Essential Dictionary for Learners of English, 2003). It also refers to something that happens to you or a situation that you are involved in. The term

‘experience’ may refer to both immediately perceived mentally unprocessed events and the purported wisdom obtained in subsequent reflection on those events or interpretation of them (Merriam-webster.com/dictionary). Although there can be many various types of experience, the term ‘mental experience’ would seem to be most comprehensive for purposes of this study. ‘Mental experience’ refers to the aspects of consciousness and intellect experienced as combinations of perception, thought, memory, will, emotion and imagination, as well as all unconscious cognitive processes. In summary, the concept by implication means a thought process.

It should also be noted that experience is the critical focus of the philosophy of mind pertaining to consciousness. Furthermore, it is regarded as a stream of private events, known only to their possessor and bearing at best problematic relationships to any other events, such as happenings in an external world or similar streams in other possessors (Merriam-webster.com/dictionary). Again, it should be noted that the conscious life of the possessor is made up by his/her stream.

According to Johnston (2010:3), going to university has always involved a mixture of educational, social, imaginative and cultural experiences, grounded and shaped by specific institutional forms of induction and socialisation. Johnston (2010) elaborates on this by saying that practical questions of prior educational experience, prerequisite knowledge, attitude and skill determine university entrance and to some extent set agendas for transition. Arguing the point further, Johnston (2010) maintains that first-year experiences are varied, therefore it may be better to think in terms of “multiple first years” with nuanced transitions influenced by diverse backgrounds and contexts rather than a unified one-size-fits-all format.

Based on the discussion above, the views of Bitzer and Troskie-De Bruin (2004) are important here. They (Bitzer & Troskie-De Bruin, 2004:119) suggest that tertiary institutions in South Africa are forced to ask themselves questions such as the following: What does the experience of tertiary education add to student development, besides furnishing students with a qualification that might or might not meet professional or societal demands? To what extent does a university experience reveal the untapped potential, special attributes, the manifold talents, and the powers of insight, innovation, negotiation, decision-making and rhetorical skills lying dominant in the new generation of students that constitutes diverse campus populations?

In line with the above argument, Scott (2009) contends that the first year of higher education is an educational stage that has a powerful influence on future success for both the individual student and the sector as a whole. According to Scott (2009:19), first-year experience largely determines students' first-year performance, which in turn is a key foundation for advanced study (including postgraduate study), which is vital to intellectual development in all spheres, including the future staffing of the university. Like Johnston (2010), Scott (2009) maintains that students' experience in the first year at university is made up of many different factors that play a significant role in shaping students in the university environment. In other words, the question as to how the students were inducted into the institutions also contributes to their experience of their first-year of study.

### **2.3 FACTORS DETERMINING ACADEMIC ACHIEVEMENT**

Interestingly, Lu (1994, in DeBerard, Spielmans & Julka, 2004:67) states that a stressful transition for college students is presented by the freshman year. However, irrespective of the many academic, social and emotional stressors, most tertiary students cope successfully with a new complex life role and achieve academic success. Unfortunately, some students are unable to manage this transition successfully and decide to leave tertiary education during or at the end of their first year. DeBerard et al. (2004:67) point out that 40% of tertiary students will leave without a qualification, with about 75% of these students leaving within their first two years of college. Importantly, DeBerard et al. (2004) also note that there is a constant relationship between academic achievement and retention, with top performing students persisting in their studies to a greater degree than their lower achieving cohorts.

DeBerard et al. (2004) also point out that there are many implications of leaving college without obtaining a degree. Thus, DeBerard et al. (2004) believe that, if risk factors can be identified, intervention programmes could be designed to increase retention rates. Hence, this study begins by identifying factors that have the potential to determine the academic achievement of high achievers in HEIs.<sup>5</sup> These factors will be identified and explored in line with the findings of other researchers who have already conducted studies related to the current study.

It is not surprising that within the context of academic achievement, in the desire to understand the causes, students attribute their success or failure in their studies to various

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<sup>5</sup> In South Africa higher education institutions refers to universities, technikons, colleges and FET colleges, where students further their studies towards their chosen careers after having passed Grade 12.



factors. Mudhovozi, Gumani, Maunganidze and Sodi (2010:587) point out that the most prevalent perceived influences of success and failure in a performance-related context are effort, ability, task difficulty or ease, luck, help or hindrance from others, as well as mood, fatigue, illness, bias, past history of success or failure and social norms. In attempting to verify whether all these factors identified by students are valid, this study will use empirical investigations. I am therefore very optimistic that the research method applied in this study will enable its subjects to provide all the important knowledge based on their experiences.

Goodman, Jaffer, Kereztesi, Mokgatle, Musariri, Pires and Schlechter (2011:373) state that an important determinant of any university's success is the academic performance of its students. Many researchers have shown that multiple factors contribute to academic performance. This study is also based on a statement made by Ntshoe (2002) that the long-term plan to increase the rate of participation in higher education in South Africa from 15 to 20% emphasises the necessity for universities to take a new look at all the factors that influence their students' success. The argument here is that it is pointless for universities to admit students in the absence of a reasonable probability that those students are capable of successfully completing the programme in which they have enrolled. Hence, Killen and Fraser (2002) and Fraser and Killen (2005) warn that admitting knowingly students who for whatever reason have no chance of academic success would be immoral, as would admitting students who demonstrate the potential to succeed and thereafter treat them in ways that do not allow them to realise that potential. Based on this argument, Fraser and Killen (2005:26) and Killen, Marais and Loedolff (2003:147) then argue that tertiary institutions should always act proactively in attempting to improve the success rates of their students, while at the same time striving to maintain or improve their academic standards.

Affendey, Paris, Mustapha, Nasir and Muda (2010:832) believe that a difficult but useful undertaking would be to try to predict student performance in an academic programme. In addition, Affendey et al. (2010:833) note that predicting the academic performance of students in order to enhance teaching and learning has been attempted by many studies. Hence, I believe that in undertaking this study all the critical factors that determine the academic achievement of students at HEIs could be identified and explored. This study would also inform institutions of higher learning as to what areas of academic development need to be improved on or be reinstated or phased out in an institution.

Based on the argument above, Muller, Swanepoel and De Beer (2010:64) are of the opinion that no single intervention or attribute influences an outcome (such as performance) in isolation and that outcomes are usually influenced by a combination of interacting forces. Accordingly, Muller et al. (2010) also believe that the external indicators and biographical characteristics (and combinations of these factors) that affect or predict academic performance translate into profiles of successful and at-risk students.

This research was initiated in order to identify the critical factors that potentially determine students' academic achievement in HEIs. This initiative could play a significant role in assisting tertiary institutions to develop academic programmes and provide services that cater directly for the needs of their students. Affendey et al. (2010:836) state that in order to help improve intervention strategies and support services for students who perform poorly in their studies and to implement such strategies and services as early as possible in the students' academic career, the attributes that contribute the most significantly to the students' academic performance should be identified. However, it is important to clarify that, for purposes of this study, such factors not only have to be identified but they also have to be applied in order to explain students' behaviour with a view to suggesting the support students need when studying at HEIs.

From the literature review, it would seem that most researchers categorise the factors determining academic performance as psychosocial factors (Kleemann, 1994; McKenzie & Schweitzer, 2001; Tinto, 2002; Sommer & Dumont, 2011) and cognitive factors (Cuasay, 1992). In this regard, Olani (2009:1058) states that non-cognitive variables have been defined in different ways in the literature, with some researchers seeing them as extracurricular or non-academic activities relating to adjustment, motivation and perceptions, while others describe them as academic-related skills, and motivational and personality variables. In this study, I have decided to categorise these factors according to the following groups, namely, affective, cognitive, academic and socio-economic factors.

### **2.3.1 Affective factors influencing academic performance**

Guinness (1990:166, in Sikhwari, 2007:523) maintains that the term 'affect' is regarded by some scientists as being synonymous with emotion whereas others regard it as 'a feeling'. The term 'affective' is derived from the word 'affect', which is defined by Tulloch (1993:26, in Sikhwari, 2007:523) as "a feeling, emotion or desire especially as leading to action". Thus, Sikhwari (2007) contends that affective factors can be regarded as emotions and feelings that

may be triggered by perceptions, desires, thoughts and beliefs about an issue or object. Hence, the perception one has of oneself may lead to the development of a positive or negative self-concept. On the other hand, Bloom (1976:170, in Sikhwari, 2007:521) views affective factors as “a critical part of the learning history of the individual which has results for each new learning situation”.

Affectivity is regarded as basic to human behaviour and, as a result, determines personality. In addition, memories, thoughts, ways of thinking and responses are to a large extent influenced by affective qualities (Van den Aardweg & Van den Aardweg, 1988:15). Furthermore, beliefs and attitudes and whether one is interested in a particular activity or situation can have a great influence on one’s behaviour. This then means that the attitude an individual has toward an activity or task has a definite impact on his or her involvement in the task and its outcomes. Drew and Watkins (1998:174) regard motivational orientations and self-esteem variables as significant factors influencing academic performance in higher education.

Sikhwari (2007:521) stresses the point that most research conducted on the factors that influence academic performance has focused strongly on cognitive factors while affective factors have been ignored. As he Sikhwari (2007:521), argues that a prerequisite for academic achievement is intelligence and it is, for example, believed that an intelligent child is more likely to be successful in learning than a less intelligent child. Thus Sikhwari (2007) maintains that one of the significant factors which can influence academic achievement is intelligence.

It is against this background that the study sought to identify and explore the factors that influence academic achievement, especially in the first year of study. Affective factors are studied because they are said to be basic to human behaviour; that is, they have a profound influence on human behaviour. Accordingly, this study attempts to reveal how affective factors influence behaviour and, as a result, determine the personality, ways of thinking, memories and thoughts of students. It is hoped that the findings of this study will add to the empirical literature on the affective factors that influence student achievement at HEIs.

In this section, the affective factors influencing academic performance are explained and elaborated on according to the available literature. This study attempts to understand why

affective factors are viewed by some scholars as an important part of the learning history of the individual which has results for each new learning situation.

#### 2.3.1.1 The role of motivation in academic achievement

Based on their motivational analysis, Deci and Ryan (2002) found that self-determination theory (SDT), like all current theories of motivation and behaviour change, distinguishes between being not motivated, that is, amotivated (i.e. being unmotivated), and being motivated. According to Deci and Ryan (2002:63), amotivation refers to not having an intention to act (i.e. not trying to attain an outcome) and it may occur in the form of lethargy and lack of behaviour or as unintended behaviour, for instance just going through the motions. In contrast, motivation is about intentionality; it refers to acting with the desire to accomplish some outcome, such as the long-term accumulation of a straight-A record (Deci & Ryan, 2002:63).

Goodman et al. (2011:374) indicate that motivation may be defined as a drive to fulfil a need. Further, Landy and Conte (2004, in Goodman et al., 2011:374) state that motivation refers to the conditions responsible for variations in the quality, intensity and direction of ongoing behaviour. In other words, motivation is defined as “the driving force, the impetus of the personality, which is put into effect by an act of the will in accordance with what a learner wants to do. It energizes behaviour and can be an intrinsic or an extrinsic force” (Van den Aardweg & Van den Aardweg, 1988:138). Sikhwari (2007:523) puts it simply, defining motivation as the driving force or the urge behind an individual’s actions. Thus, people who are highly motivated try to achieve to the best of their ability and to be consistent in that achievement. In addition, Sommer and Dumont (2011:387) state that motivation may be defined as an internal condition that stimulates an individual to engage in a particular action or behaviour; its central issue is the explanation of individuals’ conscious choices among different alternatives.

Munteanu, Costea and Palos (2011:553) indicate that motivation is believed to be one of the constructs thought to cover a share of the variance in academic performance, which is a share that is not explained by the intelligence factor. Munteanu et al. (2011:553) further explain that despite the importance of motivation, few studies have investigated the validity of motivational structures and looked beyond general intelligence or cognitive features. On that note, Furnham and Chamorrow-Premuzic (2004, in Munteanu et al., 2011) posit that personality features are predictors of academic performance. This notion is supported by the

argument that if cognitive capacity demonstrates what a person is capable of doing from a cognitive point of view, the motivational structure of personality shows what an individual would want to do irrespective of his/her potential.

According to Maslow's (1954) theory, intrinsic and extrinsic factors and the interplay of both is what drives motivation (Goodman et al., 2011:374). Muller and Louw (2004:170) postulate that the basis for Deci and Ryan's (1985, 2002) self-determination theory is the classic distinction between intrinsic and extrinsic motivation. According to Deci and Ryan (1994:5) being intrinsically motivated represents the prototype of self-determined behaviour: "these self-determined behaviour are perceived as wholly volitional, as representative of and emanating from one's sense of self and they are the activities people pursue out of interest when they are free from the press of demands, constraints and instrumentalities". Muller and Louw (2004) maintain that behaviour that is intrinsically motivated is associated with interest, curiosity, exploration and spontaneity. Accordingly, I will study students' behaviour from their viewpoint, as they are or were directly involved in first-year university studies.

For the purposes of this study, motivation refers to all the driving forces both within and external to the student when striving for excellent academic performance. It is my belief as a researcher that some students perform excellently or do well in their academic work because of the motivation they receive both from their lecturers or tutors or the university as a whole and as a result of their positive inner drive. The facets of motivation in which a student's best academic performance is based is not an issue to be discussed in this study. More importantly, the study attempts to find out how students are motivated at university and whether motivation plays a role in their academic achievement. In other words, those factors that relate to motivation are investigated and more detailed information is collected through the interviews conducted with subjects of the study.

In my opinion, motivation generally is a prerequisite for all students to obtain good academic results. Students need to be motivated for the entire learning process to be realised. As a researcher, I believe that if students are unmotivated, they might not see the need to put some extra effort into their studies (e.g. motivation to complete their studies and ultimately enter the world of work to earn some money). Hence, the study looks at intrinsic and extrinsic motivation separately.

## **Intrinsic motivation and academic performance**

Munteanu et al. (2011:554) maintain that many studies have demonstrated that a key trigger of academic performance and achievement is academic motivation. However, other researchers suggest that personality factors are also related to motivation and thus have implications for the way students learn academic content.

In defining the concept of motivation, Deci and Ryan (1985, in Goodman et al., 2011:374) maintain that, as a driving force, intrinsic motivation is fundamental to the active nature of human beings. Accordingly, Deci and Ryan (2002:64) regard the manifestation of people's proactive nature as being appropriate for defining intrinsic motivation. According to Deci and Ryan (2002), people have a general propensity to learn, to explore, to exercise capacities and to take on optimal challenges. However, such actions are not behaviours that have to be programmed but instead are inherent tendencies. Stuurman (1999) maintains that intrinsic motivators are characterised by a personality variable called achievement motivation. Achievement motivation is understood to be a disposition, which refers to an ongoing concern with excellence and meeting internalised performance standards (Stuurman, 1999). Achievement motivation is defined by Robbins, Lauver, Davis, Langley and Carlstrom (2004) who describe it as a person's motivation to achieve success, enjoyment of surmounting obstacles and the completion of tasks undertaken, and as a drive for success and excellence.

McClelland's (1955) theory of achievement motivation (in Goodman et al., 2011:374) suggests that people who are intrinsically motivated are generally more effective or productive and perform well, such that the mastery of a task tends to satisfy the person and his/her internal need to achieve as it fosters a perception of a challenge, which encourages task involvement and generates excitement. Hence, according to Deci and Ryan (1985, in Goodman et al., 2011), in order to be intrinsically motivated, a person must experience interest and enjoyment in his/her task, along with feelings of competency and self-determination. This is supported by Elliot and Harackiewicz (1996) who stress the point that individuals with high achievement motivation explore their environment by taking calculated risks and looking for concrete measures of their progress. This is further supported by Sommer and Dumont (2011:387), who stress that research shows that students who are intrinsically motivated display autonomy and employ self-initiated exploratory strategies; extrinsically motivated students on the other hand seek approval and external signs of worth.

The argument raised above by various researchers cannot be overlooked because this study focuses mainly on two different groups of students who are high achievers for different academic years and attend different HEIs (i.e. universities), such that there would be no biases in terms of identifying the constructs or variables that each student feels are the determinants of his/her academic performance. However, as Goodman et al. (2011) state, the fact that people who are intrinsically motivated are more productive and perform well plays a significant role in finding out how motivation as a construct benefits students' academic performance, especially in this study. Since motivation has to do with inherent tendencies, it is not expected that the researcher will be biased in any way because what students say of themselves would be backed up by their individual academic records, which are to be analysed for the purposes of this study.

Taking the argument further, Goodman et al. (2011) argue that confidence has been found to play an important role in the level of the student's intrinsic motivation. A study conducted by Sikhwari (2007) found that confidence and a positive self-concept have an impact on students' motivation to achieve. Sikhwari (2007) reports that, students who are highly motivated try to achieve academic success by attending class regularly and participating in class discussions which results in their getting higher marks in tests and examinations.

Based on the discussion above, Muller and Louw (2004) contend that improved cognitive and emotional outcomes as well as in the learners' identification with certain content areas of their studies give rise to intrinsically motivated and interest-motivated learning. Accordingly, it would be of benefit to design learning environments that promote intrinsically motivated or interested learning. This study intends to establish from the respondents whether HEIs are trying their best to ensure that the environment in which they conduct their teaching promotes intrinsically motivated learning. Such data would be obtained by asking respondents about their expectations of HEIs and their experiences after having enrolled at their different institutions.

To sum up, Deci and Ryan's (2002) position is that "intrinsic motivation is the epitome of volition and is accompanied by feelings of interest, enjoyment and freedom". Deci and Ryan (2002) also believe that when people are intrinsically motivated, they are engrossed in the activity and they are not easily distracted, they are initiative and often persist for long periods.

Accordingly, in agreement with Deci and Ryan (2002), when students are intrinsically motivated they show an interest, desire and willingness to learn and they will go an extra mile on their own just to ensure that they produce excellent results. In other words, intrinsically motivated students will also initiate some programmes for their own benefit and will generally adhere to these irrespective of the prevailing conditions. My opinion in this regard is that intrinsic motivation is key to all other aspects that might contribute to academic performance because intrinsic motivation, which is internally located or initiated (i.e. an inherent tendency), does not depend on the environment one finds oneself in. The decision to act in a proper way or not lies with the person himself/herself, that is, it is a choice. In line with one of the research questions – how do Grade 12 top achievers respond to the challenges of the first year at university? – this study intends to find evidence to show how intrinsic motivation plays a significant role in assisting students to persevere irrespective of the external forces or challenges. The interviews held with the students will be used to obtain their experiences.

In summary, I am in agreement with Deci and Ryan (2002), who highlight that intrinsic motivation is a kind of self-motivation in terms of which individuals are inclined to undertake activities that interest them, that provide spontaneous pleasure or enjoyment and that do not require any ‘reward’ beyond inherent satisfaction.

### **Extrinsic motivation and academic performance**

In contrast to intrinsic motivation where the behaviour itself is interesting and satisfying, extrinsic motivation involves doing ‘a behaviour’ to get separate results that are made contingent on the behaviour (Deci & Ryan, 2002). One example (Deci & Ryan, 2002) is prototypic extrinsic motivation which is illustrated by looking for rewards and avoiding punishments. Furthermore, Deci and Ryan (2002) emphasise the fact that when people are extrinsically motivated, they engage in activities because these are instrumental, that is, they are means to desired ends. They (Deci & Ryan, 2002) believe that achievement-associated behaviours can be motivated by either intrinsic or extrinsic motivation or a combination of both. In view of this, Deci and Ryan (2002) reviewed an array of evidence that suggests that intrinsic motivation and the internalisation of extrinsic motivation flourish in situations where secure relationships provide opportunities for need satisfaction.



According to Stuurman (1999:204), extrinsic motivation is based on rewards and the impact of external authorities or controls on activities or action. Accordingly, extrinsic motivation is said to be strongly controlled by socialisation within the family and the academic environment. Thus, according to Piotrkowski and Katz (1982, in Goodman et al., 2011) the social system of which students form part affects their development.

In the same vein, Goodman et al. (2011:374) state that extrinsic motivation includes external sources of influence on a student, and categorise these as socialisation (interactions with and support from parents, teachers and friends) and rewards (which are tangible and intangible incentives). Hence, parents are said to be critical role models in students' social systems. Goodman et al. (2011) also note that there is some evidence that the parents' level of education and perceptions about education play an important role in the development of their children's core beliefs and behavioural tendencies relating to educational pursuits. Therefore, as a researcher I believe that parents' level of education as a motivating factor (Goodman et al., 2011) is directly associated with the academic achievement of high achievers (the subjects of the study). Hence, it will be discussed in the category of demographic factors.

On the other hand, Muller and Louw (2004:170) state that, in order to attain an end state that is separate from the actual behaviour, extrinsically motivated behaviours are undertaken. The motive for the activity is determined by some external contingency such as good marks or the avoidance of negative consequences. As Muller and Louw (2004) state that, recent studies have shown that there are forms of behaviour that are extrinsically motivated that can be self-determined. Hence, Deci and Ryan (1994:5) believe that extrinsically motivated behaviours become self-determined through a process of internalisation and integration, which these authors refer to as "organismic integration theory". Muller and Louw (2004) maintain that this internalisation refers to the transformation of the individual's regulatory processes that are external to the self into internal regulatory processes. In other words, once values and regulations are internalised, they become integrated into and form part of one's self.

Based on the argument above, Muller and Louw (2004:171) also indicate that the four categories of extrinsic regulation, resulting from different degrees of internalisation and integration, include integrated regulation, introjected regulation, identified regulation and external regulation. These are discussed in the following section in order to further clarify this study. What follows below is a brief explanation of each extrinsic regulation:

### **External regulation (ER)**

According to Muller and Louw (2004:171), external regulation refers to attaining a reward or avoiding negative feedback thus depending on external contingency. This kind of regulation is regarded as ‘classical’ extrinsic motivation.

### **Introjected regulation (IJ)**

Muller and Louw (2004) maintain that actions aimed at contingencies that relate to one’s self-esteem involve introjected regulation. For example, one might study in order to impress others or because it is ‘right and proper’ to act in a particular way. In addition, the influence of action may come from the individual himself or herself, even though it is not autonomously controlled by the self, that is, it is outside the person’s sense of self.

### **Identified regulation (ID)**

Muller and Louw (2004:171) state that the attention here is on the personal appropriateness of an action, for instance when a learner identifies with the values and tasks of the learning arrangement and also integrates them into herself. Muller and Louw (2004) further point out that a student may be less interested in the content of the discipline but nevertheless consider the examinations to be critical, because the self-set goal of content mastering is of personal importance.

### **Integrated regulation (IR)**

Muller and Louw (2004) stress in this regard that integrated regulation depends on self-determination more than any other extrinsic motivation. According to Deci and Ryan (1994:6) the integration of identified values and regulations into one’s coherent sense of self produces integrated regulation. This results in the harmonious coexistence of values along with other aspects of the self.

In addition, Deci and Ryan (1994) argue that the satisfaction of the basic psychological needs of autonomy and competence influence the development of external regulation (ER) into self-determined forms of regulation and the maintenance of self-determined motivation. In other words, through the support of autonomy and competence, the value of an activity that is at first of no interest to the individual (i.e. the person is not intrinsically motivated), can be integrated into the autonomous self. To that effect, Deci and Ryan (1994) further maintain

that the integration of external prompts is promoted by the interaction of a person with other important people (e.g. parents and teachers) and by a third basic psychological need, namely, social relatedness (groups).

According to Goodman et al. (2011:375) reward is another key extrinsic motivator and can be either tangible or intangible. An example of an intangible reward would be that if students excel they will attain a good academic reputation and receive praise and recognition from their significant others. Goodman et al. (2011) also believe that students with a good academic reputation are those students who excel and may often be asked to give academic help. In support of this, Deci and Ryan (1985, in Goodman et al., 2011:375) found that the use of rewards in an academic environment brought about a significant improvement in the motivational levels of students.

Besides intrinsic and extrinsic motivation, Muller and Louw (2004:171) and Sommer and Dumont (2011:387) indicate that there is a set of behaviours that is called amotivated behaviours. Hence, Deci and Ryan (1994) suggest that it is important to consider this third kind of motivational construct so as to fully understand learning behaviour in humans. According to Deci and Ryan (1994:3), although they are energised and explicable these behaviours are considered motivated because they are not regulated by intentional processes. This is also well explained by Coakley and White (1992, in Sommer & Dumont, 2011:387) who maintain that amotivation occurs in students when they believe that they cannot attain a desirable result or in those who do not value the activity. For example, Muller and Louw (2004) state that with regard to the amotivated type of impulsion, students with high scores perceive their behaviours as caused by forces outside of their own control and start to ask themselves why they should go to school or university at all and may eventually drop out of academic activities altogether.

From my reading, I understand that for them to perform in a required way, students do need some kind of motivation, whether intrinsic or extrinsic, depending on the perceptions of each student. Although researchers differ in terms of their perceptions and findings on the subject, I maintain that for students to succeed in their studies, intrinsic motivation is what it really takes (i.e. the primary construct) and that this kind of motivation lasts for a comparatively longer period. It is therefore my belief that intrinsically motivated students are more likely to make an effort to perform as required without expecting an external reward than those who are extrinsically motivated. In other words, whether or not rewards will be provided does not

influence their motivation, effort and interest in doing an activity. Hence, Schreiner and Hulme (2009:72) note that authentic motivation that is self-initiated and self-regulated arises in settings where the needs of competence, relatedness and autonomy are met. These authors (Schreiner & Hulme, 2009) also believe that authentically motivated students are more likely to engage in the learning process. In addition, it has been found that such engagements produce high levels of academic performance as well as the kind of content mastery that lasts beyond the final exam. Furthermore, it also facilitates student growth and development, leading to psychological well-being and persistence to graduation.

In summary, Schreiner and Hulme (2009) believe that students will be more willing to learn if they are motivated and will, in turn, tend to remember what they have learnt even after the exam. In other words, the level of content understanding would be maximally enforced. In line with this, I maintain that students need to know exactly what the course(s) they have selected are about because this will either directly or indirectly affect their level of motivation in their studies.

In conclusion, Munteanu et al. (2011) report that understanding the relationship between motivation and personality may help to predict distinctive components of academic performance. This would enable one to direct students towards the disciplines and programmes in which they are most likely to succeed. Accordingly, Munteanu et al. (2011) above allude to one of the important issues in this study, which will unfold during the process of the study.

#### 2.3.1.2 Students' attitude towards the learning process

Rajecki (1990:5, in Sikhwari, 2007:524) defines the term 'attitude' as "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related". Some researchers regard attitude as the evaluation of the attitude object, comprising a person's likes or dislikes for the attitude object. This attitude object is said to be any real or imagined entity toward which an individual's cognitive, evaluative or intentional orientation is directed. Vrey (1979:267) maintains that an attitude in the learning context may be described as a state of preparedness or general tendency to behave in a particular way with regard to a learning task.

Du Plessis and Rousseau (1999:218) define a learner's attitude as a "learned" experience which is formed when the learner experiences something (concrete or abstract), evaluates it

on the basis of the available information and his/her frame of reference and, according to his/her own perception of it, forms a specific predisposition.

Unlike other researchers, Luthans (1998:139–140, in Tait et al., 2002:177) stresses the fact that an attitude is part of a person’s personality. Luthans (1998, in Tait et al., 2002) also points out that attitudes can be characterised in three ways. First, attitudes tend to persist unless something is done to change them. Second, attitudes can fall anywhere along a continuum from very favourable to very unfavourable. Third, attitudes are directed toward some object about which a person has feelings (sometimes called ‘affect’) and beliefs.

Mullins (1999:324) defines attitudes as offering a state of “readiness” or tendency to respond in a particular way. However, Tait et al. (2002) explain that because an attitude is a predisposition it can be assumed that it will influence learners in their behaviour, which may be a response that is either favourable or unfavourable. They (Tait et al., 2002) further elaborate that in the learning situation this response involves how the learner applies himself/herself and the expectations they have of themselves and their lecturers, for example. Expectations in this sense are the perceptions of the possible extent that the choice of a certain action will eventually lead to the desired result.

In addition, Tait et al. (2002:177) warn that all learners entering university have certain expectations of university studies and individual progress. Again, these expectations are often not realised and consequently high failure rates are reported at many institutions. This then is often attributed to learners not being ‘university ready’. Tait et al. (2002:179) suggest in this regard that it is therefore important to understand learners’ attitudes towards the learning process. In line with Tait et al.’s (2002) belief that all learners entering university have certain expectations of their university studies, this study will attempt to get the student to identify such expectations. Hence, the first research question – What are the perceptions and expectations of Grade 12 top achievers of first-year university teaching and learning?

From my reading, I understand that students’ attitudes are a result of the expectations that they come to university with. I therefore concur with Tait et al. (2002) that all learners entering university have certain expectations with regard to their university studies and individual progress. This then suggests that when students’ expectations are met by the universities the chances are they will have a positive attitude towards their learning. Unfortunately, if the opposite occurs, then worse behaviour might be expected of students in

the learning process. Based on this argument, my opinion is that institutions like universities should always strive to create learning environments that will meet students' expectations, thus creating in them a positive attitude to learning. It is important to mention here that the forming of the correct attitude for excellent academic performance, especially in higher education, rests primarily with the students themselves.

#### 2.3.1.3 Students' academic self-concept as a psychological construct in academic performance

Pajares and Schunk (2002:15) maintain that interest in the self and in self-beliefs, has been characterised by changed research into self-concept, which is a construct with a long ancestry as William James wrote extensively on self-concept more than 100 years ago. Furthermore, Pajares and Schunk (2002) state that definitions of self-concept are influenced by James' conception that the self-concept is an individual's representation of all of his/her self-knowledge. In the same vein, Combs (1962:52, in Pajares & Schunk, 2002) argues that in essence an individual's self-concept is "what an individual believes he is". As a result, the accuracy of the self-appraisals that a person makes rests in part on how well one knows oneself. Accordingly, it may be said that a person's self-concept is made up of the beliefs that they hold to be true about their experience. Taking this argument further, Coopersmith (1967, in Pajares & Schunk, 2002:15) wrote that "each person's self-concept, to a considerable extent, is a mirror reflection of how he has been (and is) seen by others who are important to him".

Interestingly, Pajares and Schunk (2002:15) indicate self-concept in general terms as the global perceptions of self-worth or self-esteem as defined and used by early theorists. Unfortunately, however, many people perceive themselves primarily in terms of the different facets of their self-system, each facet carrying a different description and evaluation. Specifically, self-concept is understood as a self-descriptive judgement consisting of competence evaluation and the feelings of self-worth associated with the judgement in question (Pajares & Schunk, 2002).

Arens, Yeung, Craven and Hasselhorn (2011:970) maintain that a lot of attention in educational research over the last two decades has been on students' academic self-concept. According to Arens et al. (2011) this interest relates to the predictive power of academic self-concept for a broad scope of academic outcomes such as academic achievement, coursework selection, interest and persistence. Hence, Arens et al. (2011) believe that a high level of

academic self-concept is seen as a mediator leading to other favourable educational outcomes and also as a desirable outcome in itself. I concur with Arens et al.'s (2011) position that a high academic self-concept is both a requirement and a mediator that produces other positive or favourable educational results. The formula that applies in this instance is that a student with a high positive academic self-concept is always motivated and hence produces excellent academic results. Furthermore, in their opinion, Arens et al. (2011) believe that in addition to its domain specificity, academic self-concept is also said to be multidimensional in terms of its motivational functions, as it can be further differentiated into cognitive and affective components within each specific domain. However, the categories mentioned by Arens et al. (2011) are beyond the purview of this study.

Nevertheless, Kleemann (1994:140) notes that since students have an important role to play in assuring their own success, studies of retention, achievement and success have traditionally focused on them (students). Kleemann (1994) further states that how students approach academic work is often influenced by belief in their abilities. In other words, students with a high level of academic self-concept will obviously approach their academic work with all the necessary desire, enthusiasm and confidence to succeed.

In support of Kleemann's (1994) argument, Sikhwari (2007) stresses that affective factors like attitude, motivation and self-concept also play a significant role in academic achievement. Hence, according to Rice (1996:186, in Sikhwari, 2007:521), students who display confidence have a positive self-concept and are definitely motivated to achieve more in their academic work. On the other hand, students with negative attitudes about themselves impose limitations on their own achievement. Nonetheless, definitions provided by different scholars assist in locating the purpose of this study and coming up with constructive arguments on academic self-concept.

Self-concept is "a psychological construct which refers to a cluster of ideas and attitudes an individual holds about him or herself" (Drew & Watkins, 1998:175). On the other hand, Mwamwenda (1995:365) regards self-concept as the way a person perceives himself/herself and may be either positive or negative. Some scholars view the self-concept as "the concept or image a person has of himself and is unique, personal and highly meaningful to the person concerned" (Sikhwari, 2007). In defining self-concept, Arens et al. (2011:970) use Shavelson et al.'s (1976) definition which defines it as an individual's perceptions of the self that are created through interactions and experiences with and within the environment. According to

Sikhwari (2007:523) one can then view self-concept as a psychological concept, which forms an integral part of a person's personality and as the way an individual regards himself/herself. Since self-concept is not static, depending on the individual's perception of the situation it can change from positive to negative.

Furthermore, Sikhwari (2007) advises that, rather than a negative self-concept, which can make one feel inadequate and worthless thus leading to failure, one should always strive to develop a positive self-concept as it can lead to success. This is a very important statement that needs to be re-emphasised in the debates on self-concept development. For purposes of this study, the research also attempts to ascertain how the high achievers, or subjects of the study, use their positive self-concept to their advantage in their academic performance in HEIs.

Based on the argument above, Bloom (1976, in Sikhwari, 2007:521) contends that students with an optimal attitude, positive self-concept and motivation, employ the study time allocated to them efficiently and consequently exhibit high achievements. That is, students' beliefs about themselves affect every aspect of their behaviour and their learning. Combs (1982:496, in Sikhwari, 2007) takes this further by emphasising that students may see themselves as either able or unable, but such concepts of themselves are always accompanied by affective feelings of success or failure, acceptability or rejection, happiness or sadness, triumph or defeat.

Rooth (1995:70, in Sikhwari, 2007) maintains that the self-concept underlies all human behaviour and can be a major motivating or inhibiting force. On that note, Sikhwari (2007) points out that the literature is deluged with reports that indicate that there is an increase in learning when the self-concept increases. The advice given by Sikhwari (2007) is that affective factors cannot be treated as separate entities but as an interdependent collective. The current study is also significant given the fact that it allows the subjects of the study to identify all the factors they know or think to be determinants of their academic performance in HEIs. Discussions would therefore be based on common factors or variables that arise in the interviews conducted with the subjects of the study as well as from the questionnaires.

Another factor that is prevalent in the self-concept is self-esteem. Self-esteem is a component of 'self-concept' and refers to the way a person perceives himself or herself or the beliefs and thoughts a person may have about himself/herself (Vrey, 1979:47). Vrey (1979:115) further



states that there is interaction between self-concept and achievement. Accordingly, Sikhwari (2007) states that, a learner with a positive self-concept would perform better than a learner with a negative self-concept. According to Sommer and Dumont (2011:387), self-esteem is often defined as “the individual’s positive or negative attitude toward the self as a totality” and has been demonstrated in several studies to be positively associated with different social and academic-related factors, including psychological well-being and academic performance.

Based on the definitions and arguments raised by different scholars on the self-concept, the researcher’s position is that the self-concept forms the basis for all the other elements that are required for satisfactory academic achievement. As a researcher I believe that when a student has developed a positive self-concept about himself/herself long before coming into contact with the HEI environment, even if the experience is challenging the chances of this student succeeding are generally higher than would otherwise be the case. This is well phrased by Modipane (2011:1595), who highlights that the way in which first entering university or college students deal with the transition period can also be related to how individual students see themselves in relation to other people, mainly their peers. According to Modipane (2011), students who have a poor self-concept are likely to find it more challenging to adapt to new environments. Modipane (2011) further argues that a poor self-concept is also associated with poor academic achievement and is one of the challenges faced by first-year university students.

To sum up, as a researcher one might say that it is important that students as individuals generate positive feelings, good thoughts, high self-esteem and the desire and willpower to achieve or succeed no matter what prevails in their learning environment. In short, one can say, self-concept means that a student is already self-motivated prior to accessing other support mechanisms that are directed at motivating students. Hence, in line with Arens et al. (2011), self-concept underlies all human behaviour (i.e. students’ behaviour in this study) and can be a major motivating or inhibiting force. However, different scholars warn that in addition to its domain specificity, academic self-concept is also said to be multidimensional in terms of its motivational functions. This then suggests that self-concept cannot be studied in isolation when focusing on the factors determining academic achievement. I am therefore in agreement with Sikhwari (2007) who advises that affective factors cannot be treated as separate entities but as an interdependent collective.

#### 2.3.1.4 Students' interest in their studies

Fraser and Killen (2005:27) state that some of the most important factors in students' academic success at university seem to be effort, interest in the course, motivation and self-discipline but none of these can be predicted directly from matriculation results.

On the other hand, Muller and Louw (2004:172) argue that individual interest describes relatively stable personality characteristics while situational interest depends on time and situation. The assumption here is that repeated situational interest produces individual interest. Hence, Muller and Louw (2004) stress that intrinsic motivation, positive emotional valence and a strong personal relationship with certain objects (e.g. a specific discipline at university) produce high interest behaviours.

On that note, Muller and Louw (2004) further point out that there are numerous ways in which the theory of interest and self-determination theory can have pedagogic significance. Muller and Louw (2004) argue in this regard that, firstly, learners who are interested are more content in their learning processes, acquire knowledge in a more differentiated and more coherent form, show a long-term retention of what has been learnt and apply their knowledge more often than others. Furthermore, it is believed that intrinsically motivated and interested learners cope better with the demands of the learning institution. In addition, they demonstrate higher academic achievement especially over the long term and also perceive themselves as more competent.

Interestingly, Yaworski, Weber and Ibrahim (2000:217, in Sikhwari, 2007:522) argue that interest is central to motivation since it involves the selection of and persistence in processing information. The claim made here is that personal interest has been demonstrated to increase memory, attention, depth of processing, comprehension and knowledge base. These researchers (Yaworski et al., 2000, in Sikhwari, 2007) also indicate that a student must construct a self-schema that includes possessing knowledge of cognitive learning strategies and being a good strategy user in order to use such strategies. Hence, top achievers are those individuals who describe themselves as being good students, while low achieving students do not engage fully in academic work because of a lack of interest or a lack of knowledge of strategy use. In this study the focus is on high or top achievers as informed by their Grade 12 achievement.

McCoach (2002:66) argues that “why some students achieve in school and others do not, remain a mystery”. Although ability is the best predictor of academic achievement, it explains less than 50% of the variance in students’ performance. Based on this argument of McCoach (2002), Sikhwari (2007) concludes that there are other factors which play crucial roles in learning and in the academic performance of students besides intellectual ability. Again, important factors in learning are students’ interests and their involvement in different academic tasks, how they perceive their interactions with their lecturers and what they feel and think about themselves with regard to the execution of academic tasks. The truth and validity of this statement will be ascertained through the empirical investigation that the study seeks to undertake. For the purpose of this study, interest focuses on the students’ interest in their academic work, their new learning environment, the programme of study/course and the institution as a whole.

The question that then arises is that, under normal circumstances, how and where does one see good academic achievement if students do not show any interest in their studies. Again, if an individual’s interest shows relatively stable personality characteristics, as alluded to by Muller and Louw (2004), how then would support structures within the universities change this into a construct that would promote excellent academic achievement. My belief is that students’ interest is integral to motivation; that is, when students have an interest in a programme or course, they will more than often be motivated to work on it. The students’ interests in their studies will therefore be investigated and explored against this background to a create better understanding on this variable.

#### 2.3.1.5 Students’ effort as the mediator between motivation and academic performance

Crissman Ishler and Upcraft (2005:37) point out that a commonly accepted axiom of first-year student persistence is that “the more students invest in their learning, the greater is their likelihood of staying in college”. The work of Tinto (1987 in Crissman Ishler & Upcraft, 2005) is quoted as evidence to support this notion. According to Crissman Ishler and Upcraft (2005), Tinto found that the hours that students studied per week were positively associated with persistence. Furthermore, Crissman Ishler and Upcraft (2005) indicate that there is substantial evidence to show that the quality of the student’s effort affects the extent of student learning and thus may have an indirect or direct effect on persistence.

Parker (2006:139) maintains that the student’s effort devoted to learning has been interpreted in various ways and with mixed results. For instance, in some studies effort is measured as

out-of-class study time, however Parker (2006) states that defining and measuring the productivity of study time are some of the problems associated with using study time as a measure of effort. On the other hand, the majority of studies use lecture/class attendance as a proxy for student effort. Parker (2006) states in this regard that generally these studies have found that performance does benefit from greater attendance.

Ultimately, Goodman et al. (2011:375) stress that the mediator between motivation and academic performance is effort. According to Goodman et al. (2011) mediation means an individual's internal response to a stimulus that influences one to perform in a certain way. Goodman et al. (2011) report that, many studies have found 'effort' to be a mediator between motivation and academic performance. These authors also point out that research has found that achievement motivation has an influence on academic performance but argue that a particular level of effort has to be exerted to obtain the desired performance level. Moreover, some studies have revealed the existence of a positive relationship between effort and academic performance.

In view of the research cited above, it would seem that motivation alone cannot make students reach the desired level of performance. In other words, even if students are motivated in their learning or studies, they also need to put in a certain amount of effort to perform as required. I therefore believe that, in this study, when students narrate their experiences of their first year during the interviews, they will share interesting information about the effort they put into their studies in order to succeed. This will assist in answering the second research question: How do Grade 12 top achievers respond to the challenges of the first-year at university? Ultimately, I contend that in putting some effort into their studies, students might be responding to the challenges referred to in the research question.

Studies already conducted have found that the amount of time that is spent on assignments appears to be a relatively good measure of student effort. In addition, the amount of time spent on homework and class attendance have been found to have a positive effect on student learning and academic performance. A study conducted by Fraser and Killen (2005) at two South African universities (i.e. University of South Africa and University of Pretoria) revealed that less motivated students put in less effort which subsequently led to poor academic achievement. Goodman et al. (2011) argue in support of this assertion by finding that highly motivated students apply extra effort and exhibit high academic achievement. On

the other hand, Park and Kerr (1990) attest to the fact that generally effort and intelligence determine the grade.

Interestingly, Dweck (2002:42) provides a good example of what students believe about effort. As a researcher, I share the sentiments of the group of students in Dweck's (2002) study, who believed that effort can compensate for lower ability; as they put it, "you can get to the same place by working that much harder". On that note, I believe that the argument raised by the other group in Dweck's study with the belief that intelligence is fixed is misguided. This group of students indicated that "if you don't have the ability forget it; you are not going anywhere. Your effort just won't work". They agreed that "if you are not good at a subject, working hard won't make you good at it and it doesn't matter how hard you work – if you are smart you will do well and if you are not smart you won't" (Dweck, 2002). In short, these students believed that having to work hard at something automatically means one is not good at it and that "if you are really smart at something you should not have to work hard at it".

Accordingly, Dweck (2002) warns that there is no more damaging view than the belief of students that effort is unnecessary (if you are smart) and ineffective (if you are not). Notwithstanding, my analysis of this scenario is that students' perceptions influence their belief about effort to a large extent. I am also in agreement with Dweck (2002) that students who believe that they are measured by their effort are prone to different self-defeating behaviour. In most cases, it is possible for such students to choose failure over effort; in other words, trying harder is simply too much of a risk. My position on the scenario given by Dweck (2002) is that it really takes some effort for those students who are viewed as 'not smart' to be smart just like others. In my view, effort works for all students irrespective of their level of intelligence.

The study conducted by Goodman et al. (2011) indicates that there is a direct relationship between students' motivation and academic performance. Moreover, both intrinsic and extrinsic motivational factors have been found to be triggers for students' effort in performing well academically. This study also found that academic performance is almost equally affected by intrinsic motivation and effort. In a study conducted by Fraser and Van Staden (1996), it was found that learners who were successful were committed to a study programme, studied on the basis of a pre-planned study schedule, established achievable and

realistic learning objectives, had self-confidence and completed tasks within the allotted time-frame.

Consequently, it would seem that researchers have tried to define effort against the background of the studies they have conducted. For the purpose of this study, I regard effort as meaning all the exertion and determination that the students put into their academic activities with the one objective of ensuring that they perform as required or above the minimum requirements in the end. This does not imply instances where students perform well in some courses but fail others, but caters for efforts made towards excellent achievement for that particular academic year or study programme. Most importantly, effort in this study is located within the students themselves; that is, the entire responsibility for making sure that one puts in extra effort to perform as required or better lies solely with the individual student. This is important because in a university environment lecturers are not always there to remind students to work harder in order to avoid failure. Thus, Peterson et al. (2011:2) argue that although students may see personal effort and ability as significant for academic success, the responsibility for encouraging that effort and developing ability may lie elsewhere. Unfortunately, in the university environment the “survival of the fittest” prevails.

### **2.3.2 Cognitive factors influencing academic performance**

According to the literature, different disciplines such as psychology, philosophy, linguistics, science and computer science all study cognition. However, the use of this term differs across disciplines, for example in psychology and cognitive science ‘cognition’ refers to an information processing view of an individual’s psychological functions (Pancer, Hunsberger, Pratt & Alisat, 2000).

Pancer et al. (2000) point out that cognition in science is a group of mental processes that includes memory, attention, producing and understanding language, learning, reasoning, problem solving and decision making. Furthermore, Pancer et al. (2000) contend that cognition is a faculty for the processing of information, application of knowledge and changing of preferences. Worth mentioning here is the fact that cognition or cognitive processes can be natural or artificial, conscious or unconscious. This study focuses on intelligence as one of the examples of cognitive factors that are linked to academic achievement. Whether or not the top achievers’ academic performance is as a result of their intelligence level will be determined by the variables that these students identify as factors that contribute to their academic successes. Hence, Pancer et al. (2000) maintain that the

concept of cognition is closely related to abstract concepts such as mind and intelligence in psychology or philosophy. In addition, it includes mental functions and mental processes (thoughts and states of intelligent entities). Based on this notion, education has the clear task of developing cognition in society.

#### 2.3.2.1 Intelligence as a prerequisite for academic achievement

Cuasay (1992:3) states that colleges often depend on tests that they believe will predict college academic performance for the students tested. Cuasay (1992) further maintains that IQ tests and their correlates measure only three aspects of intelligence, namely, inherited intellectual ability, content knowledge and problem-solving skills. In addition, the same author (Cuasay, 1992) believes that since it is assumed that inherited ability is fixed, most pedagogy in higher education is then geared to increasing students' content knowledge and improving their problem-solving skills.

Another argument raised is that differences in individuals' academic performance have been linked to differences in intelligence and personality. Cuasay (1992) states in this regard that students who tend to achieve well in academic settings are those with higher mental ability, as demonstrated by IQ tests (quick learners), and those who are higher in conscientiousness (linked to effort and achievement motivation). Again, a more recent meta-analysis suggests that mental curiosity (as measured by typical intellectual engagement) has an important influence on academic achievement in addition to intelligence and conscientiousness (Park & Kerr, 1990; Cuasay, 1992).

According to Sternberg (1985, in Cuasay, 1992), intelligence is a broader and more complex concept than IQ. The argument here is that, it (intelligence) goes beyond results obtained from pencil-and-paper exercises to include many other cognitive activities like writing, reading, discussion, coping with novelty and attitude and emotions as they influence intellectual activities.

Intelligence is further described as the application of cognitive and metacognitive processes to learning and problem-solving. Cuasay (1992:7) points out that, metacognition refers to the processes by which the brain organises and monitors its cognitive resources. Accordingly, metacognitive processes involve managing the cognitive processes using techniques such as self-steering, thinking strategies, functional principles and mental preparation involving attitudes and emotions.

In conclusion, Cuasay (1992:8) warns that intelligence, unfortunately, continues to be viewed as unmodifiable not only by many educators but by many students as well. On the other hand, Cuasay (1992) also warns that metacognitive instruction cannot be undertaken apart from the emotional, attitudinal and motivational orientations promoting academic success. For the purposes of the study, intelligence on the part of students will only be traced through the academic performance records of first-year university studies, which serve as a follow-up on the Grade 12 or NSC results.

In response to the views of the different writers cited above, my understanding is that students' intelligence as a cognitive factor cannot only be associated with IQ as it is measured by paper and pencil assessments. In other words, intelligence has to do with different abilities ranging from inherited intellectual ability to problem-solving skills. In my opinion, all these elements would then be demonstrated by the level of performance of the different students who form part of this study.

### **2.3.3 Academic factors influencing academic success**

Matoti (2010:135) points out that university lecturers and professors often assume that students from the school system are well prepared for programmes in the higher education sector. However, according to Matoti (2010), research has shown that any transition from one level to another has its own challenges. Indeed, the transition from school to university has been found to be problematic.

Killen et al. (2003:147) indicate that students entering South African universities have a diversity of abilities, attributes and backgrounds that gives rise to a variety of expectations and needs. The argument raised here is that many students are under-prepared for university or are unable to cope with its demands; consequently, a significant number never graduate (Paras, 2001, Tait et al., 2002). Again, according to some researchers, students should not be blamed for such failures or for dropping out (Killen et al., 2003; Fraser & Killen, 2005). It is against this background that this study explores the different factors that students might identify as affecting their academic performance. This investigation aims to assist researchers in building theory on the role played by the various internal and external factors that contribute towards students' academic success, especially in their first year of study.

In support of the above argument, Killen et al. (2003:147) suggest that when admitting students, universities need to be reasonably confident that those students will be capable of



successfully completing the course for which they have been permitted to enrol. Killen et al. (2003) take this argument further, stating that there is ample research to suggest that few selection methods give anything more than a very approximate indication of students' likelihood of success at university. Hence, they (Killen et al., 2003) contend that the two most common predictive measures, despite having limited empirical support, are school matriculation results and standardised admission tests. On the same note, Van Eeden et al. (2001:171) point out that in South Africa attempts to predict student performance in higher education are currently complicated by pressure to ensure that students represent the different racial groups in the country.

Apart from the facts raised above, Petersen-Waughtal and Van Dyk (2011:100) point out that there is agreement among academics that the South African higher education landscape is rather complex and there are several factors that may contribute to high retention rates. However, Subotzky and Prinsloo (2011) argue that universities do not have full control over these factors and are to a certain extent powerless with regard to the calibre of student they receive from the secondary education system. Petersen-Waughtal and Van Dyk (2011:100) note in this context that one of the factors often reported on is the lack of academic readiness of school leavers. On that note, some studies have revealed that "it is self-evident that the lack of academic readiness constitutes a major risk to student success" (Petersen-Waughtal & van Dyk, 2011).

Based on the discussion above, it is indeed logical to indicate that these authors, McKenzie and Schweitzer (2001) and Petersen-Waughtal and Van Dyk (2011), have raised a very significant point. Their studies have shown that students' lack of academic readiness is a major risk to student success and students' lack of academic readiness has been found to be a significant contributing factor to poor performance.

Some researchers (Kleemann, 1994; Tait et al., 2002) argue that the responsibility for academic success lies entirely with students and that "they need to acquire those skills ... that will allow them to succeed even when they encounter poor instruction or an unsupportive professor". However, this view is not supported by Killen et al. (2003) based on the principles of outcomes-based education, which require teachers to have "high expectations" of all learners and to providing "expanded learning opportunities" to maximise the learners' success. Thus, Killen et al. (2003) insist that students and lecturers have a joint responsibility

for students' success and gaining a thorough understanding of the complex processes that influence student success and failure is the first stage in accepting this responsibility.

#### 2.3.3.1 Academic preparedness of students for first-year university

Academic preparedness is said to be a multidimensional concept which includes skills such as the ability to write, read, take notes and take examinations. Miller, Bradbury and Pedley (1998:104) define under-preparedness as the after-effects of a challenging educational past characterised by learning environments that inadequately prepare students to deal with the demands of higher education.

In addressing the issue of preparedness, Matoti (2010:138) argues that a variety of factors contribute to the students' level of preparedness for higher education. In addition, Matoti (2010:139) emphasises that students who are well prepared academically stand a better chance of progressing well at university than those who are not. Therefore, Matoti (2010) believes that it is necessary for all the lecturers to have an understanding of the different backgrounds of the students in their lecture rooms to be able to help them overcome their learning problems. Besides the level of preparedness, Matoti (2010) maintains that students also have different preferences which may affect their study methods and learning. In other words, students not only come to university with different levels of academic preparedness, but also have different needs and preferences.

On that note, Bitzer and Troskie-De Bruin (2004:122) maintain that the level of students' academic preparedness is crucial to their success in higher education environment. Tinto's (1993) model, as cited in Bitzer and Troskie-De Bruin (2004), supports the notion that the perception of students on the workload determines the level of their effort. Thus, one of the factors that influence the academic adaptation process during the first year in higher education is workload.

Based on the argument above, Subotzky and Prinsloo (2011) emphasise the fact that under-preparedness for university study is widely regarded as another main factor that contributes to the lack of academic success amongst first-year university students in South Africa, which is evident from the low national pass rate. The question that arises here is how one determines under-preparedness as a main contributing factor to academic success at university. According to Robinson (1996:1, in Matoti, 2010), three domains of under-preparedness have been identified in the literature, namely, academic, cultural and emotional under-

preparedness. Firstly, academic under-preparedness entails a lack of proficiency in English, a lack of mathematical ability and ineffective study skills. The last-mentioned would explain why I also address the issue of study skills later on in this section.

Secondly, Matoti (2010:137) stresses the fact that cultural under-preparedness has also been found to affect students. In this regard, Robinson (1996:2, in Matoti, 2010) notes that, students entering university from an environment that differs culturally from that of a typical HEI are categorised as culturally under-prepared. According to Matoti (2010), these students are experiencing what is commonly known as ‘culture shock’ and need support in order to adjust. Accordingly, counselling and guidance is suggested for such students in order to help them cope with cultural under-preparedness which could lead to problems of emotional adjustment.

Another domain in which students are often under-prepared is the emotional domain. Emotional under-preparedness refers to a lack of self-efficacy and self-regulation displayed by students. According to Dunlap (2005:65), self-efficacy refers to learners’ beliefs about their performance capabilities in a specific context or task domain. In addition, some researchers maintain that higher levels of self-efficacy have been found to correlate with higher levels of self-regulation and eventually academic achievement (Kitsantas & Chow, 2007:383).

Following on from the above discussion, it can be said that the emotional under-preparedness, which has to do with a lack of self-efficacy and self-regulation, is also important in investigating the perceptions and experiences of students in their first year of study. Consequently, ascertaining self-efficacy could also reveal how students’ beliefs about themselves have influenced their performance.

A study conducted by Bradbury and Miller (2011) offers evidence for the claim that under-preparedness is a distinctive phenomenon and that the reasons for failure are not the same for all students. In an analysis of their study, Bradbury and Miller (2011:7), suggest that under-preparedness might be understood as a function of questioning engagement rather than simply as a deficit in individual students with respect to particular content domains. Interestingly, Bradbury and Miller (2011:7) maintain that under-preparedness reflects a systemic failure by the educational system to initiate these students into the world of

academic study and its implicit rules of enquiry and knowledge construction rather than simply a failure or lack of aptitude on the part of individual students.

Finally, Parker (2006:146) indicates that the response of several universities to the poor academic preparedness of new entrants has been to implement ‘foundation’ programmes in which students not meeting standard entrance requirements may be enrolled. It is also highlighted that such programmes typically extend the three-year bachelor’s degree by an additional year. In these courses during the first year of study, students are generally taught academic skills such as basic computer literacy, academic writing and Mathematics in addition to credit-bearing courses towards their degree.

The academic preparedness of students as a factor that might contribute to students’ performance needs to be understood within both the individual’s internally and externally located conditions. From my reading, I understand preparedness to be addressing the emotional, cultural and academic domains that relate to the level of preparedness. However, it is important to stress that in the academic domain it should not be stereotypically assumed that under-preparedness has to do specifically with language proficiency (i.e. English) only.

#### 2.3.3.2 Previous academic performance of students

Hofmeyer and Spence (1989, in Zewotir, North & Murray, 2011:1234) argue that because admission to universities in South Africa is mainly granted on the strength of Grade 12 results, a great deal of uncertainty arises regarding the validity of these Grade 12 results as a predictor of future performance, particularly for students that have come from a disadvantaged schooling background. In the same way, Petersen-Waughtal and Van Dyk (2011:100) state that the reliability of matric results has been under rigorous scrutiny for a number of years and there seems to be consensus that Grade 12 results are poor predictors of academic success, as also noted by Paras (2001), Horn, Jansen and Yu (2011) and Sochet (1994). Regardless of the prevailing situation, HEIs are still admitting students on the basis of their Grade 12 results as they are regarded as the single most reliable predictor of academic success even though not a good one. Therefore, as a researcher I need to highlight the fact that for this study to take a position on the above statement would be premature, because this will be addressed by scrutinising the students’ performance record at university as informed by their Grade 12 results.

In contrast, McKenzie and Schweitzer (2001:22) highlight that some research has revealed support for the relationship between previous academic performance and performance at university. It is also noted that some researchers have found that the predictive capacity of secondary school grades is different for different individuals and groups. The findings of the researchers, Power, Robertson and Bake (1987, in McKenzie & Schweitzer, 2001) reveal that secondary school grades are not as good predictors of performance for mature age students as they are for school leavers' performance and that female students with the same secondary school grades as male students consistently outperform their male counterparts later on. This finding is supported by McKenzie and Schweitzer (2001), who note that the university entry method and the ease with which entry can be made into university has also been found to affect the predictive capacity of secondary school grades.

In their study, Horn et al. (2011:210) found that as a proxy of academic ability matriculation results played a weaker role in explaining academic success in the second year whereas performance in the first year of study was a more important predictor. In support of this statement, Van Eeden et al. (2001:171) confirm that high school grades have often been found to be a good predictor of subsequent academic and work performance. On the other hand, Sochet (1994) argues that academic potential cannot be accurately reflected by grades obtained in a disadvantaged social and educational system. This argument is taken further by Nunns and Ortlepp (1994:203), who report that previous research conducted at the University of Witwatersrand (Wits) established that for typically white students, matric results (particularly in the higher range of faculty ratings) were an acceptable predictor of success at university. However, it is important to note that these results typically concerned white students who could not be considered educationally disadvantaged.

It is important to note that whether or not students are from a disadvantaged community or education background is not a point of concern for this study. However, if students do mention that as a factor contributing negatively to their studies, it would then be examined and analysed based on the data presented by the subjects themselves. For this study in particular I believe that the previous academic performance of students would lay a good foundation for their performance in the first year since they performed above the requirements of the NSC exams.

### 2.3.3.3 Language of learning and teaching

Petersen-Waughtal and Van Dyk (2011:99) point out that one of the main reasons for a lack of academic success amongst undergraduate students is low levels of academic literacy in the language(s) of teaching and learning. In a South African educational context, the language of learning and teaching (LoLT)<sup>6</sup> refers to the language chosen for instruction and assessment at a school by the school's governing body in consultation with parents. This is also the language of the textbooks provided to the school (Department of Basic Education, 2011:ix).

Van den Berg (1996) insists that language proficiency as the most significant single moderator of test performance reflects familiarity with concepts and access to the language medium through which knowledge has to be gained. In support of this argument, Cross, Shalem, Backhouse and Adam (2009:25) further elaborate that to become a student requires “a progressive mastery of the common institutional language” of the learning space through which a student emerges as “a person endowed with a pool of procedures, methods, activities, know-how, which make him/her able to invent mechanisms of adaptation to give a meaningful sense to the world which surround him/her”.

Modipane (2011) concurs with the statements above, based on the belief that the success or failure of a student, more often than not, depends largely on their ability to listen, speak, read and write proficiently in the medium of instruction. Unfortunately, poor language skills are said to be a major contributing factor to poor academic performance among first-year students. An argument raised here is that students in South African higher education are taught mainly through the medium of English at most institutions and yet there are many students who enter university with a poor proficiency in English. Moreover, this is their language of instruction for most of their academic work.

Niven (2005:778) argues in this regard that common sense suggests that the under-performance of foundation-year students could be explained by the fact that they all use English as an additional language. Niven (2005) further notes that this has implications for the students' ability to cope academically at tertiary level where success depends on the reading and writing of academic texts in English. On the other hand, lecturers often explain student failure as being a result of laziness, not being intelligent enough, or the fact that their 'literacy levels' are low.

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<sup>6</sup> Language of Learning and Teaching (LoLT) refers to the language teachers use to instruct and to assess. In South Africa it can either be English or Afrikaans.

Similarly, research conducted by Bohlmann and Pretorius (2002, in Du Plessis, Muller & Prinsloo 2005) shows that the stronger a student's reading ability the better his/her chance of performing well in Mathematics examination. Not surprisingly, the implications of this is that weak readers only achieve comprehension levels of 50% or less, which effectively means that half of what they read they don't properly understand, with dire consequences for their academic performance.

As a result, Niven (2005:786) warns that ascribing student failure to cognitive or linguistic rather than socio-cultural factors means that lecturers can avoid their responsibilities to teach in imaginative accessible ways; if students have 'language' or 'literacy problems' then language or literacy specialists must be called in to address them. In support of this argument, Van Eeden et al. (2001:171) state that personality then plays a larger role in actual achievement. However, according to their findings the LoLT is a useful predictor of academic performance.

Bradbury and Miller (2011:1) emphasise that it is clear that South Africa's enduring unequal schooling system creates multiple layers of disadvantage that require redress. Such redress should be directed at the low level of skill and training among teachers, the inadequate infrastructure and the paucity of equipment and books. On that note, Bradbury and Miller (2011) further argue that a factor that further places learners at a disadvantage is learning through the medium of a second language. In this regard, I agree with Bradbury and Miller (2011) that learning through the medium of a second language is an important issue that should not be overlooked because in HEIs no distinction is made between students who did English as the Home Language at school and those who did it as a First Additional Language (FAL). In other words, universities use a "one size fits all" kind of learning or instructing level in their classes or lectures.

Consequently, Parker (2006:145) suggests that as long as English remains the chief medium of instruction and assessment, attention must be given to the proper development of language skills at primary and secondary school or alternative language policies should be devised. In support of this statement, Modipane (2011:1597) stresses the point that the importance of language proficiency for the purpose of managing learning and academic studies cannot be over emphasised. Accordingly, Modipane (2011) warns that first-entering students who do not possess the appropriate language proficiency in English nor the appropriate language skills might possibly find it difficult to cope with their studies.

Therefore, the importance of the acquisition of skills and proficiency in the language of instruction and assessment cannot be overlooked as it has a direct influence on the learning and academic performance of first-year university students. The most unfortunate part in this instance is that the consequences of this lack of language mastery are felt at the end of the first semester or first year at university. My position as a researcher is that the South African education system should try and address the issue of the medium of instruction at school level. This would then assist HEIs in formulating policy as to which grade is required in the LoLT for a student to be admitted to a particular programme.

Language mastery is important because it enables students to interact with the course materials on their own. Hence, it can be viewed as facilitating self-motivation among students. The argument I am raising here is that if students are coping in terms of the language of instruction and assessment, the desire and the will to learn more about the course will prevail. Most importantly, students will put more effort into their studies because they really understand and enjoy what they are doing.

Hrabowski III (2005:132) emphasises in this regard that since faculty–student interaction is vital, one of the challenges first-year students often face is that of adjusting to the speech patterns and accents of faculty members and graduate students teaching first-year classes. The main argument here is that if first-year students have little or no exposure to people from different cultures, they often have difficulty both understanding and being able to relate to the instructor. Therefore, it is then incumbent on institutions to address this issue head on by helping students develop more tolerance for speech and behaviours related to different cultures and by working with the instructors they place in the classroom to ensure that they are speaking standard English clearly (also providing opportunities for training as needed). My reading of Hrabowski III's (2005) argument is that institutions should come up with support structures in the form of programmes to address the language challenges facing first-year students. I am in agreement with Hrabowski III (2005) because if institutions do not attend to the problems or challenges they have identified, the chances are they will become victims of the same problem(s) in each academic year. In short, it would be better for institutions to have some preventive measures in place before the problem gets out of hand.

#### 2.3.3.4 Academic skills influencing students' performance

Johnston (2010:6) notes that in essence the concern now is that many students enter higher education with a lack of academic skills and attitudes previously considered as basic to



tertiary level work. This leads to uncertainty, disengagement and cynicism about the traditional values of university study. It is therefore, against this background that this study aims to explore the impact that academic skills might generally have on the academic performance of first-year students at university. The literature review and the data obtained from the subjects of the study would provide a meaningful description of the way academic skills influence students' performance.

Munteanu et al. (2011:553) consider Murray's (1938) vision, which refers to the need for achievement to be one of the basic human needs, to be of great interest. This vision views the need for achievement as being "a more or less consistent trait of personality". Munteanu et al. (2011) point out that the need for achievement is thought to trigger different behaviours in different situations as part of one's personality. Munteanu et al. (2011:553) further elaborate that the motivational structure in one's personality includes the need for performance that can be associated with the need for achievement. This theory covers behaviours and thoughts, for example, both of which are associated with overcoming obstacles, accomplishment and success. Hence, it is believed that the need for achievement is the result of an emotional conflict between the hope to obtain success and the desire to avoid failure.

Interestingly, McKenzie and Schweitzer (2001:22) report that study skills have also been found to be having an impact on academic performance. This is also alluded to by Abbot-Chapman, Hughes and Wyld (1992), who found that students who display poor study habits are more likely to withdraw from university or to have academic adjustment problems in the transition from high school to university.

Another domain of academic skills that needs to be acquired by students in HEIs in order to perform to the best of their ability is academic competency. Sansgiry, Bhosle and Sail (2006:105) define academic competency as the proficiency of students with respect to the content taught during courses over the past academic year and the ability to understand the course material. Again, academic competence is said to be associated with students' ability to manage their study load and is used to assess whether students are able to manage the study material in the curriculum. It also assists to make judgements on whether the curriculum is interesting enough for students to enjoy their classes. Sansgiry et al. (2006:105) also reveal that academic competence affects students' academic performance and a student with better academic competence will probably display better academic performance. It is also important for me to stress that when academic competence is fully achieved, its fruits should be evident

through test competence. Test competence is operationally defined as the student's ability to manage and cope with the amount of study material for examinations and or tests (Sansgiry et al., 2006). In addition, test competence is said to refer to the challenges associated with managing the amount of study material for an examination and in preparing for them.

Strategic studying is said to be another area of academic skills that students need to acquire in order to perform as required in their university programmes. Sansgiry et al. (2006:106) define strategic studying as the students' knowledge and application of effective study skills or techniques. In their opinion (Sansgiry et al., 2006), strategic studying techniques might assist students achieve a high GPA<sup>7</sup>. These study strategies may include, among others, Know-Want-Learn (K-W-L), Survey-Question-Read-Recite-Review (SQ3R), summarising and note taking, using graphics and self-questioning, all of which can be based on the learning environment. However, strategic studying skills cannot be realised if students do not have good time management skills. Time management is defined as a cluster of behavioural skill sets that are significant in the organisation of study or course load (Sansgiry et al. 2006:106). In the same vein, Sansgiry et al. (2006) point out that time management involves tasks such as planning in advance, prioritising work, test preparation and following schedules. Hence, these researchers argue that higher academic performance may be achieved by balancing time management and study techniques effectively.

Kleemann (1994:146) emphasises in this regard that the most critical need and the most difficult to achieve is to improve learning in order to meet our goals of institutional diversity and high academic quality. Kleemann (1994) argues that if we do not improve the teaching and learning that takes place in the classroom all of our other efforts at improving the quality of out-of-class life will amount to little. Based on the statement above, Kleemann (1994) advises that an academic "safety net" for students needs to be established. However, how best to organise such a safety net must be determined by each campus. According to Kleemann (1994), this should at a minimum monitor student progress at the sixth, ninth and twelfth weeks. Again, it should intervene in terms of advising students and providing a means whereby if a faculty member notices a student struggling, that student would be counselled.

Based on the argument raised by Kleemann (1994), Taylor (1994) stresses that it is important to identify those individuals who have potential, even if their abilities are currently limited by

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<sup>7</sup> GPA stands for grade point average. It is international measure used to denote the average performance of students in a particular academic year.

past disadvantages. Hence, Taylor (1994) suggests that to address the inequalities of the past, more emphasis should be placed on potential rather than skills or specific abilities and those with high potential should be granted the opportunity to develop specific skills through training programmes. On the other hand, Sochet (1994) warns that modifiability does not necessarily constitute or predict success. In other words, both the potential and the current developmental state should be considered.

Like Sochet (1994), Schreiner and Hulme (2009:76) argue that in addition to engagement, academic self-efficacy and perceived academic control, strengths-based approaches also promote first-year student success by influencing students' level of hope. They (Schreiner & Hulme, 2009) believe that hope reflects students' perceptions of their ability to conceptualise goals.

It is pertinent to indicate that the views of the various authors mentioned here are important and will be of benefit to the current study. From my reading of different arguments, I understand that the academic skills that students have acquired in high school play a significant role in their university studies. In other words, whether or not students come to university with the required academic skills has an influence on their academic performance especially in the first year of university study. Therefore, it is important to note that for students to perform as required, HEIs (e.g. universities) should commit to prioritising the academic success of students, as has been discussed in this chapter. Accordingly, universities should put initiatives in place that assist students who lack academic skills.

#### 2.3.3.5 The impact of class attendance on performance

Van Schalkwyk, Menkveld and Ruiters (2010:631) conducted an overview of the literature, highlighting the complexity and contradiction that surrounds the many debates linked to issues of class attendance. In contrast, Horn et al. (2011:202) point out that factors that influence the academic success of first-year economics students have been intensely researched (see also, Dlomo, Jansen, Moses & Yu, 2011). In these studies, factors such as lecture and tutorial attendance, age, gender and matriculation results are identified as significant in explaining academic performance. However, according to Horn et al. (2011:202) in South Africa the academic successes of senior students have received less attention.

According to Thatcher, Fridjhon and Cockcroft (2007:656), there is considerable international evidence suggesting that lecture attendance levels are moderately (but significantly) related to academic performance. However, Thatcher et al. (2007) also argue that there are few studies on attendance rates and academic performance at South African HEIs. On that note, other researchers have, according to Thatcher et al. (2007), proposed a more student-centred approach to the lecture environment. One challenge identified by Thatcher et al. (2007:656) relates to the fact that all South African studies have only examined attendance at first-year level and not at the higher levels of study. This is of benefit to this study, however, as this research focuses on first-year university level.

Stanca (2006:252) points out in this regard that students make choices about whether or not to attend classes and these choices rest on an array of external variables and unobservable individual characteristics, such as ability, effort and motivation. However, some researchers, according to Van Schalkwyk et al. (2010), remind us that each student is in command of their own attendance and make choices accordingly. Dollinger, Matyja and Huber (2008:873) support this, stating that one of the factors that influence academic success and which is fully under the students' control is making a choice to attend classes. Hence, they (Dollinger et al. 2008) suggest that non-attendance at a time of escalating tuition costs would appear to be "economically irrational". A number of South African studies have also found that the more classes students attend the better their results (Van Walbeek, 2004; Steenkamp, Baard & Frick, 2009). This is supported by the results of a study conducted by Thatcher et al. (2007) that demonstrated that students who 'always' attend lectures show statistically significant academic performance advantages over students who 'seldom' or 'never' attend lectures. However, it is surprising to note that these results do not indicate why high attendance at lectures carries academic performance benefits (or even the direction of the relationship). However, my belief is that students who always attend lectures benefit greatly from their lecturers because besides learning the content they also learn how to handle different sections of content in preparation for any assessment. Again, my observation is that students who seldom or never attend lectures often panic during assessments even when they know they did study. In addition, it is generally believed that those who attend lectures are given tips for the examination.

Most importantly, motivation as a factor that influences class attendance emerged strongly in a number of studies including that of Devadoss and Foltz (1996). Van Schalkwyk et al.

(2010:640) indicate that students' motivation to attend classes often depends on students' school and academic performance, as well as the faculty (type of programme) in which they are involved. These authors also point out that the stronger students are in the academic sphere, the more they are motivated by academic concepts, for example that attending class enhances comprehension of the work.

According to Horn et al. (2011:203), many researchers argue that students in second year are aware of the importance of their performance in a potential major subject and may therefore be more goal orientated than freshmen. As far as staying on campus and off campus is concerned, there have been serious unresolved debates and arguments. For instance, some researchers, according to Horn et al. (2011), have reported that students who are in second year and staying in the campus residence do not attend classes more often than commuting students. Moreover, Horn et al. (2011) also reveal that in a more recent study, students in residences outperformed those students who are commuting.

Similarly, findings from the study conducted by Dlomo et al. (2011:704) reveal that a greater probability of writing the examination is associated with higher tutorial and lecture attendance, with the coefficient of the latter variable being greater and more statistically significant. Van Walbeek (2004) supports the positive correlation between lecture and tutorial attendance and examination performance.

In this regard, Thatcher et al. (2007:659) note that academic performance is not merely an attendance level function, but that personal factors such as ability (Park & Kerr, 1990), prior knowledge and motivation also play an important role in the prediction of academic performance and in influencing attendance levels. Furthermore, according to Park and Kerr (1990), levels of motivation engendered by the lecturer and the teaching style also play an important role in determining student performance and attendance.

Given the facts given here, Fraser and Killen's (2005) study puts up the argument that students' beliefs about what will enhance their chances of success or diminish their chances of failure, as well as motivational and personality factors, influence students' approach to study. Hence, Fraser and Killen (2005:27) demonstrate that, if students believe that attending lectures contributes to success, they will probably attend regularly even if they learn little from the lecturers. They (Fraser & Killen, 2005) further emphasised that if students believe

that success can be achieved without attending lectures, they may not attend on a regular basis even when this diminishes their chance of success.

In response to the views of the writers above, I strongly believe that class or lecture attendance is very important for performance, especially at first-year university level. In my opinion, whether a student is staying on campus or commuting is not an issue of debate in terms of lecture attendance. Although lecture attendance is up to the students themselves, if it could be enforced I believe that it could produce positive results. It is logical to agree that all institutions that have made lecture attendance compulsory for all students have identified problems with performance and have acted accordingly. Thus, my position is that lecture attendance in HEIs especially at the first-year level is a prerequisite for academic performance.

#### 2.3.3.6 Lecturers' expectations of students

Fraser and Killen (2005:35) contend that the lecturers' expectations of students influence many of the interactions between lecturers and students at university. In their previous studies, Fraser and Killen (2005) found that students thought that the expectations were "unrealistically high" although they placed a low priority on understanding lecturers' expectations. Fraser and Killen (2005) believe that explicit criteria are the ones that students are most likely to consider "unrealistically high" but these may have less influence on students' success than implicit criteria. The findings of Fraser and Killen's (2005) study suggest a strong need for lecturers to have appropriate expectations of their students, to make these expectations explicit and to explain to students why the expectations exist.

In addition, Moll (2004) maintains that instructional mediation refers to the idea of "curriculum responsiveness". Curriculum responsiveness focuses on the instructional strategies and learning pathways which a university employs in order to cater for its diverse student body, whilst socialising students into a type of academic inquiry that is aligned with the dictates of their academic discipline. According to Cross et al. (2009:24), the nub of this analysis is on how to enable what Morrow (1992) refers to as "epistemological access" for students of different social and cultural backgrounds.

Tait et al. (2002) contend that students' approaches to study are strongly influenced by their perceptions about what will enhance their chances of success or diminish their chances of failure at university, even when those perceptions are misguided. On the other hand,

researchers also believe that, similarly, lecturers' approach to teaching and their relationship with students is influenced by lecturers' perceptions of what factors contribute to student success.

From my reading, I understand that lecturers should try and make their expectations of students much clearer so as to avoid any confusion in the students. In other words, if expectations are clear and known by students, they will be motivated to study. Based on the above discussion, it is logical to concur with Tait et al. (2002) that students' perceptions of their success or failure influence their approach to their studies; hence, students' perceptions greatly influence their academic life and performance. Against this background, the study seeks to investigate the perceptions and expectations of Grade 12 top achievers in terms of first-year university teaching and learning. Again, the fact that the same perception plays a significant role in the lecturers' approach to teaching cannot be overemphasised. This then suggest that, to an extent, lecturers' expectations of students might be influenced by their own perceptions which in turn are said to influence their relationship with students.

#### **2.3.4 The impact of support structures on academic performance**

Vincent Tinto (in McKenzie & Schweitzer, 2001) is a major contributor to the study of the relationship between psychosocial factors and academic performance. In his research, Tinto (1975, in McKenzie & Schweitzer, 2001) designed a student integration model which suggests that a match between the academic ability and motivation of the student with social and academic qualities of the institution foster academic and social integration into the university system. According to this model, if students are not integrated into a university, they will develop low commitment to the university.

Scott, Yeld and Hendry (2007) maintain that the key factors affecting student performance in higher education is the quality of the schooling sector. They (Scott et al., 2007) argue that since the first democratic elections in 1994, the new government has instituted measures to reform education. According to Scott et al. (2007), 80% of schools in South Africa are considered to be performing poorly and interventions to improve these schools have proved to be inefficient. The argument raised again is that besides identifying the quality of the schooling sector as a factor affecting student performance in higher education, Scott et al. (2007) further argue that performance is also influenced by factors such as material conditions (e.g. socio-economic conditions and student finance), affective factors and the institutional climate and the effectiveness of the educational processes in higher education.

By contrast, Sedumedi (2002:167) contends that besides students' backgrounds, most historically black universities (HBUs) lack support structures such as the "academic development/support programmes" long established at historically white universities (HWUs) to assist under-prepared black students and writing centres to develop the students' writing and study skills. The current study is therefore important given the fact that as part of the empirical investigation to be undertaken, it seeks to find out what the existing support structures are that universities offer and also explore those structures so as to establish what impact they have on students' academic and non-academic activities. Hence, the research question, How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance? finds application here.

#### 2.3.4.1 Academic support

Tinto (1993, in Graunke & Woosley, 2005) suggests that important issues for first-year students may not be important issues for students at other stages in a college career. Graunke and Woosley (2005:368) also note that in his classic work, *Leaving college*, Tinto (1993) outlined a longitudinal model of institutional departure. According to Graunke and Woosley (2005), this model suggests that to foster integration into the social and academic context of the institution, individual student attributes interact with experiences within the university environment. Moreover, this integration impacts on the academic goals of students, their future plans and their commitment to the university. Unfortunately, on the other hand, poor interactions with faculty or lack of involvement in campus activities as negative experiences within the university may cause the students to lessen their commitment to the university and possibly leave the institution.

According to Beehr, Bowling and Bennett (2010, in Pillay & Bundhoo 2011:418) the term 'support' refers to those interpersonal contacts which the recipients felt were personally beneficial. In line with this definition, Van Schalkwyk et al. (2010:641) stress that support structures should be given high priority.

In this regard Tinto (1975, in Sommer & Dumont, 2011:388) reports that better socialisation at university has been associated with help-seeking via informal student–faculty interactions. Hence, Sommer and Dumont (2011) stress the fact that through their interaction with academic, other university staff and their peers, students experience and learn institutional values and requirements. Studies have also revealed that student–faculty contact and the



utilisation of student support services and intervention programmes have a positive impact on adjustment to university and academic performance.

The fundamental premise underlying Astin's (1993, in Bitzer & Troskie-De Bruin, 2004:120) concept of talent development is that "true educational excellence lies in an institution's ability to affect its students and staff favourably to enhance their intellectual and scholarly development and to make a positive difference in their lives". In other words, the most 'excellent' institutions are those that have the greatest impact on (add the most value to) students' knowledge, skills, attitudes and personal development.

Most importantly, Bitzer and Troskie-De Bruin (2004:121) believe that students' intentions and commitments are continually modified by their experience in the social systems of the institution, as indicated by his/her academic (intellectual) and social (personal) integration. For example, persistence is reinforced by positive experience (i.e. integrative academic and social experiences), leading to heightened intentions and commitment both to the goal of completion of studies and to the institution in which the person finds himself/herself. On the other hand, student intentions and commitment, especially commitment to the institution, are weakened by negative or malintegrative experiences which then enhance the likelihood of them leaving the institution.

Furthermore, Tinto (1993, in Bitzer & Troskie-De Bruin, 2004) found that a strong relationship between students' personal valued goals and the goal of completing their studies positively influence commitment and thus the likelihood of persistence until the qualification is obtained. However, students' entry characteristics, which include family background characteristics (e.g. socio-economic status, parental educational level), individual attributes (e.g. academic ability, race, gender) and pre-university schooling experience (e.g. high school academic achievement, involvement in high school activities) affect the level of students' initial commitment (Bitzer & Troskie-De Bruin, 2004).

On that note, Horn et al. (2011:203) warn that second-year performance is potentially affected by the fact that students do not receive the same institutional support (e.g. faculty interaction within and outside the traditional academic environment, curriculum advice and career guidance) as freshmen (first-year students) do, even though it could be more applicable to them in the attainment of their goal. In support of this, Zewotir et al. (2011:1241) report that in their study focusing on academic support programmes, those students who were not in

academic support programmes were found to have a higher risk of failing during their first year in the other faculties. The study also revealed that the risk of drop-out seems to be much higher if students are not in an on-campus residence. On the other hand, Jawitz (1995:108) is of the opinion that the existence of a relationship between performance in matric Physical Science and first and second-year courses in the Engineering curriculum highlights the need for revised curricula and teaching methods, as well as support programmes and tutorials that give first-year students exposure to the physical phenomena that underlie the principles and concepts developed in these courses. Hence, Petersen-Waungtal and Van Dyk (2011:101) suggest that support courses/programmes should focus on both “at risk students” and so-called “stronger students”, as all of them could benefit from such courses.

The establishment of social networks is clearly important in student transition (Heirdsfield, Walker & Walsh, 2007). However, it is worth noting that Heirdsfield et al. (2007:3) further highlight that mentoring programmes have a positive effect on transition to university, sense of belonging, retention and skill development according to evaluations. Heirdsfield et al. (2007:3) also note in this regard that mentoring programmes have benefits for both the more experienced student mentor and the first-year student (mentee). It is also indicated that preventing the negative effects of stress, enhancing the sense of belonging and identity with the university, school or faculty, early access to information about resources on campus, social connections, skill development and improved retention are some of the benefits for first-year students (Heirdsfield et al., 2007:3).

Based on the ongoing argument above, Sommer and Dumont (2011) concluded that students’ academic support structures are important and seriously useful. However, Sommer and Dumont (2011:393) suggest certain principles: students should be provided with skills that improve their abilities to cope with various demands (i.e. stress, time and work management, to understand their own motivation to study at university or career orientation) and, most importantly, a university climate which encourages students to seek help to improve their academic and social skills should be considered if these support structures aim to improve students’ academic performance. Hence, Sommer and Dumont (2011:393) conclude by emphasising that in order to achieve the desired effects, universities should provide support or assistance for students to ease their adjustment to university life during the first year of study.

The statement above is further supported by Zewotir et al. (2011:1243), who argue that though there are some common trends, factors affecting success in first year differ greatly from faculty to faculty, so that it is impossible to find a “one-size-fits-all” solution to increasing the level of student throughput rates at university. Hence, Zewotir et al. (2011:1243) suggest that each faculty should take note of the factors that affect failure and drop-out rates so that prevention or intervention strategies may be designed that are specifically geared to supporting students with risk-enhanced profiles in that particular faculty.

One can conclude that the notion of ‘pedagogic distance’ and ‘social presence’, as adopted from international research (Richardson & Swan, 2003) has brought to light the complexity and multidimensionality that characterise lecturer–student interaction. On that note, Moore (1997) claims that by narrowing the pedagogic distance between lecturers and students, learning mediation will be enhanced in its different domains – emotional, political, pedagogical, linguistic and physical. Again, Witt et al.’s (2004) description of “teacher immediacy” or “the act of minimizing the physical or psychological gap between lecturers and students through eye contact, touch, direct body orientation and gestures” are part of the work that contributed significantly to the issue of student–lecturer interaction.

The findings by different scholars above serve as pointers for understanding the significance of the academic support offered by HEIs. As a researcher, I believe that academic (i.e. intellectual) support structures in particular should be given high priority in order for institutions to meet the demands of first-year students. Like some of the researchers I also believe that this would demonstrate the ability of the institution in supporting its students and staff. I am in agreement with Petersen-Waughtal and Van Dyk (2011), who suggest that support courses or programmes should focus on both at-risk students and so-called stronger students as all could benefit from such courses. This is important because if such programmes are intended for students to achieve as required, those who are capable will then excel. Another good point is that mentioned by Zewotir et al. (2011), namely, that each faculty should identify its own challenges as they tend to differ from one faculty to another. In other words, to fully support students academically one cannot rely on ‘one size fits all’.

#### 2.3.4.2 Social support

As DeBerard et al. (2004:68) state, it would seem that social support is very important for a successful transition to the college environment. According to DeBerard et al. (2004),

preliminary research has revealed that parental social support is positively related to college achievement. On the other hand, there is also consistent evidence to show that non-persistence is influenced by low perceived social support.

Many factors that are indirectly associated with classroom activities can influence academic performance (Kleemann, 1994:147), one of which appears to be the student's sense of either belonging or alienation. Kleemann (1994:147) interprets this as meaning that students who are involved and feel that they are part of a university are much more likely to be successful academically than those who do not feel a sense of social support. Kleemann (1994:147) also points out that many studies have suggested that a good indicator of success in the first semester of college is prior academic performance, particularly high school GPA, whereas other studies reveal that for students with poorer academic records at high school level, non-academic characteristics or non-intellectual dimensions may be better predictors of success.

Many researchers believe that despite the role parents play in shaping students' competence-related beliefs, there is evidence to suggest that students' relations with teachers and fellow students has a strong link with academic performance (Felner, Seitsinger, Brand, Burns & Bolton, 2007). In the study they conducted, Felner et al. (2007) demonstrated that the teaching environment plays a major role in students' academic performance. This is supported by McKenzie and Schweitzer (2001:23), who confirm that academic performance is influenced by social support. This is also evident in the work of Gerdes and Mallinckrodt (1994), who found that an important predictor of student retention and academic success is the presence of a person who provides strong support and also support from family or spouse.

An interesting statement in this regard is that a premise of student affairs is that "no programme can succeed outside the context of a university-wide strategy and no university-wide strategy can succeed without concurrent community understanding, support and participation" (Kleemann, 1994:148). An important issue raised here is that nothing will ever succeed without it being properly communicated to all university stakeholders. To me, it also shows that all programmes that are meant to support students must be well understood and supported by the entire university community. On that note, Kleemann (1994) points out that if the campus culture is to change so as to foster learning, faculty also needs to contribute in this area.

Interestingly, DeBerard et al. (2004:73) claim that social support may be a useful way of insulating the individual from the harmful impact of stress during times of increased stress associated with the transition to college. Thus, DeBerard et al. (2004) believe that some of the ways of encouraging students to obtain and utilise social support during the transition to college are counselling centre outreach and welcoming student activities. To me, whatever problems a student might have, if there are some social support structures in place in the institutions the chances are they will not seriously affect his/her academic performance. Again in cases of serious problems, students should be referred to university specialists for immediate help. Social support structures like counselling centres play a significant role, especially during examinations when some of the students cannot cope.

#### 2.3.4.3 Financial support

According to Kleemann (1994:146) the cost of college attendance continues to increase at a high rate with ethnic minority students being disproportionately represented among the less affluent and poor. An important argument raised by Kleemann (1994) is that the affordability issue is faced by nearly all students but it is particularly difficult for many underrepresented students. Consequently, Kleemann (1994) recommends that institutions should work to establish the understanding that education is not just an expenditure but an investment.

In addition, Sansgiry et al. (2006) warn that students' anxiety levels may be influenced by demographic variables such as students' age, gender, ethnicity and marital and employment status. Moreover, Fraser and Killen (2005:37) suggest that if lecturers, students and administrators make the effort to develop a common understanding of the factors that contribute to students' academic success, they will make important progress towards that important goal because student success can never be guaranteed. On that note, Holmberg (2001, in Fraser & Killen, 2005) suggests that students who personally feel they are connected with their learning institution are more likely to be motivated and to study more effectively.

Since university students come from diverse backgrounds, the financial status of each student sometimes has direct or indirect implications to academic performance. Although students come to university with one purpose (i.e. to study), their financial background and the challenges they encounter might in way shift their focus from their studies as they try to address this in their own way, some taking on part-time jobs that will steal their study time.

### **2.3.5 Institutional factors contributing to student success**

Unlike other studies that focused mainly on the attributes of students on academic performance, Tinto (2002) and Tinto and Pusser (2006) focused their work on the conditions within institutions rather than on the attributes of students themselves. This is supported by Heirdsfield et al. (2007:1), who point out that faculty–student interaction, peer group interaction and extracurricular involvement are some of the institutional variables that also help to shape the students’ progression through the university experience. However, this does not mean that individual attributes do not matter, since these researchers looked at the institutional environment shaping students’ success and are within the capacity of institutions to change.

Tinto and Pusser (2006:1) indicate that success is a broad concept that places value on different forms of persistence. In addition, success means the completion of a college degree. Tinto (2002) and Tinto and Pusser (2006:6) identify five conditions that promote student success. These include institutional commitment, institutional expectations, support, feedback, and involvement or engagement. Each condition will be discussed in the following sections.

#### **2.3.5.1 Institutional commitment**

According to Hrabowski III (2005:127), to foster success among first-year students, institutions need first to ask themselves to what extent first-year student academic performance is considered an institutional priority. Hrabowski III (2005) believes that the question is fairly easy to answer. In expanding on this, Hrabowski III (2005) indicates that we know when something is a priority based on the level of resources applied to the effort and, in the case of first-year student academic performance, we need to look at the quality of faculty teaching in the courses, the extent to which faculties are regularly examining instructional practices, developing and revising innovative teaching materials and the extent to which the institution has developed an understanding of those factors that are most critical to students’ success. Such factors, according to Hrabowski III (2005), include the rigour of students’ high school preparation, including test scores, grades and the difficulty of the course work, as well as the students’ attitudes to college work, their willingness to take advice and to be involved in supplemental support work, and the level of students’ motivation to succeed.

The argument raised by Hrabowski III (2005) is important in that it provides the background for what the current study is looking at when addressing the issue of institutional

commitment. Therefore, I am in agreement with Hrabowski III (2005) that institutions should show some evidence of prioritising students' academic performance in their planning. Accordingly, the issue of resources and effort cannot be overemphasised in this discussion. I believe that what Hrabowski III (2005) has alluded to is an important suggestion. My take is that this would also caution the students that in case of failure the university cannot always be blamed.

On that note, Tinto (1993, in Graunke & Woosley, 2005:369) maintains that institutional commitment "arises from and is demonstrated in the everyday interaction among students, faculty and staff in the formal and informal domains of institutional life". In the same vein, Tinto and Pusser (2006) highlight that a condition for student success is institutional commitment. Tinto and Pusser (2006:6) define institutional commitment as the willingness of the institution to invest resources and provide the incentives and rewards needed to enhance student success. Therefore, institutional commitment translates in turn to expectations for the success of students (Tinto, 2002). Tinto and Pusser (2006) also highlight that institutional commitment to the goal of student success is critical to improved rates of student success over time. Their argument is that most efforts at improvement are marginal and short-lived without institutional commitment.

In addition, Braxton, Vesper and Hossler (1995:94, in Heirdsfield et al., 2007:1) note that the principles underpinning effective retention programmes are commitment, namely, student welfare commitment, commitment to all students' education and commitment to the initiation of students into the academic and social communities of an institution. This then suggests that there is a need for institutional leaders and university student services to ensure that a proper mix of academic and social integration experiences is available to students. Hence, Heirdsfield et al. (2007) confirm that there is compelling evidence to show that universities should focus on promoting effective social and academic integration for students and allow for greater interaction among peers around common challenges and stressors.

Commendable as the contributions made by scholars above is the statement made by Hrabowski III (2005:130) that a good sense of the institution's commitment to the first-year students' success can be obtained by looking at who teaches the courses that these new students typically take. Furthermore, of importance to Hrabowski III (2005) is the question of to what extent these faculties are involved in professional development aimed at improving their instructional effectiveness in general. Furthermore, Hrabowski III (2005) maintains that

some of the most successful strategies are to engage faculty and administrators in discussions about student performance (e.g. grades and retention in first-year courses) and to have discussions among faculty in and across departments. According to Hrabowski III (2005), these discussions are designed not to point fingers at students or faculty but rather to understand the level of student performance by course and even by section and faculty member. Most importantly, Hrabowski III (2005) states that, understandingly, the faculty needs to be assured that the purpose is to improve performance and not to embarrass anyone.

My reading of the argument raised by Hrabowski III (2005) is that there is a dire need for faculties to have some bilateral discussion with their students so as to find out directly from them as to what are the challenges that might be contributing negatively to their academic performance. This is generally a good move that institutions could take in showing their commitment to students' success in their studies. Interestingly, the issue of common understanding in the discussions by both the students and the faculty members is emphasised so that all parties involved can be open and share their experiences and even good practices. Worth mentioning is the fact that this study also addresses the issue of students' experiences which is covered in the present discussion. In other words, whatever students might have experienced in their first year at university would fall within this discussions in line with the first main research question.

To sum up his argument, Hrabowski III (2005:128) advises that other important questions to consider include the following: Has the college or university analysed pertinent data on first-year student grades and course loads to determine who succeeds in the first year and who does not? Again, to what extent is the institution using data on first-year performance and attitudes in shaping and reshaping policies and practices related to admissions, orientation, advising, tutoring and curriculum. Finally, are faculty and administrators assessing levels of effectiveness of the different initiatives and strategies designed to help first-year student succeed?

#### 2.3.5.2 Institutional expectations

Tinto and Pusser (2006) point out that a condition for student success is high expectations. This expectational climate, which is often regarded as campus climate, refers to the expectations the institution has for students, faculty and staff behaviour. Tinto and Pusser (2006:12) further elaborate that because of the ways in which expectations shape how individuals respond to each other and to the multiple and often competing demands on their



time and energies, the expectational climate provides the expectational context for individual action and in turn influences student success. A good example here is the national study conducted by Kuh (2003), which shows that students in their first year spend less time on their studies out of class than is deemed necessary for successful learning. Hence, Shilling and Shilling (1999, in Tinto & Pusser, 2006:12) argue that with regard to student's success, expectations for student performance as expressed, for instance, by faculty in the classroom are particularly significant because of the influence that expectations have on the quality of student effort.

As demonstrated by the writings of the authors above, it is clear that the expectations that an institution holds for its students can directly influence the behaviour or actions of students which then further influence student success. In other words, to a certain extent institutional expectations do contribute to students' perceptions of their studies. Based on the discussion above, I think it is important for institutions to set high expectations, since students also respond according to the standard set by their institution. For example, if institutional expectations are high, students will put in more effort in order to meet those expectations. Hence, I am in agreement with Tinto and Pusser's (2006) statement that expectations have an impact on the quality of student effort.

In the same vein, Tinto and Pusser (2006) contend that research has shown that students quickly pick up expectations and they are influenced by the degree to which those expectations validate their presence on campus. These expectations can, it is argued, also be expressed in concrete ways through formal and informal advising. Hence, it is noted that part and parcel of student success is knowing the rules and regulations and the informal networks that mark campus life (Tinto & Pusser, 2006). Another argument raised by Tinto and Pusser (2006:7) is that advising is particularly important to the success of the many students who either begin college undecided about their major and/or change their major during college. This is because the lack of ability to obtain the needed advice during the first year or at the point of changing majors/courses can undermine motivation, increase the likelihood of departure and, for those who continue, result in increased time to degree completion.

#### 2.3.5.3 Institutional support

Earlier on in this chapter, support was discussed as a factor that determines academic performance. However, for this section, support refers to the kind of support that an institution offers as a condition for student success. According to Tinto and Pusser (2006),

research has identified three types of support that promote success, namely; academic, social and financial.

Tinto and Pusser (2006) indicate that it is unfortunately the case that, with regard to academic support, many students enter university insufficiently prepared for the rigours of university study. Therefore, Tinto and Pusser (2006) suggest that for such students and others, an important condition for their continuation in the university is the availability of academic support in the form of developmental education courses, tutoring, study groups and academic support programmes such as supplemental instruction.

Like Tinto and Pusser (2006), Hrabowski III (2005:134) highlights that another key to a strong advising system is to encourage faculty and staff to monitor carefully the level of courses that students take in relation to their prior course work and the performance level. This is based on some studies that have revealed that the most significant first-year predictor is high school GPA. Thus, Hrabowski III (2005) also warns that students will find themselves in courses that are over their heads and for which they are not well prepared if there is no technology system or person in place to monitor the situation.

My take of Hrabowski III's (2005) argument above is that institutional support in the form of guidance during course selection is very much key to students' academic performance. My argument is situated against the background for the South African education system where not all schools seem to prioritise career guidance and subject selection in their programmes. I therefore believe that this should be done in Grade 9 which is the exit point for the General Education and Training (GET) band in preparation for Further Education and Training (FET) band, which starts from Grade 10 to Grade 12. Notwithstanding the fact that the weight of the course material at university is different from that of high school, it is imperative that students come to university with a thorough knowledge and understanding of the different subjects they have studied so as to have the background required in their first year of university study. In other words, the extra support that they might receive at university should be a top-up of some kind based on what they have already achieved at high school.

Another aspect that I believe is of critical importance and which Hrabowski III (2005) addresses is the issue of students' study groups at the college or university. Hrabowski III (2005) maintains that more than ever before, colleges and universities are coming to understand that encouraging students to participate in study groups outside the class or

laboratory also leads to helpful social support and constructive interaction and not only to better academic performance. Unfortunately, according to Hrabowski III (2005), first-year college students tend to frown on the notion of group activity as they typically have had little experience of it prior to coming to college and are often accustomed to thinking of collaborating with others as either a hindrance or a form of cheating. I think that what Hrabowski III (2005) expresses above is dependent on the kind of environment that a student comes from. My observation is that in most instances, students start engaging in group-work right in their matric year (Grade 12). Therefore, serious engagement in study groups is evident mostly in Grade 12, although this can also be viewed as late in terms of the educational level of schooling. This would be influenced by the kind of institutional commitment the school has to its learners, I should think. Therefore, the best advice here is that when institutions are truly committed to ensuring the academic success of first-year students, they can take advantage of the growing number of models and best practices developed by institutions that are experiencing success.

Furthermore, the availability of social support like counselling, mentoring and ethnic student centres is emphasised. It should be noted that such centres provide the required support for individual students and a safe haven for groups of students who might find themselves out of place in a setting where they are a distinct minority. Through these centres students may safely navigate the unfamiliar terrain of the university (Tinto, 2002). Interestingly, research has shown (Tinto & Pusser, 2006) that support is most effective when it is connected to and not isolated from the environment in which students are asked to learn. Supplemental instruction, for instance, provides academic support that is directly attached to a particular class in order to help students succeed in that class. By contrast, Muraskin (1997, in Tinto & Pusser, 2006) argues that academic support regardless of the form is especially important to the success of students who enter academically underprepared, a disproportionate number of whom are from low-income backgrounds. In response to the argument above, Hrabowski III (2005) contends that once students matriculate, campuses can use institutional data about first-year students' performance and attitudes and engage in institutional conversations involving faculty, staff and students about effective instructional techniques and initiatives. Accordingly, universities can develop and implement multicomponent programmes to strengthen the performance of first-year students.

#### 2.3.5.4 Quality and constructive feedback as a learning tool

Quinton and Smallbone (2010, in Du Toit, 2012:33) see feedback as a “socially constructed process affected by the conditions in which it was produced”. However, Black and William (1999) regard this as the facilitation of the development of self-assessment. Black and William’s (1999) definition is quite exciting in that it refers to the development of self-assessment. In other words, after students have received feedback they should be able to do self-assessment and find out where and how they went wrong. For the purposes of this study feedback is located within all the processes of academic control; guiding, advising and correcting in a way that enhances improvement in the learning environment. Some feedback can be formally or informally obtained from the relevant sources within the institution.

Tinto and Pusser (2006) believe that a condition for student success is monitoring and feedback. Tinto and Pusser’s (2006) argument is that in settings that provide faculty, staff and students with frequent feedback about their performance students are more likely to succeed. In addition, Tinto (2002:3) maintains that in settings that assess their skills, monitor their progress and provide feedback about their learning as they are trying to learn, students are more likely to succeed. Similarly, Angelo and Cross (1993, in Tinto, 2002:3) maintain that what seems to be key is immediate and continuous feedback about student progress because it allows institutions to intervene and provide support when necessary and enables students to adjust their learning as they learn. In support of the argument, Du Plessis et al. (2005:690) attest that students’ ability to self-evaluate is increased by regular and constructive feedback which also leads to increased success.

Ultimately, I share the sentiment that the importance of feedback cannot be over-emphasised in the learning environment. To me, quality and constructive feedback in learning serves as compulsory support of some kind. This institutional factor would then respond to one of the research questions, that is: How do Grade 12 top achievers utilise the support structure in learning in first-year university level to accelerate and sustain excellent academic performance? The kind of feedback students receive at their different institutions would then assist in describing whether the institutions are really committed to students’ success in their studies or not. As a researcher, I believe that students require constructive feedback that allows them to realise their abilities and potential and do self-assessment. This is well phrased by Du Toit (2012:32), who notes that feedback should encourage students’

motivational beliefs and develop self-esteem and thus empower students as self-regulated learners.

In addition, Du Toit (2012) believes that if feedback is given in a way that can develop students' self-regulatory skills, it could promote learning and ultimately lead to improved performance. Most important, quality feedback is regarded as a constructive learning tool for improving teaching and learning in higher education. Furthermore, Du Toit (2012) believes that if students make meaning of the feedback they receive they will be successful. The argument that could arise in response to this statement is that it is important for institutions to provide students with feedback at the most convenient time and to do so continuously, if they want students to make meaning of their feedback. In short, I believe that feedback received well in time is productive feedback because students would learn from it and improve further. Unfortunately, feedback received late in the academic year is not effective and cannot assist students in making the meaning out of it that they were supposed to do.

In the same vein, Du Toit (2012:33) notes that, according to the findings of other researchers, feedback can only assist students if they

- are aware of what is expected of them and the level at which they should perform
- can compare their actual level of performance with the intended level or standard, and
- are actively engaged in a specific action that will improve their situation or close the gap between their current level and the intended level of performance.

The points highlighted above, as noted by Du Toit (2012), are important in guiding institutions on what they expect of their students and whether the students are aware of their expected performance or not. For the purposes of this study, this kind of engagement is addressed by the very first research question – What are the perceptions and expectations of Grade 12 top achievers in first-year university teaching and learning? Students come to university with many different expectations, while the universities also have some expectations of the students. Nonetheless, I believe that it is crucial that universities and colleges make their expectations very simple and clear to students in all respects. This would then make student realise their gap and strive for significant improvement. On that note, Du

Toit (2012) then advises that it is important that students make sense of the knowledge they have received and use feedback information constructively. She (Du Toit, 2012:33) further notes that the appropriateness of the feedback also affects the quality of learning and student achievement. According to Du Toit (2012), students require support in linking the feedback they receive to ways to use the feedback in order to improve their performance.

In conclusion, as a researcher I am of the opinion that quality feedback and feedback that is effective require the active involvement of students all the times. In other words, students need to be offered an opportunity to engage deeply with the feedback received. In the same vein, Du Toit (2012:34) states that close communication between lecturers, tutors, peers and students is necessary in order to develop the students' capacity for self-assessment so as to improve performance after feedback. Du Toit (2012) further stresses that, without this communication, students might not be able to either internalise the feedback they receive or identify the gap between the intended goals and their performance. Hence, I concur with Du Toit (2012) that if students receive feedback without it being clearly communicated by lecturers or tutors the chances of it being interpreted correctly are very slim owing to insufficient mastering of both the language of instruction and assessment. Furthermore, feedback that is positive and in writing could create a climate in which self-esteem is promoted, which could lead to improved performance.

#### 2.3.5.5 Involvement as referring to 'student engagement'

'Student engagement' is a recent term that has been coined for the principles of quality undergraduate education (Kuh, 2001). Student engagement refers to the time and energy that students dedicate to educationally purposeful activities and the extent to which the institution gets students to participate in activities that lead to their success (Kuh, 2003).

It is noteworthy to mention that, according to Kuh (2005:87), two critical features are represented by student engagement. Firstly, it is student driven, as it relates to the amount of time and effort students put into their studies and other educationally purposeful activities. The second one is that it is institution driven, that is, it is based on how a school/university supplies its resources and organises the curriculum, other learning opportunities and support services to induce students to participate in activities that lead to the experiences and outcomes that constitute student success (persistence, satisfaction, learning and graduation), (Kuh, 2005). The second feature is the one that is being addressed or under discussion in this section. In taking the argument further, Kuh (2005) argues that higher education has

recognised the significance of student engagement for years even though most colleges and universities have not yet created the conditions that research studies show to be effective educational practice. The point made by Kuh (2005) is very important since this study focuses on higher education and as a result students' perceptions of the university in totality would describe students' engagement at the different institutions (i.e. universities) at which they are studying.

Mudhovozi et al. (2010:586) also state that the concept of engagement has been used to illustrate a myriad of student behaviours and attitudes which are deemed essential to a high quality undergraduate learning experience. The emphasis here is on one important phenomenon that academic advisers should consider, namely, self-performance evaluation among the students. This is deemed to be crucial because students' belief about their capabilities to achieve academically moderate their actions, motivation and achievement (Cheong, 2005). In addition, the understanding of the students' academic attributional style would serve as a point of reference for planning academic support to reduce failure in HEIs. Again, it is noted that academic difficulties can have serious negative effects on self-esteem and as a result many students may drop out because of isolation and loneliness.

Involvement here also refers to academic and social integration. Tinto (2002:3) argues that theorists have long pointed to the importance of what is more commonly referred to as involvement to student retention or academic and social integration. Tinto (2002:3) and Tinto and Pusser (2006:7) point out that when students are more academically and socially involved, it is likely that they will persist and graduate.

On that note, De Sousa (2005) argues student engagement cannot be effectively evaluated without considering academic advising since it is an integral and required part of student life. It is also noted that some researchers have observed that the key determinant of the impact of an institution of higher learning is individual effort or engagement. Thus, to encourage student engagement the institution should focus on the ways in which it can shape its academic, interpersonal and extracurricular offerings.

Tinto and Pusser (2006) make an important point here, stating that students are more likely to succeed when they find themselves in settings that are committed to their success, actively involve them, especially with other students and faculty, in learning, hold expectations for their success and provide frequent feedback. According to Tinto and Pusser (2006), the main

concept is that of educational community and institutions' capacity to establish educational communities that involve all students as equal members. In support of this point, Allie et al. (2009:360) refer to various communities in the context of higher education, for example the "workplace community" and "the classroom community". The classroom community is then described as a "safe place" where students can experiment with new identities (Allie et al., 2009). Allie et al. (2009) also argue that, since students can be members of multiple communities, there is a need for staff at tertiary institutions "to develop an understanding of the communities from which students come".

On that note, Tinto (2004, in Mudhovozi et al., 2010:586) states that when trying to explain student departure from college, or attrition, many researchers emphasise the importance of student integration or involvement in college or university, meaning engagement in academic and extracurricular activities associated with the college. It is further noted that the increased concern about high dropout rates among students at tertiary level has led to the wider study of factors influencing student persistence in college. Therefore, it is pertinent to mention that it is against this background that the current study seeks to investigate and explore all the institutional factors contributing to students' success. Based on the nature of this study (i.e. subjects/participants enrolled in different HEIs), the findings will assist in coming up with models that would serve as student engagement guidelines of some kind for institutions. It is then postulated that institutions of higher learning should conduct surveys on student engagement and use the findings from these benchmarks in creating a powerful tool to assist academic advisers to focus on what needs to be changed and, possibly, how.

I am attracted to the views of Mudhovozi et al. (2010) that powerful and enriching educational experiences create the opportunity to learn about the self and others. Hence, it is also suggested that the development of such opportunities should be championed by advisers and they should make certain their advisees are aware of them. In the same vein, De Sousa (2005) maintains that by assisting students in ways that encourage them to engage in the right kinds of activities, both inside and outside the classroom, academic advisers can play an integral role in promoting student success.

Based on the argument above, Sedumedi (2002:168) believes that given the divergent ideological interests at stake, it seems particularly important to understand the perceptions of the stakeholders involved in determining which route the transformation should take, with the major stakeholders being the students, because they are the most affected by the conditions at



the university. It is therefore important to understand what their perceptions and opinions of transformation are. I am in agreement with Sedumedi (2002) that students' perceptions when they come to university influence their way of engagement or dedication to their studies. This implies that students' academic life is more or less influenced by their own personality as it also contributes to the way they see the university environment.

## **2.4 CONCEPTION OF ACADEMIC SUCCESS**

Some researchers, for instance Potgieter, Rogan and Howie (2005), argue that university lecturers should be well informed about the content knowledge, conceptual understanding and skills development of prospective first-year students in order to ensure a smooth transition from secondary to tertiary education. For Matoti (2010:136), this then suggests that students have to make certain adjustments in order to cope with the varied demands at a higher level of education. Again, factors such as the attitudes of the university lecturers, their preparedness to understand the students' problems and their willingness to provide the relevant academic support will determine the ease with which students adjust to the new situation (Matoti, 2010). This is supported by a statement made by Sommer and Dumont (2011) that previous research conducted has revealed that university adjustment is a key determinant of academic performance.

Baker and Siryk (1985, in Sommer & Dumont, 2011:388) define adjustment typically as a multidimensional process of interaction between an individual and his/her environment in an attempt to bring about harmony between the demands and needs of both. Thus, according to Sommer and Dumont (2011), the study by Petersen et al. (2009) tested the assumption that the quality of the students' adjustment to university, a premise which has not been tested previously, mediates the effects of the psychosocial factors on students' academic performance.

On that note, Sommer and Dumont's (2011) study also reveals that adjustment and academic overload significantly predicts academic performance. According to Sommer and Dumont (2011:392), these results replicate the findings of Petersen et al. (2009) that students who perceive the academic requirements to be very demanding to the extent that they are unable to cope with the academic workload, tend to achieve lower academic grades at the end of the academic year. On the other hand, students who are well adjusted to the academic and personal/emotional demands of the university and feel a sense of belonging in attending the university achieve higher academic grades.

Based on the discussion above, Bitzer and Troskie-De Bruin (2004:119) advise that to assess students' perceptions of themselves is one way to generate useful information about students who continue their studies after school for both the schooling sector and HEIs. However, Bitzer and Troskie-De Bruin (2004) maintain that there is no comprehensive strategy in South Africa to assess the dimensions of student development across institutions. Furthermore, these authors (Bitzer & Troskie-De Bruin, 2004) advise that it is of the utmost importance that effective input-process and outcomes-assessment strategies be investigated and piloted in view of the increasing emphasis on quality and effectiveness in higher education, as prescribed by Council on Higher Education. They (Bitzer & Troskie-De Bruin, 2004) argue that this is needed to emphasise the quality of student development effected and not only to complement current quality assurance measures that focus mainly on output criteria of institutional effectiveness.

In addition, McKenzie and Schweitzer (2001:23) state that research has shown that academic performance is affected by satisfaction with the university, the financial situation, career orientation and social support. Moreover, Rickinson and Rutherford (1995) found that the reason most commonly endorsed for leaving university was dissatisfaction with the course of study. In as far as career orientation is concerned, Himmelstein (1992) reported that students who were less likely to withdraw from university were those with a clear career orientation and achieving higher GPAs than students lacking a clear career orientation.

Similarly, Killen et al. (2003:148) maintain that factors such as students' motivation, students' approach to studying and the support structures for students provided by the university (Kleemann, 1994) have a strong influence on students' success. Killen et al. (2003) also maintain that none of the significant factors in students' academic success at university, for instance interest in the course, motivation, self-discipline and effort, can be predicted directly from matriculation.

In taking the argument further, Pillay and Bundhoo (2011:422) advise that it is also important that any support or intervention programme takes cognisance of the multiple fears and anxieties that students experience in relation to their academic work. As a result, Pillay and Bundhoo (2011) suggest that universities must provide an adequate and effective programme that reduces or eliminates the jarring effect experienced by young students in the first year at university, where they find the teaching and evaluation styles quite different to what they had been accustomed in the preceding years.

Generally, the best single predictor of student learning and personal development is the time and energy students devote to educationally purposeful activities; however, many arguments have been raised pertaining to the predictors of academic achievement. Bitzer and Troskie-De Bruin (2004:120) argue that what students do during their higher education experience is what counts most in terms of desired higher education outcomes and not who they are or even what institution they attend.

To improve interventions and support services for students at risk of academic problems, McKenzie and Schweitzer (2001) investigated academic, psychosocial, cognitive and demographic predictors of academic performance. To enable researchers to fully examine the relationship between age, previous academic performance and university achievement in their study, they (McKenzie & Schweitzer, 2001) recommended implementing stringent record-keeping procedures at the university level. In addition to what McKenzie and Schweitzer (2001) allude to, De Beer, Smith and Jansen (2009) advise that we should not overlook the socio-historic conditions influencing learning on our campuses. De Beer et al.'s (2009) argument is based on their work, entitled "Situated in a separate campus – students' sense of belonging and academic performance: A case study of the experiences of students during a higher education merger". For me this then suggests that different researchers would come up with different views on academic performance based on what exactly was the cornerstone of their research. Hence, this study will also come up with positive contributions on the academic performance and experiences of first-year university students based on the empirical findings.

Interestingly, Yorke and Longden (2004:8) report that student success is not only about the students obtaining the qualifications for which they have been studying, but is also connected with the perceptions of those outside higher education (mainly employers) who will be concerned with ensuring that they have recruits who can relatively quickly fulfil the expectations laid upon them and, by so doing, institutions have a vested interest in their students' success. Yorke and Longden (2004) also note that the ability to display both academic and 'practical' intelligence determines success. For the purpose of this study, students' success is limited to their first year of study and students' success in the workplace will in no way be studied. In other words, Yorke and Longden's (2004) point requires research, as one cannot ignore the fact that there are some perceptions from those outside the

university about the kind of people university students should become in order to meet the demands of the workplace.

It would perhaps be premature for me to draw any conclusions from the literature review here. This is because various researchers have come to understand academic performance or achievement based on their own empirical findings. However, I am attracted to the views of Sommer and Dumont (2011), McKenzie and Schweitzer (2001) and Himmelstein (1999). These researchers have alluded to the main factors viewed as influencing academic performance. For example, Sommer and Dumont (2011) indicate how students who have well-adjusted at university in their first year can academically perform well or with high grades. On the other hand, McKenzie and Schweitzer (2001) elaborated on how satisfaction with university (through financial, social and academic support) affects academic performance. Interestingly, Himmelstein (1999) also draws a picture on the relationship between the clear career orientation and the students' GPA.

For the purpose of this study, the literature I reviewed included that dealing with the psychosocial, cognitive, affective, academic and socio-economic factors determining academic performance in HEIs. This literature identified, categorised and explored in-depth the factors that determine academic performance in HEIs. Some studies addressed the factors determining academic performance with special reference to a particular subject or course. However, very few studies have focused on general academic performance in HEIs.

## **2.5 CONCLUSION**

Nunns and Ortlepp (1994:206) maintain that it is possible that the use of a selection criterion such as a faculty points rating system will be acceptable to most students once the education system in the country has been normalised; however, they (Nunns & Ortlepp, 1994) are of the opinion that until such a situation is obtained, other selection criteria must be sought. Furthermore, those students who have a genuine chance of passing the course (to avoid wasting limited teaching resources) without being tainted by apartheid education, must be identified by these criteria (as highlighted by Killen et al., 2003).

On that note, in line with this study's focus on higher education, Olani (2009:1056) points out that the first year at university is a critical transition period; this is a crucial time when students build up the foundation on which their subsequent academic success and persistence rest. It is also noted that much of the literature on the prediction of first-year university

students' academic success and retention has demonstrated that many students, irrespective of the academic, social, emotional and other challenges, complete the transition period successfully and achieve academic success.

Besides all the factors that have been mentioned by researchers as determining academic performance, Tinto (2002:3) insists that learning is a condition for retention. The argument raised by Tinto (2002) is that students would find more value in their learning and they are more likely to stay and graduate if they learn more. This statement is supported by Armien and Le Roux (2010:44), who state that learning is regarded as being situated in the sense that it cannot be considered separately from the context in which it takes place. Tinto (2002) further elaborates that this is particularly true for more able and motivated students who seek out learning and are in turn more likely to respond to perceived shortcomings in the quality of learning they experience on campus. Interestingly, Tinto (2002) is of the opinion that the purpose of tertiary education is not merely that students are retained but that they are educated, hence he explains that students' learning drives student retention. In the current study I am interested in investigating the factors that contribute to students' success or failure at university based on their academic experiences.

Since it is too early for this study to conclude on any factor cited as influencing academic performance, it is my belief that factors that have not been alluded to by any researcher might be drawn from the data collected and used for purposes of this study. However, it should be reiterated here that, like Olani (2009), I believe the first year to be a critical transition period.

However, from the views presented by the different authors in this chapter, more than ever before it would seem that, in the South African education context in particular, we need to foster the kind of universities and colleges that would inspire first-year students to dedicate themselves to campus life and follow through on their educational goals. In my opinion, this would reduce the risk of withdrawal or under-performance. Again, instead of students putting the blame on external factors, they need to realise that the actual responsibility for succeeding lies with them.

## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 INTRODUCTION

This chapter elaborates on the research design used in this study. Hence, the purpose of this section is to discuss the research approach used to investigate the research questions and to ascertain that the methodology adopted is the most appropriate to the nature of the research questions.

A researcher's choice of a design or an approach is a personal choice and responsibility, though it depends on several factors. This notion is also indicated by Creswell (2008:63), who maintains that the personal skills, training and experiences of the researcher should determine the choice of approach. However, this does not suggest that the choice of a design or an approach is a personal choice only, because the design is also determined by the objective of the study and sometimes the type of research questions that the study needs to answer.

#### 3.2 RESEARCH PARADIGM

In this study, I worked from a pragmatist research paradigm in which individuals who subscribe to it focus on the outcomes of the research, the actions, situations and the consequences of inquiry, rather than antecedent conditions (Creswell, 2007). Johnson and Christensen (2012:32) posit that pragmatism is a philosophical position that what works is what is important or "valid". Moreover, pragmatism is generally considered to be a way of dealing with issues or problems in a more practical way instead of strictly following a set of ideas. According to Ivankova, Creswell and Plano Clark (2011:22), pragmatists believe that the truth is "what works" best for understanding a particular research problem. This means that, pragmatism is not committed to any one system of philosophy and reality. Citing Patton (1990), Creswell (2007) contends that in pragmatism there is a concern with applications, "what works" and solutions to problems. Hence, the important aspect of research is the problem being studied. For example, the study made room for participants to provide quantitative information, with no interference from the side of the researcher, and later on their voices were heard (i.e. through interviews) and this also provided the researcher a chance for further probing where necessary.

The decision to employ both quantitative and qualitative approaches was not by accident because, among other things, a major argument of pragmatism is that quantitative and qualitative methods are compatible. In other words both approaches have enough similarities in fundamental values to allow their combination within a single study (Ivankova et al., 2011). In other words, my application of the two approaches was based on the “compatibility principle”. In other words they can be used together without a problem being encountered.

The present study is located within a pragmatic worldview, collecting both quantitative and qualitative data sequentially in the design, as will be explained in the sections to follow. This was done so that I could focus on the practical implications of the research and emphasise the importance of conducting research that best addresses the research problem. As Creswell (2014b:19) argues, the researcher bases the inquiry on the assumption that collecting diverse types of data best provides a more complete understanding of a research problem than either quantitative or qualitative data alone. For the purposes of this research, I began with a quantitative study which was followed by qualitative, open-ended interviews to collect detailed views from participants to help explain the research phenomena in more detail. The research problem required that I collect quantitative data (i.e. attributes that participants ascribed their academic success or failure to). The qualitative interviews that followed provided the study with detailed explanations as to why participants attributed their academic success or failure in the first year of study to particular attributes or factors. Hence, Creswell (2014a:567) posits that the pragmatists believe philosophically in using procedures that “work” for a particular research problem under study and that you should use many methods when attempting to understand a research problem.

Nevertheless, the study finds itself in the position where, unlike qualitative methods that are ostensibly conducted with the idea that there is no single reality, there are multiple realities or reality is constructed by the researchers and their subjects (Bergman, 2010). By contrast, quantitative research is ostensibly conducted under the assumption that there is one single and objectifiable reality. Pragmatism on the other hand claims to work within the ontological constraint of one single reality where statistical analysis is conducted and then a no multiple-reality option is used to conduct the qualitative part (Bergman, 2010:390). For instance, in dealing with the first phase data (i.e. quantitative) the principle applicable in analysing quantitative data was employed and in dealing with the qualitative data its standing principle (i.e. no multiple-reality) was also applied to this second phase data.

According to Johnson and Christensen (2012), pragmatism postulates that what is ultimately important is what works in practice and what promotes social justice. Therefore, the study is located within the pragmatic paradigm because, according to pragmatists, the research design should be planned and conducted based on what will best help you to address your research questions (Johnson & Christensen, 2012:32). This study is therefore located within a pragmatist worldview based on the argument made by Johnson and Christensen (2012) that pragmatists argue that theories or programmes or actions that are demonstrated to work for particular groups of people are the ones that we should view as currently being the most valid for those people.

### **3.3 RESEARCH DESIGN**

A research design commonly indicates the structure and procedure followed to address research questions. Edmonds and Kennedy (2013:2) explain in this regard that the primary purpose of a research design is to provide a conceptual framework that will allow the researcher to address specific research questions while utilising sound principles of scientific inquiry. Simply put, a research design is the investigation structure, conceived so as to get the ‘answer’ to different research questions or hypotheses.

In choosing a research design and methodology for this study, two major factors are mentioned by Creswell (2008:63) that influenced the researcher’s decision. Firstly, the research approach is viewed in the context of its relevance to the research problem; this means being able to address the research questions (Creswell, 2008). Secondly, the researcher found it crucial to ensure that the chosen methodology had the ability to address the complexity of quality assurance in aspects and processes of academic performance. Besides these two factors, the researcher also ensured that the chosen methodology is relevant to the audience for whom the researcher is writing the report. On the other hand, Creswell (2008) maintains that research will be conducted differently depending on the approach used. In other words, the researcher should always own the approach and methodology he/she chooses for a particular study.

Creswell (2008) further argues that the kinds of problems being investigated and how the literature is used tend to differ from one approach to another. The research objective and questions also differ in scope and the data collection is clearly spelt out, with quantitative research using numbers and statistical analysis and qualitative research relying on words and images. Owing to the different kinds of data used, the analysis of data is also different



(Creswell, 2008). Therefore, it is crucial that researchers understand the differences and similarities between quantitative and qualitative approaches because the approach that is chosen determines how research is conducted along the way. Hence, Brannen (2004:314) maintains that when researchers work with various kinds of data within the same research project, the manner in which they use these data will differ according to the phase or aspect of the research wherein the researcher applies the peculiar datasets in play. On that note, Edmonds and Kennedy (2013:1) state that aspects of the scientific method, which can vary from field to field and method to method, are used by all researchers who attempt to formulate conclusions from a particular path of inquiry. Hence, the same authors believe that researchers are able to reveal valid empirical findings through the sound application of the scientific method. As a result, my choice of research design was based on all the strengths identified in the different approaches that would best suit the study and answer the research questions.

### **3.4 MIXED METHODS RESEARCH DESIGN**

Tashakkori and Teddlie (1998, in De Vos, 2005:358) contend that many discussions or “wars” have raged in the social and behavioural sciences during the past three decades regarding the superiority of one or the other of these two major social science approaches or paradigms (quantitative and qualitative). Hence, Creswell (2008:551) maintains that you can use both forms of data to understand your research problem and address your research questions if you have access to both quantitative and qualitative data. In the same vein, Creswell (2009:203) argues that the use of either quantitative or qualitative approaches by social or health science researchers is inadequate because the problems addressed by social and health science researchers are complex.

Interestingly, Morse (2010:340) maintains that during the last 10 years, interest in mixed methods has escalated. Morse (2010) argues that researchers consider mixed methods design to be a way to work efficiently with the nuances of present-day research and to encapsulate quantitative variables with phenomena that cannot easily be qualified in the same project. Furthermore, Morse (2010) points out that researchers consider mixed methods design to be efficient because it can incorporate both meaning and quantity into the same project; it is a method that acknowledges the progression of research as it moves inductively toward solving a puzzle or increases the scope of deductive inquiry.

For purposes of this study, it is important to define mixed methods as the approach was applied. De Vos (2005:360) defines mixed methods studies as “those that combine the qualitative and quantitative approaches into the research methodology for a single study or multiphase study”. Another important definition is provided by Creswell (2008:552) and states that mixed methods designs are different procedures applied in the collection and analysis of data and involves mixing both quantitative and qualitative data in a single study or in a multiphase series of studies. Similarly, Johnson and Christensen (2012:33) maintain that mixed research refers to the mixing of qualitative and quantitative research methods, strategies/approaches or other paradigm characteristics. However, Johnson and Christensen (2012) use the simpler term ‘mixed research’.

Many authors or researchers argue that the combined use of a quantitative and a qualitative approach offers an expanded comprehension of research problems than to advocate one method for the entire study (Creswell, 2009; De Vos, 2005; Hesse-Biber & Leavy, 2006). Creswell (2009:203) further states that there is more understanding to be gained from the combination of qualitative and quantitative research than either form by itself. In addition, Creswell (2008, 2009) states that mixed methods research has become popular as the newest development in research methods, and in approaches to “mix” quantitative and qualitative research, with qualitative research recognised and appreciated by more educators and with quantitative research long established as an approach.

I used a combination of methods in the study, based on the argument above and Creswell’s (2008) and Brannen’s (2004) position that one applies mixed methods study when one attempts to get more complete, relevant information than can be obtained from the results of statistics texts. Creswell (2008:552) also argues that when one type of research (qualitative or quantitative) is not enough to address the research problem or answer the research questions one conducts a mixed methods study. On the other hand, Brannen (2004:314) points out that researchers often pursue a variety of aims when seeking to combine different methods or types of data within a single research project. Another reason for choosing to do mixed methods research was that I was motivated by the strengths of both quantitative and qualitative data, which I sought to build on.

I chose a mixed methods research design for this study because it suited the objective of the study and provided answers to the research questions in a single study. One fundamental principle of mixed methods research that influenced my choice is that it combines methods in

a way that achieves complementary strengths and non-overlapping weaknesses (Punch, 2009:290; Johnson & Christensen, 2012:51).

Edmonds and Kennedy (2013) point out that the primary reason for applying mixed methods is to maximise a blending of methods to answer the research questions in a study (i.e. converge and confirm results from different methodological techniques). In this study, I therefore used a mixed methods approach because it could help deepen understanding of the issue under study and afford me opportunities for greater completeness with respect to addressing questions.

The literature that deals with mixed methods design (Creswell, 2008; Creswell, 2009; Punch, 2009; Creswell & Plano Clark, 2011; Edmonds & Kennedy, 2013) identifies four major strategies of mixed methods, namely, the embedded design, the triangulation design, the exploratory design and the explanatory design. This study employed an explanatory sequential mixed methods design, which I chose because of the advantage, stated by Creswell (2014a:572), that instead of collecting data at the same time and merging the results, quantitative and qualitative information can be collected sequentially in two phases. The data collected during the second phase will thus inform and supplement the findings of the first phase. In terms of this explanatory design, I collected quantitative data, then analysed the data and thereafter used the results to inform the follow-up qualitative data collection phase (Creswell & Plano Clark, 2011; Edmonds & Kennedy, 2013). For instance, the quantitative results were used to guide the design of the questions included in the qualitative data collection phase.

An explanatory sequential mixed methods design is also called a two-phase model (Creswell & Plano Clark, 2011; Edmonds & Kennedy, 2013) because Creswell (2014a) postulates that it consists of firstly collecting quantitative data and subsequently collecting qualitative data to help explain or elaborate on the quantitative results. In other words, the rationale for choosing this explanatory sequential design is that I wanted to explain the initial quantitative statistical results in more detail using qualitative research, as outlined by Creswell (2014a), Creswell and Plano Clark (2011) and Edmonds and Kennedy (2013). The rationale for choosing to use this approach included the fact that although the quantitative data and results provided a general picture of the research problem, the analysis of the qualitative data helped to refine, extend and explain the general picture. In the study, I was able to explain the results in more depth in the qualitative phase.

Since the study focuses on the ‘what’ and ‘how’ of the academic experiences of first-year students in HEIs, the design is appropriate because it has the advantage of clearly identified quantitative and qualitative components or sections. This is an advantage for readers and for those designing and conducting such studies (Creswell, 2014a). Furthermore, according to Creswell (2014a), the design captures the best of both quantitative and qualitative data. For instance, this study provided the quantitative and qualitative results in two separate chapters so that all the data that was regarded as important in presenting the findings was captured, consequently nothing was omitted.

An explanatory sequential mixed methods approach was regarded adequate for this study because, as Creswell (2014a) posits, unlike a convergent design, the researcher does not have to converge or integrate two different forms of data. For instance, in my analysis of data I approached each piece/set of data differently and also presented the results separately, although reference is made to the quantitative findings in the discussion of the qualitative results.

In investigating the academic performance of top achievers in their first year at university, this study followed a sequential approach in which the two sets of data were collected sequentially in two phases as endorsed by Punch (2009), Hesse-Biber and Leavy (2006), Tashakkori and Teddlie (2010). Since both qualitative and quantitative methods are employed in a mixed methods research design, it is imperative to briefly outline each methodology. This is also done bearing in mind that many researchers (Punch, 2009; Johnson & Christensen, 2012; Tashakkori & Teddlie, 2010) argue that each approach has different strengths.

### **3.4.1 Defining quantitative research**

According to Hesse-Biber and Leavy (2006), quantitative research “is often privileged as hard science”. This means that quantitative research relies on scientific methods to reveal or discover knowledge. Furthermore, Hesse-Biber and Leavy (2006:6) note that in order to communicate meaning, a quantitative researcher relies on numbers, rates and percentages typically presented in a table, grid or chart.

Johnson and Christensen (2012:33) define quantitative research as research that relies primarily on the collection of quantitative data (i.e. numerical data). Furthermore, Johnson and Christensen (2012) maintain that quantitative research generally reduces measurement to

numbers. For example, in this study, students' attitudes, opinions or feelings were measured using rating scales. I therefore used a four-point agreement scale to represent students' responses to different statements in the questionnaire.

Creswell (2008:46) defines quantitative research as a type of educational research in which the researcher decides what to study, asks specific, narrow questions, collects quantifiable data from participants, analyses these numbers using statistics and conducts the inquiry in an unbiased, objective manner. As indicated by Creswell (2008), the questionnaire that was used in this study consisted of very specific and narrow statements in which respondents had to choose their best level of agreement or disagreement with the statements (see Appendix D).

I used this approach based on its major strength, as noted by Punch (2009:294), namely, that because the procedures for analysing quantitative data are well developed and codified they bring objectivity to the research in the sense that they increase the chances that the results of the analysis do not depend on the researcher who is doing the analysis. This means that the information or knowledge is discovered independently of the intentions of the researcher.

I employed this approach because, according to Johnson and Christensen (2012), quantitative researchers attempt to operate under the assumption of objectivity. In other words, quantitative researchers try to remain as neutral or value-free as they can, avoiding human bias whenever possible. Based on this assumption, Johnson and Christensen (2012) further argue that in a sense quantitative researchers attempt to study the phenomena that are of interest to them "from a distance". Similarly, Punch (2009:294) states that quantitative data enable standardised, objective comparisons to be made and the measurements of quantitative research permit overall descriptions of situations or phenomena in a systematic and comparable way.

### **3.4.2 Defining qualitative research**

"Qualitative research is an exciting interdisciplinary landscape rich with perspectives on knowledge construction and enabled by a multitude of techniques available for generating knowledge" (Hesse-Biber & Leavy, 2006:5). Typically, qualitative researchers are concerned with text and words as opposed to numbers (Hesse-Biber & Leavy, 2006). However, Hesse-Biber and Leavy (2006:5) argue while de-emphasising the solely causal models and explanations that have historically dominated the research process, qualitative research produces both exploratory and highly descriptive knowledge. Furthermore, Hesse-Biber and

Leavy (2006) believe that qualitative research is a craft that is at once intellectual, creative and rigorous, such that the practitioner not only learns but also develops.

Denzin and Lincoln (2005:3) define qualitative research as a situated activity that locates the observer in the world:

It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to the self. At this level qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them.

This definition is further clarified by Creswell (2008:46), who posits that qualitative research is a type of educational research in which the researcher relies on the views of participants; asks broad, general questions, collects data consisting largely of words (text) from participants, describes and analyses these words for themes and conducts the inquiry in a subjective, biased manner. Likewise, as outlined in the two definitions above, I relied on the views of the participants (i.e. data from the interviews) to understand and interpret the phenomenon of ‘academic experiences of first-year university students’.

In addition, Johnson and Christensen (2012) state that qualitative research uses a wide-and deep-angle lens, examining human choices and behaviour in all their detail as they occur naturally. This being the case, qualitative researchers study behaviour naturalistically and holistically and they try to understand multiple dimensions and layers of reality, such as the type of people in a group, how they think, how they interact, what kinds of agreements or norms are present and how these dimensions come together holistically to describe the group. For example, in this study I studied the academic experiences of first-year students in HEIs (i.e. universities). I had to seek detailed information or data from the first-year university students who formed part of this study on the way they experienced their first year at university and how they coped or adapted to become successful in their first year of study.

To explore students’ academic experiences in their first year at university, I had to conduct qualitative research because, as Johnson and Christensen (2012) maintain, qualitative research is used when little is known about a topic or phenomenon and when one wants to discover or learn about it. In my case I wanted to learn about the students’ perceptions and

expectations of their first year at university and their academic experiences that influenced their academic success. Furthermore, Johnson and Christensen's (2012) position that qualitative research is commonly used to understand people's experiences and to express their perspectives motivated me to use a qualitative approach.

In addition, my use of a qualitative approach also stems from the fact that the qualitative researcher is attempting to understand the people he/she is observing from the participants' or "natives'" or "actors'" viewpoints (Johnson & Christensen, 2012). In order to be in line with Johnson and Christensen's (2012) position, I relied on standardised open-ended interviews to obtain participants' viewpoints on their academic experiences during their first year at university. According to Johnson and Christensen (2012), qualitative researchers argue that it is important to "get close" to their object of study. Moreover, a qualitative approach was deemed suitable for this study on the basis of Silverman's (2004) perspective, namely, that a particular strength of qualitative research for both researchers and practitioners is its ability to focus on actual practice in situ, looking at how social interactions are routinely enacted.

Punch (2009) attests to the fact that qualitative methods are the best way we have of getting the insider's perspective, the "actor's definition of the situation" and the meanings people attach to things and events. According to Punch (2009:294), this suggests that qualitative methods might be used in studying people's life experience that includes people's purposes and meanings. In addition, the qualities of 'holism' and 'richness' that qualitative data possess, makes them well able to deal with the complexity of social phenomena. Hence, Punch (2009) reminds us that this is what it means when qualitative researchers speak about thick descriptions provided by data. This is one reason why I used a qualitative data collection technique in the form of the standardised open-ended interviews conducted in the second phase of this study. This type of interview provided rich data about students' understanding and the meaning they attach to their academic performance.

Furthermore, Punch (2009) emphasises the fact that there are significant strengths in qualitative approaches, with qualitative methods being more flexible than quantitative methods. Interestingly, Punch (2009) concludes by indicating that, from the comparison and analysis of strengths and weaknesses, it is clear that we can very often increase the scope, depth and power of our research by combining the two approaches, that is, by mixing the methods, as one cannot explore everything one might want to know using only one approach.

### 3.4.3 Advantages of mixed methods research

Like Punch (2009), Johnson and Christensen (2012:51) note that

... when mixing research or when you read and evaluate research that involved mixing, be sure to consider the fundamental principle of mixed research, which says that it is wise to collect multiple sets of data using different research methods, epistemologies and approaches in such a way that the resulting mixture or combination has complementary strengths and non-overlapping weaknesses.

To simplify, the idea of complementary strengths here denotes that the whole is greater than the sum of the parts (Johnson & Christensen, 2012). In addition, since the different research approaches have different strengths and different weaknesses, a mixed approach helps to improve the quality of research.

Similarly, Hesse-Biber and Leavy (2006:317) note that combining two different methods could create a synergistic research project whereby one method assists the other to be more effective and, combined; both methods provide a fuller understanding of the research problem. Arguing further, Hesse-Biber and Leavy (2006) maintain that mixed methods designs can also help to get at “subjugated knowledge” and provide an opportunity to obtain the views of those whose ideas may be left out of the research process with the goal of presenting “a plurality of interests, voices and perspectives”. The choice to use a mixed methods research design was based on Hesse-Biber and Leavy’s (2006) contention that combining methods often helps the researcher when tackling highly complex problems that involve several layers of understanding and which might also require different levels of analytical techniques.

On that note, Johnson and Christensen (2012) also advise that in mixing two or more research methods with different strengths and weaknesses in a research study, it is less likely that you will miss something important or make a mistake. Therefore, another reason for using a combination of methods in this study is the assumption that any bias inherent in a particular data source, method or researcher would be minimised when methods are used collectively. In addition, Johnson and Christensen (2012) maintain that the exact mixture that is regarded as appropriate depends on the research questions and the situational and practical issues facing a researcher. Thus, in mixing both quantitative and qualitative approaches in this study I wanted to obtain relevant information from the participants based on their feelings,



thoughts, attitudes and beliefs (i.e. using the questionnaire) and thereafter give them (participants) an opportunity (through interviews) to elaborate on the attributions they have made to their success.

#### **3.4.4 Population and sampling**

This section deals with the selection of the sample of the actual target population according to the researcher's view of the research problem.

Edmonds and Kennedy (2013) state that, when developing qualitative, quantitative and mixed methods studies, it is important to identify the individuals from which one plans to collect data. According to Edmonds and Kennedy (2013), firstly an indication of the unit of analysis must be made. This is the level or distinction of an entity that would be the focus of the study. In social science research this is most commonly the unit of analysis which is at the individual or group level, but it can also be at the programmatic level (e.g. institution or state level). Again, Edmonds and Kennedy (2013) point out that nested within designs or models are instances when researchers identify a unit nested within an aggregated group (e.g. a portion of students within a classroom). Hence, the focus of this study is on the ten matric learners who were top achievers in 2011 and 2012 in Mpumalanga Province and not the entire matric group in a specific year. Arguing further, Edmonds and Kennedy (2013) point out that after the unit has been identified, the next step would be to identify the population, that is, the group of individuals who share similar characteristics.

Just like Edmonds and Kennedy (2013), Daniel (2012) argues that, logically, in most circumstances it is impossible to collect data from an entire population. Accordingly, for the purposes of this study only the sample of top achievers from 2011 to 2012 formed part of the study and not all Mpumalanga matric students. As indicated earlier in chapter 1, the key respondents or subjects of this study are the Grade 12 learners who obtained matric (Grade 12) with outstanding results. Therefore, the target population was former Grade 12 learners. However, for the purposes of this study and for practical reasons, a small sample of the Mpumalanga (2011–2012) top ten Grade 12 learners participated in this study. I chose to critically examine the phenomenon after 2008, because the year 2008 marks the beginning of the National Curriculum Statement (NCS) examinations which replaced the old NATED 550 Report curriculum in South Africa.

For this study, I therefore used non-probability, purposive and convenience sampling. It is also important to note here that the type of sampling that was used was convenience sampling; that is, because only the Mpumalanga 2011 to 2012 top ten Grade 12 learners formed part of this study. Convenience sampling is used by researchers when they have included in their sample people who are available or volunteer or could be easily recruited and are willing to participate in the research study (Johnson & Christensen, 2012:230; Edmonds & Kennedy, 2013:16). In other words, the researcher chooses individuals who can be “conveniently selected”, as I did. On the other hand, Neuman (2006:220) notes that it is very rare for qualitative researchers to draw a representative sample from a large number of cases to study the sampled cases intensely. According to Neuman (2006:220), for qualitative researchers, “it is their relevance to the research topic rather than their representativeness which determines the way in which the people to be studied are selected”. Therefore, I used purposive sampling because it is valuable in specific situations and, according to Neuman (2006), is generally used in exploratory or in field research.

Creswell (2009:217) maintains that purposeful sampling in qualitative data collection is used so that individuals are selected because they have experienced the central phenomenon. Furthermore, Neuman (2006:222) attests that when using purposive sampling, the judgement of an expert is used to select cases or cases are selected with a specific purpose in mind. Similarly, Johnson and Christensen (2012:231) indicate that the researcher specifies the characteristics of a population of interest and then tries to locate individuals who have those characteristics using purposive sampling (sometimes called judgemental sampling). The argument made here is that purposive sampling is relevant to select peculiar cases that are especially informative (Neuman, 2006:222). Hence, the study focused on the Mpumalanga 2011 and 2012 top ten matriculants, some of whom have just started with their degrees and others were already in their second year of study. It should be noted once again that this study used purposive sampling techniques because the individuals who participated were selected based on the research objective or purpose. Hence, Edmonds and Kennedy (2013) state that in purposive sampling the researcher chooses individuals who will participate in the study based on a specific purpose or need (i.e. based on the research objective, design and target population).

Accordingly, eleven participants who were found to be willing to participate formed part of the interviews and were categorised as a purposive sample, that is, they were selected because

they shared specific characteristics relevant to the research questions. These participants were purposefully selected because they were more relevant, more knowledgeable and had the expertise about the issues that the study was investigating. The participants were the Mpumalanga 2011–2012 top ten matriculants, some of whom were awarded bursaries by the Mpumalanga Department of Education to study further after having performed excellently in Grade 12.

### 3.5 DATA COLLECTION METHODS APPLICABLE TO THE STUDY

As indicated earlier, both qualitative and quantitative methods were used in this study to address the research questions. The methods used to collect the requisite data included interviews, document analysis and a questionnaire. Since the study has adopted a mixed methods approach, it is important for me to discuss the methods that were applied.

Table 3.1 below provides a summary of the data collection instruments used in the study.

Table 3.1: Quantitative and qualitative methods of data collection and types of data

<u>Quantitative Research</u>		<u>Qualitative Research</u>	
<b>Methods of data collection</b>	<b>Data</b>	<b>Methods of data collection</b>	<b>Data</b>
Closed-ended questionnaire	Numeric scores	Documents (official private & public)	Textual data optically scanned from official documents
		Open-ended interviews	Textual data from transcribed interviews

#### 3.5.1 Quantitative research instrument used for the study

##### 3.5.1.1 Questionnaire

By using questionnaires in a study, the researcher is applying a strategy in which participants use self-report to express their beliefs, values, attitudes, thoughts, perceptions, personality, behavioural intentions and feelings towards a topic of interest (Teddlie & Tashakkori, 2009:232; Johnson & Christensen, 2012:197). Hence, Johnson and Christensen (2012) believe that researchers attempt to measure many different kinds of characteristics using questionnaires. A major advantage of questionnaires, according to Teddlie and Tashakkori (2009), is that researchers can mail or e-mail them to the respondents. In the current study, the questionnaires were e-mailed to some of the students because they situated too far away from me to drop the questionnaire at their university or home.

Delport (2002:176) argues that whether the questionnaire will be a mailed, telephonic, group-administered or another type, as well as where, under what circumstances and by whom it will be completed, influence its format. Delport (2002:176) maintains that the covering letter should also provide an indication of how the respondent came to be involved in the investigation. This is one of the issues that I considered even before beginning with data collection, hence, the respondents knew why they formed part of this study. In other words, I ensured that all questionnaires were accompanied by a covering letter, which indicated the person undertaking the research, name, address and telephone numbers and a short description of the purpose of the study so as to motivate respondents to participate in the research. This also assisted the respondents to contact me if they required more information on the questionnaire.

I chose to use closed-ended questions with a few open-ended items (biographic information e.g. age, field of study) for this study because, according to Teddlie and Tashakkori (2009), closed-ended QUAN questionnaires (QUEST-QUAN) are used more often in research studies than open-ended QUAL questionnaire (QUEST-QUAL), because items with closed-ended responses are more efficient for collecting and analysing data. The same authors (Teddlie & Tashakkori, 2009:232) further elaborate that Likert scales, semantic differentials, checklists and rank orders are some of the response formats associated with closed-ended questionnaires. Likert scales were introduced several decades ago to measure respondents' level of agreement or disagreement on multiple items related to a topic of interest (Teddlie & Tashakkori, 2009). For purposes of this study, I used the traditional Likert scale, which is a 4-point scale with a 'neither agree nor disagree' variant (see Appendix D).

A questionnaire was designed to obtain quantitative data (i.e. based on the different variables obtained from the review of the literature) and distributed to 14 Mpumalanga Grade 12 top ten learners who were students at different tertiary institutions at the time. Fourteen respondents were included because these were the students who returned their consent forms and who were willing to participate in the study. This meant that all students were traced and after that I officially informed them about the objective of the study and also sought their consent.

Questionnaires were used in this study because, according to Bell (1999), they are a good way of collecting certain types of information quickly and cheaply, as long as you are disciplined about abandoning questions that are superfluous to the main task. In addition,

Cohen, Manion and Morrison (2000:129) maintain that because it is anonymous a questionnaire tends to be more reliable and encourages greater honesty. Thus, for the purpose of this study, the questionnaires were completed anonymously, although they did contain codes that linked them to the respective student. This then enabled me later to identify these students in order to arrange follow-up interviews (Brannen, 2004).

For the purpose of this study, the first data collection instrument used was the questionnaire, because my intention was that it should be an initial data source and create the basis for the further collection of data in the interviews (for qualitative data). Hence, the subsequent interview data supplemented the data obtained from the questionnaire. The questionnaire was designed with the assistance of the Department of Statistics at the University of Pretoria.

This questionnaire was administered by the researcher. In that regard, I communicated with the respondents to make an appointment to deliver the questionnaire by hand so that they could respond to them in their own time. I then collected them again later. Delport (2002:174) stresses that it is imperative to make an appointment for collecting the questionnaires, preferably not more than 48 hours after delivery. I chose to do this, in line with Delport (2002), because administering questionnaires in this manner usually saves time and, because of the personal contact, the response rates are increased. Moreover, in making an appointment, the researcher does not bother the respondents at an inconvenient time. One reason for collecting the questionnaire personally is, as Delport (2002:174) indicates, that if any difficulties are experienced with the questionnaire, the fieldworker can clarify the issue on her return.

### **3.5.2 Qualitative research instruments applicable to the study**

Marshall and Rossman (2009:137) contend that researchers typically rely on four primary methods for collecting qualitative information: namely, observing directly, participating in the setting, analysing documents and material culture, with varying emphases and interviewing in depth. In this study, in order to obtain qualitative data I relied on interviewing in depth and analysing documents. The next section elaborates on the qualitative research instruments used in the study.

#### **3.5.2.1 Interviews**

The literature suggests that interviews are an important data gathering method when dealing with things that the researcher cannot observe directly. This issue is mentioned by Patton

(2002), who argues that one cannot observe feelings, thoughts and intentions. Moreover, situations that preclude the presence of an observer cannot be observed. Interviews, according to Bell (1999), give the respondent the freedom to speak about what is of central significance to him or her rather than to the interviewer. Ultimately, to ensure that all topics which are considered crucial to the study are covered, a certain loose interview structure helps eliminate some of the problems experienced with entirely unstructured interviews. In support of interviews, Teddlie and Tashakkori (2009) believe that because they use one-to-one interaction between the researcher and the interviewee, interviews can be a powerful data collection strategy. Furthermore, according to Teddlie and Tashakkori (2009:229), interviews provide ample opportunity for interviewers to provide clarification if a question is not clear or to ask for explanations of vague answers. These advantages as discussed here formed the basis for my use of them (interviews) in this study. In addition, Johnson and Christensen (2012) attest to the fact that the researcher can use probes freely (prompts used to obtain responses clarity or additional information), which is a strength of interviews.

In further support for the use of interviews, Marshall and Rossman (2009:137) point out that qualitative researchers rely quite extensively on in-depth interviewing. The reason for this, according to Johnson and Christensen (2012), is because they can be used to obtain in-depth information about a respondent's knowledge, thoughts, reasoning, motivations, beliefs and feelings about a topic. Accordingly, qualitative interviews are also often referred to as depth interviews. This study employs qualitative interviewing because, as the same authors (Johnson & Christensen, 2012) point out, qualitative interviewing permits a researcher to enter into another person's inner world and to obtain insight into that person's perspective. For this reason, Patton (2002) categorises interviews into three different types, namely, the standardised, open-ended interview; the informal interview guide or topical approach; and the conversational interview. The choice of the standardised, open-ended interview as the data collection instrument for this study was also based on the explanation provided by Teddlie and Tashakkori (2009), Johnson and Christensen (2012) and Lichtman (2010) that the standardised open-ended interview is more structured; all the questions are written down and the interviewer reads the questions exactly as they are written and in the same order to all interviewees.

My use of the standardised, open-ended interview was further supported by its formal and manageable nature. As Marshall and Rossman (2009:137) put it, standardised interviews are

more carefully “scripted”, asking specific questions in a specific sequence, sometimes without follow-up. However, Marshall and Rossman (2009) also argue that the richness of an interview is heavily dependent on these follow-up questions (often called, quite infelicitously, “probes”). Generally, interviews have particular benefits. Marshall and Rossman (2009) maintain that an interview yields data in quantity quickly, while Lichtman (2010:141) maintains that the purpose of a structured interview is to eliminate the researcher’s role and to introduce objectivity. Most importantly, Teddlie and Tashakkori (2009:229) emphasise that considerable information is generated by open-ended interviews which might lead to a reconceptualisation of the issues under study.

In order to collect qualitative data, I consequently relied on standardised, open-ended interviews. These were conducted individually and once-off with eleven students who were Mpumalanga 2011 and 2012 top ten Grade 12 learners studying at different universities. In other words, as a researcher I sought to conduct this type of interviews with what Marshall and Rossman (2009) call “elites”. Marshall and Rossman (2009:155) define an elite “as individuals who are considered to be influential, prominent and/or well-informed in an organisation or community, and they were selected for interviews on the basis of their expertise in areas relevant to the research” and for their perspective on, for example, an organisation, a community or specialised fields, such as the economy or health policy. The elites that this study focused on were educational elites, who had attained that status through the recognition of their achievements (awardees) by the Mpumalanga Department of Education. In this case, one advantage of interviewing this kind of elite was that valuable information was obtained from the participants because they were able to provide an overall view of the universities and their teaching and learning practices, the curriculum, the lecturers and what makes these institutions different from their high schools, based on their own experiences and standpoints. This is in line with McCracken (1988, in Lichtman, 2010), who reminds us that “the first objective of the qualitative interview is to allow respondents to tell their own story in their own terms”.

In conducting these interviews, I personally ensured that all the necessary steps are taken into consideration. Since an interview is said to be an interpersonal encounter, I firstly established rapport and trust with the people I interviewed (the interviewees). As advised by Johnson and Christensen (2012), I explained why was I conducting the research, assured my participant(s) that their responses would be anonymous (i.e. no identification or name would be attached to

the respondent's data), except for the codes I used to trace them to the questionnaire for the purposes of interviewing them. Flick (2009:154) warns in this regard that the interviewer's situational competence determines whether or not interviews are carried out successfully.

In the study, the qualitative data collection instrument (interview) was used so as to produce a narrative inquiry. A narrative usually refers to written or spoken text that gives an account of an action/event or series of actions/events, which are connected chronologically (Czarniawska, 2004a:17). As Squire (2004) puts it, stories are rooted in human agency; an individual tells a story even though one may not know everything about the story one is telling. Thus, Squire (2004) points out that narrative analysis is a kind of compromise between modernism and postmodernism in such accounts.

According to Day Sclater (2004:115), narrative analysis as an interdisciplinary practice that cuts across the humanities, sciences, social sciences and arts and is a useful corrective to the reductive tendencies that other analyses rooted in individual disciplines can manifest. Furthermore, it provides a very rich source for theory-building and it opens up some very exciting possibilities for thinking about creativity in relation to research (Day Sclater, 2004:115). Day Sclater (2004) also believes that narrative analysis is a way of generating knowledge that disrupts old certainties and allows us to glimpse something of the complexities of human lives, selves and endeavours; hence, it is not only a way of finding out about how people frame, remember and report their experiences.

This study used interviews to produce narrative from students, as Czarniawska (2004b:656) maintains that a micro-site for production of narratives can easily be developed by an interview situation. However, according to Czarniawska (2004b), this does not imply that research interviews always produce narratives. It is therefore the interviewer's task to initiate narrative production (Czarniawska, 2004b:657). This then left the researcher with the task of ensuring that, during the in-depth interviews conducted in the study, such narratives are seriously evoked with all eleven university students.

In conducting narratives analysis for this study, special care was taken because of the fact that one cannot anonymise the narrators (Czarniawska, 2004b:663). Czarniawska (2004b) is also of the opinion that a narrative in the form of a text usually presents itself to its analyst, hence narrative analysis could be treated as a kind of textual analysis. The version that I adopted in conducting narrative analysis is that mentioned by Czarniawska (2004b), which proposes



treating a text as belonging to other texts, as a material trace of a conversation that was or is taking place instead of looking at a text under a deconstructivist or conversation-analytical microscope.

### 3.5.2.2 Document analysis

Flick (2009) suggests that you can use documents and their analysis as a complementary strategy to other methods like interviews or ethnography just like other approaches in qualitative research. In defining documents, Flick (2009:255) uses Wolff's (2004) definition that in so far as they typically occur in different formats, like statistics notes, case reports, contracts, drafts, death certificates, remarks, diaries, certificates, judgements, letters or expert opinions, annual reports, documents are standardised artefacts.

Documentary analysis was used in this study because it allowed for both quantitative and qualitative analyses and provides valuable historical insights over time through the analysis of texts (Patton, 2002). Documentary analysis has some advantages, which include, as Patton (2002) mentions, the fact that documents are written with a specific audience in mind, for a specific purpose. Bell (1999) contends that an extremely valuable source of data is documentary analysis of educational files and records. Of significance to this study is the argument raised by Strydom and Delport (2005:325), who also state that the use of a document study enables the qualitative researcher to investigate people, events and systems in depth, by analysing authentic written material. For instance, Marshall and Rossman (2009:160) point out that the analysis of documents is to be applauded for its richness in terms of its potential for presenting the participants' values and beliefs in the research setting.

Official documents with records on the performance of the 2011–2012 Grade 12 learners in the NSC examinations were obtained from the students themselves and used as a form of qualitative data. The records included records of the participants' academic performance in their first year at university. According to Flick (2009:256), the kind of documents that I used for the purpose of this study are categorised as official documents, which can be either private or state documents. These official documents served as secondary sources because they were not original written material relating to the researcher's experiences and observations. Bailey (1994:294, in Strydom & Delport, 2005:317) defines non-personal documents or official documents as documents that are compiled and maintained by large organisations such as government institutions on a continuous basis. These documents are more structured and formal than personal documents. However, Hodder (2003) warns that the

distinction between documents and records is also relevant for qualitative research, in that access to records may be restricted by laws regarding privacy, confidentiality and anonymity although researchers may often be able to get access to such documents. Furthermore, Flick (2009) advises that if you have decided to use documents in your research and know the sort of documents you want to use, an important step will be to construct a corpus of documents. This, according to Flick (2009), refers to issues of sampling as one cannot work with all documents addressing a particular problem in a single study. Hence, I obtained a representative sample of both documents, namely, the matric results and the records of academic achievement in the first year of students who matriculated between 2011 and 2012. In other words, in conducting this study I used five documents respectively containing records of academic performance of respondents during their Grade 12 final examination and records of academic achievement in the first year at university.

Furthermore, I used document analysis because it has the important advantage of non-reactivity. Bailey (1994, in Strydom & Delpont, 2005:318) and Monette et al. (1998, in Strydom & Delpont, 2005:318) argue that producers of documents do not necessarily anticipate that their documents will be analysed at a later stage, while in surveys or experiments respondents are aware of the fact that they are being studied. Therefore, in document analysis the researcher's activities do not affect the contents of the documents. However, Strydom and Delpont (2005) warn that data should never be viewed as suitable and practicable merely because they are available; they should always be objectively scrutinised. The current study used documents because, according to Marshall and Rossman (2009), they are often drawn in a qualitative study as part of the in-depth data gathering.

Finally, the documents analysis used in this study is based on the advice of Marshall and Rossman (2009:160), who maintain that the greatest advantage of using documents and other artefacts is that it does not disrupt ongoing events. It is only after the data has been collected that the researcher determines where the emphasis lies. Like Flick (2009), Marshall and Rossman (2009) warn that when relying on documents, ethical issues that the researcher cannot ignore include, among others, how publically available these material is, as well as whether the use of these documents might harm the organisation or individual. Table 3.2 below presents a summary of the research questions and the data collection strategies used in this study.

### 3.6 METHODS OF DATA ANALYSIS

Neuman (2006:467) remarks “in general, data analysis means a search for patterns in data recurrent behaviours, objects, phases or ideas. Once a pattern is identified, it is interpreted in terms of social theory or the setting in which it occurred”. In principle, for Neuman (2006), data analysis refers to categorising, examining, sorting, evaluating, comparing, synthesising and contemplating the coded data and reviewing the raw and recorded data.

Table 3.2: Research instrument and data collection strategy

Research questions	Research instrument	Data collection strategy	Data analysis
What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?	Open-ended interviews	Interviews with interview schedule and interview questions (interview 11 students)	Data were transcribed and then coded, classified and categorised logically
	Questionnaire	14 closed-ended questionnaires with open-ended questions were distributed	Data were coded and analysed statistically
How do Grade 12 top achievers respond to the challenges of the first year at university?	Open-ended interviews	Interviews with interview schedule and interview questions (interview 11 students)	Data were transcribed and then coded, classified and categorised logically
How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?	Questionnaire	14 closed-ended questionnaires with open-ended questions were distributed	Data was coded and analysed statistically
	Open-ended interviews	Interviews with interview schedule and interview questions (interview 11 students)	Data were transcribed and then coded, classified and categorised logically
How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?	Documents (official private and public)	Academic performance records of sampled students in first-year	Data were coded and analysed
	Questionnaire	14 closed-ended questionnaires with open-ended questions were distributed	Data were coded and analysed statistically
How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?	Open-ended interviews	Interviews with interview schedule and interview questions (interview 11 students)	Data were transcribed and then coded, classified and categorised logically
	Documents (official private and public)	Academic performance records of sampled students in first-year	Data were coded and analysed

Since the study was based on an explanatory sequential design or strategy, the analyses of the quantitative and qualitative data were conducted separately because different questions were reflected by different sets of evidence. In other words, since this study was by nature a sequential design, I used the first form of data, that is, the quantitative data collected and analysed earlier, to direct the qualitative second phase of the study. Creswell and Plano Clark (2011:185) emphasise that an explanatory design aims to explain initial quantitative results. In line with this, in this study the participants who participated in the initial quantitative data collection process also participated in the follow-up phase, though only eleven out of the initial fourteen participants participated in the interviews. For the purposes of this research I presented the studies in two phases with each phase clearly identified in a separate report as highlighted by Creswell (2008). Nevertheless, an in-depth qualitative exploration of typical cases from the quantitative data and an explanation of key results was done in the second phase. Thus when writing up the two datasets, the researcher used them largely to complement each other (Brannen, 2004:324). In this instance, complementarity addressed different but complementary aspects of the investigation by employing two different sets of data, for instance quantitative data were employed to examine associations of variables while qualitative data were used to understand social processes (Brannen, 2004:324).

### **3.6.1 Method of quantitative data analysis**

Generally, the study reported the quantitative results using statistical analyses. Before analysing the questionnaire data which was pre-coded, I ensured that editing of questionnaires was done so as to identify and eliminate errors made by the respondents. The data analysis was based on descriptive statistics, which describe the characteristics of the sample and included tallying frequencies. Percentages could not be calculated because of the small sample size that was used in this study, which in turn meant that the meaning of the data was sought through frequency analysis. Accordingly, the meaning of the data was conveyed by organising them into a more simple, interpretable form (i.e. by forming frequency distributions). However, I also need to mention that no inferential statistics were applied in analysing the quantitative data.

### **3.6.2 Methods of qualitative data analysis**

According to Teddlie and Tashakkori (2009), qualitative data analysis involves the analysis of different forms of narrative data, including audio-data, video and other formats. Teddlie and Tashakkori (2009) remind us in this regard that across all types of QUAL data analysis

there is a search for themes, which are the dominant features or characteristics of the phenomenon under study. Similarly, Richards (2009:93) maintains that you need to code in order to collect everything on a topic and that although different methods do this very differently, almost all qualitative research involves some sort of coding. Richards (2009) further elaborates on this, stating that whilst quantitative coding reduces data, qualitative coding is about data retention. In addition, Richards (2009) insists that one must keep on revisiting data extracts until one sees and understands patterns and explanations because the goal is to learn from the data.

For qualitative data analysis, the results were presented in the form of themes and subthemes which were supported by quotations. This was done after the audio recordings of interviews had been transformed into transcripts. This process is explained by Teddlie and Tashakkori (2009) who stress that QUAL analytical techniques involve producing emergent themes that surface from the study of particular pieces of information that the researcher has collected. For them (Teddlie & Tashakkori, 2009) themes are dominant features of the person or phenomenon being studied, as well as those qualities of a place, person or object that describe identity.

On the other hand, Richards (2009) warns that coding is intended to bring parts of a document together so that they can be reviewed and your thinking about the topic developed; it is not intended merely to label all the parts of documents about a topic. The qualitative data in this study were also categorised using the index cards, similar to the process when it is done systematically using software. Content analysis was also employed in determining the availability of certain concepts and meanings. For purposes of this study, I employed topic coding. Richards (2009:98) maintains that topic coding is coding that involves allocating passages to topics with little interpretation involved. In other words, you are putting data ‘where they belong’ – a sort of data disposal.

Qualitative codes, according to Kelle (2004:484), serve as “signposts” that support relevant text passage identification and assist in making them available for further interpretation and analysis. Hence, Friese (2012) indicates that, in practical terms, the process of assigning categories, concepts or ‘codes’ (more generally speaking) to segments of information that are of interest to your research objectives refers to coding. Again, the qualitative data were converted into numbers employing the “quantising” technique of Miles and Huberman (1994). On that note, Creswell and Plano Clark (2011:186) emphasise that the intention of

this design is not to merge or compare the data as in a convergent procedure, but rather the important consideration lies in collecting enough qualitative information so that meaningful themes can be developed.

### **3.7 VALIDITY AND RELIABILITY**

Another aspect of data analysis that should be described in a mixed methods research study, according to Creswell (2009), is the series of steps that are considered when checking the validity of the quantitative data and the accuracy of the qualitative findings. The strategies that were employed to check the accuracy of the qualitative findings included, among others, member checking, triangulating data sources and detailed description of data.

Reliability, on the other hand, applies mainly to quantitative studies. Hesse-Biber and Leavy (2006:60) simplify the concept of reliability by indicating that it has to do with “does the measure do what it is supposed to?” It is therefore important to discuss the strategies that were used to ensure the reliability and validity of the research. In this regard, Nieuwenhuis (2007) describes research “validity” and “reliability” as referring to research that is credible and trustworthy, stating further that it is generally accepted that the use of multiple methods of data collection, which is the case with this present study, increases a study’s trustworthiness.

#### **3.7.1 Validity in quantitative and qualitative research**

DeCuir-Gunby (2008) suggests that when conducting mixed methods research, it is essential to address issues of validity and trustworthiness; this suggests that such issues should be addressed in both the quantitative and qualitative components. Furthermore, DeCuir-Gunby (2008:131) notes that in mixed methods research, validity and trustworthiness are concerned with examining aspects of truth value, applicability, neutrality and consistency. Arguing further, DeCuir-Gunby (2008) highlights the fact that validity is important in qualitative research and is usually regarded as an issue of trustworthiness, credibility, dependability, confirmability and understanding. Eisenhart and Howe (1992, in DeCuir-Gunby, 2008) maintain that “the trustworthiness of inferences” developed from data defines validity.

On the same note, Punch (2009:313) states that data validity answers the question: How do we know this instrument measures what we think it measures? According to Punch (2009), the three main forms of validity in quantitative research are content, criterion-related and construct validity. In simple terms, Punch (2009) explains it in terms of the question “how

valid are the data?” In other words: How well are the data representing the phenomena for which they stand?

According to Silverman (2004), validity is another word for truth. On the other hand, Hammersley (1990, in Silverman, 2004:174) expresses the view that “by validity, I mean the truth: interpreted as the extent to which an account accurately represents the social phenomenon to which it refers”. Since the validity of qualitative research has been questioned, Silverman (2004) suggests method and data triangulation and/or respondent validation as ways of validating such research.

According to Creswell and Plano Clark (2011:211) “overall, checking for qualitative validity means assessing whether the information obtained through the qualitative data collection is accurate, however there are strategies available to determine this validity and qualitative researchers typically use more than one procedure” .

DeCuir-Gunby (2008) maintains that when doing qualitative research, there are several ways to address trustworthiness; these include triangulation and member checks. According to Silverman (2004:177), triangulation refers to trying to get a “true” fix on a situation by mixing various ways of looking at it or different findings. On the other hand, like Hesse-Biber and Leavy (2006), Neuman (2006:150) points out that triangulation as a process means rather than looking at something only in one way, it is better to look at it from several angles. Since triangulation is about looking at something from several points of view it improves accuracy. I used triangulation as a procedure to ensure validity by combining quantitative and qualitative approaches of research and data. In the same vein, Mathison (1988, in DeCuir-Gunby, 2008:132) contends that triangulation entails using different methods to gather information from a large range of individuals and settings. Such a strategy helps to reduce the risk of bias and allows a better assessment of the phenomena under study. Therefore, for this study I triangulated the results by using data drawn from several sources (e.g. questionnaire, academic results of the sampled research participants and interview protocol) or from several individuals (Creswell & Plano Clark, 2011; Cohen et al., 2000). According to Creswell and Plano Clark (2011), this procedure is a common data analysis practice and involves the inquirer building evidence for a code or theme from multiple sources or from multiple individuals. I chose to triangulate because it allowed me to use more than one data collection source to verify and cross-check data. In simple terms, the academic results/records of the sampled research participants were used to verify and validate the participants’ claims about

their academic performance in their first year at university. On that note, DeCuir-Gunby (2008) explains that triangulation should be accompanied by comparisons of the consistency in responses from the data gathered from the personal interviews.

Cohen et al. (2000) raise the importance of open-ended interviews for validity and reliability in qualitative data, as they allow respondents to convey their peculiar way of looking at the world and their definition of the situation. Hence, I relied on standardised open-ended interviews for obtaining qualitative data. For respondent validation, I increased the credibility of the interview data by applying member checking and peer review. According to Punch (2009), member checking means checking one's interpretation of the data with the people who are being studied and who gave the data. This allowed the interviewees to play an active role in the process by bringing their own meaning to the data, as a form of triangulation, to reduce the researcher's biasness. Accordingly, DeCuir-Gunby (2008:132) notes that member checks as a process enable the researcher to obtain feedback from the study participants on the data and the conclusions made from data. However, for Creswell and Plano Clark (2011:211), member-checking is a strategy that involves the researcher taking summaries of the findings (e.g. case studies, major themes and theoretical model) back to the core study participants and verifying with them whether or not the findings are an accurate reflection of their experiences.

I chose to do member-checking because besides validating the data it allowed the participants a chance to correct misunderstandings/misrepresentations of their voices, hence creating some ownership of the study. The participants that formed part of the study were given an opportunity to review the data and make comments and changes where they deemed necessary. In other words whatever I wrote had also been scrutinised by the participants. This was of great benefit for the study. As DeCuir-Gunby (2008) explains, the use of member checks assists in clearing up any misinterpretations that the investigator might make. Thus, Reason and Rowan (1981, in Silverman, 2004:177) note that respondent validation postulates that researchers should return to the participants with their tentative results and refine them in the light of their participants' reactions.

The final validity approach that I used was peer review. In order to validate the study, I asked colleagues who were graduate students in the Faculty of Education at the University of Pretoria and are experts in qualitative research and the content area of the research to examine the data.



### 3.7.1.1 Internal validity

Punch (2009:315) defines internal validity as the internal logic and consistency of research. However, Edmonds and Kennedy (2013:4) refer to internal validity as the degree to which the results are based on the independent variable (i.e. treatment) as opposed to extraneous or unaccounted for variables. Nonetheless, Punch (2009) further states that internal validity is most clearly defined in the quantitative context.

In the quantitative context, internal validity means “the extent to which the relationships between the variables are correctly interpreted”. Based on this fact, Punch (2009) notes that for the qualitative context this needs broadening and thus he refers to “the isomorphism of findings with reality”. Therefore, according to Punch (2009), this refers to the degree to which the findings faithfully represent and demonstrate the reality that has been studied and it has two aspects: Firstly, it refers to whether the research has internal consistency; that is, whether all the elements of the research fit together and whether the findings specifically have internal consistency and coherence (Punch, 2009). Secondly, this addresses whether the ways in which propositions have been developed and confirmed are described, including the removal of rival hypotheses, the consideration of negative evidence and the cross-validation of findings with other components of the data (Punch, 2009).

### 3.7.1.2 External validity

Edmonds and Kennedy (2013:4) state that the extent to which the results can be generalised to relevant populations, settings, treatments or outcomes is termed “external validity”. Similarly, Punch (2009:316) stresses that external validity is a “question of generalizability”; that is, how far are the findings of this study generalisable? Hence, Punch (2009) reveals that for quantitative studies, a main part of this generalisability is “people generalisation”, which is based on probability sampling. Thus, Bracht and Glass (1968, in Punch, 2009:316) label this “population validity” and acknowledge its importance.

In the same vein, Punch (2009) confirms that even in a qualitative study, the question – How far can these findings be generalised? – can be asked. In other words, to what extent are the conclusions transferable to other settings and contexts? In a qualitative study, the focus is on three important aspects, which also guided this study:

- Firstly, the sampling itself – Is it sufficiently theoretically diverse, does it capture sufficient variation to encourage transfer of the findings to other situations?

- Secondly, the context – Is there a thick description of the context so that the reader can judge the generalisation or transferability of the findings to other situations?
- Thirdly, the degree of abstraction of the concept in the data analysis.

This study definitely took into consideration all important aspects that address the issue of external validity. I ensured that before and even during data collection all potential threats to the validity of this study were taken into account. Firstly, in my sampling for the administration of the questionnaire, all Mpumalanga matric top achievers for the academic year 2011–2012, irrespective of their fields of study at university, were invited to participate in the study. However, for qualitative data (i.e. interviews), only 11 out of the total of 20 students were willing to participate in the study. These interviewees were asked the same questions and in the same order. Punch (2009) summarises this process by stating that the questions regarding external validity are therefore: What claims can be made for the generalisability of these findings (if appropriate)? What possible threats are there to their generalisation and have those threats been taken into account?

#### 3.7.1.3 Content validation of the questionnaire

Neuman (2006:193) states that content validity, as measurement validity, expects that a measure represents all the elements of the conceptual definition of a construct. On the other hand, Delport (2002:167) notes that content validity addresses the degree to which the content topics or items of an instrument accurately represent the research. Both Delport (2002) and Neuman (2006) agree that, to determine content validity, we need to ask two questions, namely: “Is the instrument really measuring the concept we assume it is? Again, does the instrument provide an adequate sample of items that represent that concept?” Furthermore, Neuman (2006:188) points out that validity suggests trustfulness and is concerned about how well an idea “fits” with actual reality. However, Delport (2002) also contends that validity does not have to do with the validity of an instrument but rather its validities; in other words, validity generally means the extent to which an instrument does what it is intended to do. Moreover, an instrument may have numerous purposes that vary in terms of kind, scope and number. As a result, the questionnaire used in the current study was presented to a research expert before using it to collect data so as to ensure that it was clear and accurate for addressing the purpose of this study. With the help of a research expert from the Statistics Department at the University of Pretoria, a final valid questionnaire was produced.

In this research, a questionnaire was employed as the instrument to gather the quantitative data for this study. This questionnaire consisted mainly of closed-ended questions with a few open-ended questions (e.g. age). The questionnaire was chosen for gathering quantitative data because it allowed me to obtain a large volume of data within a short space of time. Moreover, the quantifiable data produced from it is generally referred to as scientific, reliable, representative, valid and objective (Hesse-Biber & Leavy, 2006:19). Another reason for using a questionnaire was that I also believe that quantitative instruments of measurement like the questionnaire are generally believed to have rigour and that data emanating from their usage takes on the presumption of validity (Hesse-Biber & Leavy 2006:19).

To ensure the validity of the questionnaire, I designed and drafted it and then presented it to my supervisor who scrutinised it three times to determine the extent to which it accurately indicated the concepts or variables it was intended to measure. After my supervisor was satisfied with the questionnaire, he forwarded a copy of the questionnaire to the expert statisticians and researchers in the Department of Statistics at the University of Pretoria, so that they could scrutinise it and comment on it. For some months, my supervisor, the colleagues from the Department of Statistics and I had regular meetings to discuss the comments and suggestions they have made on the questionnaire. In April 2013, the final version of the questionnaire was produced. After this somewhat lengthy journey, I was confident that the questionnaire would measure what it was intended to measure.

The following constructs were covered in the content of the questionnaire.

The questionnaire used in this study consisted of three sections: Section A sought to obtain biographical information on the respondents; Section B inquired into the motivation to study at a tertiary institution; and Section C, which asked question relating to students' experiences and perceptions of lecturers, class attendance by students, the availability of teaching and learning resources at the tertiary institution, the support structures a student needs, presentation of lectures, one's abilities as a student and student experiences of institutional conditions and their responses to them. Each question in each section consisted of a list of statements which provided an empirical representation of academic performance. Codes in the form of numbers indicated the value of the words that respondents believed represented their understandings, thoughts, perceptions, experiences and beliefs: Totally agree designated as 4, Mostly agree designated as 3, Mostly disagree designated as 2 and Totally disagree designated as 1 were used in answering both Section B and Section C.

#### 3.7.1.4 Content validation of the interview schedule

For collecting qualitative data from the participants, both academic results/records and the interviews were used.

Most researchers believe that truthfulness/honesty is the core or primary principle of validity in qualitative research. Hence, this study's interview questions were developed to search for a fair, honest and consistent, balanced account on academic performance of top achievers in their first year at the universities.

To ensure the validity of the sampled participants' academic performance, as reported during the interviews, I used their academic results. Creswell and Plano Clark (2011:211) note in this regard that in qualitative research there is more of a focus on validity than reliability when determining whether the account provided by the researcher and the participants is accurate, trustworthy and credible. In this research, I drafted the interview questions on the basis of a standardised open-ended schedule which in turn was based on the results of the quantitative study. These interview questions were also submitted to my supervisor, who made comments and suggestions. Based on these comments and suggestions, corrections and amendments were effected and the final version of the interview protocol was produced. During the interviews, the questions were posed with the same wording and in the same order as they appeared in the guide. Although I used a standardised approach, the data collected was still open-ended in the sense that the participants were free to provide their thoughts, insights and understandings in their own words when answering the questions.

#### 3.7.2 Reliability

Silverman (2004:188) defines reliability as “the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions (i.e. in the sense of both stability over time and internal consistency)”. Silverman (2004) also argues that it is incumbent on the scientific investigator to document his/her procedure and to demonstrate that categories have been used consistently so that reliability can be calculated. For the purposes of this study, the qualitative data analysis was assessed by means of triangulation.

According to Punch (2009), the concept of reliability is appropriate for qualitative data based on two principles: firstly, the same questions can be asked of qualitative data as of quantitative data: How stable are these data over time? Again, if several sources of data are

used, are they internally consistent? Secondly, to what extent is there inter-observer agreement when observational data are involved? Since reliability means dependability or consistency, Cohen et al. (2000) and Neuman (2006) argue that qualitative researchers employ different techniques (e.g. interviews, photographs, document studies etc.) to record their observations consistently. It is for this reason that I also used interviews, questionnaires and document analysis to collect data and also to address the question of the reliability of the data. Interviews were recorded so as to avoid missing out or misrepresenting any important information from the participants. Hence, according to Cohen et al. (2000:117), reliability entails precision and accuracy.

Since the credibility and reliability of the results depend on the consistency of both the research instruments and the procedures, I ensured that all possible strategies for keeping the instruments and procedures reliable were employed in this study. For example, the research instruments (i.e. questionnaire and interview schedule) were produced after experts in the field had thoroughly scrutinised them and had declared them to be valid and reliable; consequently they had certainly produced reliable data. Hence, according to Neuman (2003) reliability is the degree of data consistency produced by an instrument. Neuman (2003) talks of internal consistency of observations “over time and in different social context”. In verifying the reliability of data, Neuman’s (2003) concept of external consistency was applied. Neuman (2003:388) notes that external consistency denotes “verifying or cross-checking observations with other divergent sources of data”. As a researcher interested in external consistency for reliability purposes, before I drew any conclusion from the data I was careful to determine whether there was other evidence that confirmed my findings.

### **3.8 CONCLUSION**

This chapter presented a detailed description of the research design used in this study. A mixed methods research design was chosen to address the purpose of this study and the qualitative data played a major role in explaining the quantitative (statistical) data that was collected in the first phase of this study. Another reason for using a mixed methods research design is that given by Creswell and Plano Clark (2011:179), that is, in mixed methods study the purpose of data collection is to address the research questions. This is, in fact, the main objective that mixed methods researchers should not lose sight of. Accordingly, they should continually ask themselves whether their data will address their research questions. In this chapter, I also explained the way in which both quantitative and qualitative research methods

were employed in a mixed methods research design and the advantages of a mixed methods research design were also outlined. Since data collection procedures consist of several key components, according to Creswell and Plano Clark (2011), sampling, collecting the data, recording the data and administering the data collection were also explained in this chapter. As part of ensuring that I did not lose sight of the research objective, issues of validity and reliability were also discussed in order to show how they were addressed in this study.

## CHAPTER 4

### RESULTS AND DISCUSSION OF THE QUANTITATIVE STUDY

#### 4.1 INTRODUCTION

For the purposes of this study, a questionnaire (Appendix D) was one of the instruments chosen to gather enough relevant data from top achievers who were first and second-year university students at the time of the study. The quantitative data obtained in this research refers to the empirical information obtained from the students, which was later assigned numerical codes. As indicated in chapter 3, numbers were used as values to indicate respondents' feelings or opinions as they related to the construct variables.

In this study, descriptive statistics included the tallying of frequencies for data analysis. However, because of the small sample used for this study, I could not calculate the percentage of the values presented, because that would have given a skewed representation of the data. Nonetheless, I described the data values of variables by constructing a frequency distribution. According to Johnson and Christensen (2004), a frequency distribution is a systematic arrangement of data values in which the frequencies of each unique data value are shown.

The arrangement and presentation of the results correspond exactly with the layout of the sections in the questionnaire that was used to collect quantitative data (see Appendix D). The main reason behind this arrangement was that I wanted to ensure consistency, ease of interpretation and the understanding of the results.

The design of the instrument (i.e. the questionnaire) was finalised with the assistance of Department of Statistics at the University of Pretoria. Twenty students were approached to participate in this study; of these 14 signed the consent form to indicate their willingness to participate and subsequently completed and returned the questionnaires.

As indicated in chapter 3 of this study, I used a combination of methods based on Creswell's (2008) position that one conducts a mixed methods study when one approach to research (qualitative or quantitative) is not sufficient to address the research problem or answer the research questions. Punch (2009) maintains that in an explanatory sequential design the researcher uses the qualitative data to help explain or to build upon initial quantitative results.

For the purpose of this study and for practical reasons, a small sample of the (2011–2012) top-ten Grade 12 learners participated in this study. I chose to use this sample because, as Franzosi (2004) advises, effective sampling also requires clear knowledge of the relationship between source characteristics and the investigator’s research questions. The fourteen respondents who took part in this study were among the twenty students who were relevant, more knowledgeable and had the expertise about the issue that this study was investigating.

#### 4.2 SECTION A: BIOGRAPHICAL INFORMATION OF STUDENTS

Section A of the questionnaire (see Appendix D) was intended to obtain information on the biographic profile of the students who participated in this study. The information relating to the respondent sample (n = 14) is shown in table 4.1. The biographic characteristics covered in the questionnaire include student age, gender, type of school attended, medium of instruction at school, academic stream studied in matric, the year of matriculation, number of distinctions obtained in matric, institution of study, the year of study at university, field of specialisation or degree studied, type of funding and accommodation arrangements at university. Section 3.7.1.3 of chapter 3 explains the content validation of the questionnaire in detail.

Table 4.1 below presents the important biographic information of respondents. This is important because it would assist in making follow-ups with the respondents in the qualitative study that followed this quantitative study.

Table 4.1: Biographic information of the top achievers who participated in the study

Respondent	Gender	Age	Race	School attended	School’s medium of instruction	Degree/course	Study year
1	Male	20	Black	Public	English	BCom Accounting Sciences	2 <sup>nd</sup> yr
2	Male	20	Black	Public	English	BCom Accounting	2 <sup>nd</sup> yr
3	Male	19	Black	Public	English	MBChB	1 <sup>st</sup> yr
4	Female	-	White	Public	Afrikaans	Medicine (MBChB)	2 <sup>nd</sup> yr
5	Male	19	Black	Public Technical	English	B Engineering Mining	1 <sup>st</sup> yr
6	Female	20	White	Model C	Afrikaans	BCom Accounting	2 <sup>nd</sup> yr
7	Male	19	Black	Public	English	Mechanical Engineering	1 <sup>st</sup> yr
8	Male	20	White	Public	Afrikaans	Mechanical Engineering	1 <sup>st</sup> yr





Respondent	Gender	Age	Race	School attended	School's medium of instruction	Degree/course	Study year
9	Male	20	White	Public	Afrikaans	B Accounting LLB	2 <sup>nd</sup> yr
10	Female	20	Black	Public	English	Medicine (MChB)	2 <sup>nd</sup> yr
11	Female	20	White	Public	Afrikaans	Financial Accounting and Law	2 <sup>nd</sup> yr
12	Male	-	Black	Public	English	Engineering and Build Environment	2 <sup>nd</sup> yr
13	Female	19	White	Public	Afrikaans	Medicine and Surgery (MChB)	1 <sup>st</sup> yr
14	Male	-	Black	Public	English	BSc Mechanical Engineering	1 <sup>st</sup> yr

\*Some of the respondents did not participate in the qualitative study (interviews).

### 4.3 SECTION B: MOTIVATION TO STUDY FURTHER AT A HIGHER EDUCATION INSTITUTION

Twenty-four statements were provided in section 2.1 of the questionnaire (see Appendix D), which asked top achievers to express their opinions on what motivated them to study further after completion of matric (see table 4.2).

Top achievers seem to see self-motivation and their interest in the course as having contributed significantly to their motivation to study further. Again, it seems that top achievers see their academic success as emanating from 'self-discipline'. All respondents strongly agreed that they believe that self-discipline plays an important role in academic success (see table 4.2). Again, all respondents (i.e. fourteen) agreed that self-motivation had helped them to persist by putting more effort into dealing with the course's workload. The majority of respondents (13 of the 14) agreed that their interest in the course had made them to perceive the course to be more achievable.

Respondents indicated either a mostly agree or a totally agree in almost all items, except items 1, 3, 4 and 24 in which they totally disagreed or mostly disagreed with the statements. For instance, all respondents (i.e. fourteen) mostly or totally agreed that they performed very well in their matric and thus had to pursue educational goals. Eleven of the fourteen respondents mostly or totally agreed that the educators at school were their best role models who motivated them to study further. On the other hand, all respondents (i.e. fourteen) mostly or totally agreed that self-confidence had assisted them in realising their abilities so that they

could be assisted where necessary. Eleven of the fourteen respondents mostly or totally agreed that their level of intelligence had assisted them to succeed academically (see table 4.2). The majority of respondents (13 of the 14) mostly or totally agreed that their academic level of preparedness had determined their successes in the higher education environment. All respondents (i.e. fourteen) mostly or totally agreed that their maturity level had influenced their behaviour which in turn determined their academic performance. Again, all respondents (i.e. fourteen) mostly or totally agreed that their willingness to accept university procedures had contributed to their effective adjustment to the university. The majority of respondents (13 of the 14) mostly or totally agreed that their approach to their studies had been influenced by the perceptions they had about what enhanced their chances of success. However, some respondents disagreed on some of the above-mentioned items with the highest value being 3 (see table 4.2 below).

In addition, table 4.2 below indicates high values of agreement, with respondents either totally agreeing or mostly agreeing with the statements that followed. All respondents (i.e. fourteen) mostly or totally agreed that clear university requirements made it easy for them to adjust to the university. All fourteen respondents mostly or totally agreed that academic readiness had made them respond positively to the academic demands. The majority of respondents (13 of the 14) mostly or totally agreed that the belief that they had in themselves had led to their academical success. Thirteen of the fourteen respondents mostly or totally agreed that effort had been the mediator between motivation and academic performance. Only ten of the fourteen respondents mostly or totally agreed that the research they had done on their career choice made them develop more love for the course. The majority of respondents (13 of the 14) mostly or totally agreed that they had to acquire academic competence in order for them to perform to the best of their ability. Finally, twelve of the fourteen respondents mostly or totally agreed that the fact that their choice of course of study had been appropriate for them had allowed them to excel in their studies.

Although respondents seemed to view most of the statements as possible motivations to study, there were, nevertheless, responses that indicated strong disagreement. From the list of items in table 4.2, four items showed serious disagreement. Responses indicated disagreement where ten of the fourteen respondents mostly or totally disagreed that the main reason for them to be at university was that they came from an educated family. Again, ten of the fourteen respondents mostly or totally disagreed that they were studying because they

were offered bursaries to study at university. The majority of respondents (12 of the 14) mostly or totally disagreed that they are studying because they had been recruited by the university. Eight of the fourteen respondents mostly or totally disagreed that they were studying because they wanted to change their family’s background or conditions. All students who responded by agreeing to this statement seemingly had uneducated parents and came from families that were not well to do. Therefore, this means that items 1, 3, 4 and 24 were not really good reasons for the respondents (top achievers) to study or pursue university studies. However, self-discipline, self-motivation, self-confidence, interest in the course, willingness to accept university procedures, academic readiness, self-belief and effort would seem to be the most important motivational aspects for top achievers to pursue their studies.

Table 4.2: Motivation to study further at a higher education institution

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1) The main reason for me to be at university is that I come from an educated family.	14	6	4	3	1
2) I performed very well in my matric thus had to pursue educational goals.	14	0	0	6	8
3) I am studying because I was offered a bursary to study at university.	14	5	5	2	2
4) I am studying because I was recruited by the university.	14	10	2	1	1
5) I think my educators at school were my best role models to motivate me to study further.	14	0	3	7	4
6) The availability of funds at home pushed me to study at university.	14	4	2	6	2
7) To me self-discipline plays an important role in academic success.	14	0	0	1	13
8) Self-motivation has helped me to persist by putting more effort on the course’s workload.	14	0	0	3	11
9) I think self-confidence has also assisted me in realising my abilities so that I can be assisted where necessary.	14	0	0	6	8
10) My level of intelligence has assisted me to succeed academically.	14	0	3	7	4
11) My interest in the course has made the course to sound more achievable.	14	1	0	1	12
12) My level of academic preparedness has determined my success in the university education environment.	13*	0	0	9	4
13) My maturity level has influenced my behaviour which did determine my academic performance.	14	0	0	5	9
14) My willingness to accept university procedures has contributed to my good adjustment into the university.	14	0	0	9	5
15) My approaches to the studies have been influenced by the perceptions I had about what enhance chances of success.	14	0	1	8	5
16) Clear university requirements have made it easy for me to adjust at the university	14	0	0	12	2



Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
17) Academic readiness has made me respond positively to the academic demands.	14	0	0	9	5
18) The belief I had about myself has led to my success academically.	14	0	1	4	9
19) To me, effort has been the mediator between motivation and academic performance.	14	0	1	4	9
20) I find it easy to combine my study and leisure time.	14	0	5	7	2
21) The research that I did about my career choice, made me develop more love for the course.	14	0	4	6	4
22) I had to acquire academic competence for me to perform to the best of my ability.	14	1	0	9	4
23) My appropriate choice of the course of study has made me to excel in my studies.	14	1	1	8	4
24) I am studying because I want to change my family's background.	14	3	5	3	3

\*Missing values

#### 4.4 SECTION C: STUDENTS' EXPERIENCES AND PERCEPTIONS OF LECTURERS

##### 4.4.1 Students' perceptions of their lecturers

Table 4.3 below shows that different students perceived their lecturers differently, even when they (students) were at the same university and doing the same course. The top achievers' responses on how they perceived lecturers showed that most students (11 – mostly agree; 3 – totally agree) believed that lecturers made themselves available all the times for contacting when students needed assistance (item 6 in table 4.3). Respondents also agreed with the statement that the attitudes of their lecturers directly influenced their performance (10 – mostly agree), with only four disagreements on this item.

Furthermore, table 4.3 also shows that the majority of respondents (13 of the 14) mostly or totally agreed that the impressions they had of the lecturers' personality made them to see the course(s) as more understandable. Twelve of the fourteen respondents mostly or totally agreed that their academic potential was not revealed to their lecturers in their first year of study. Eleven of the fourteen respondents mostly or totally agreed that their lecturers' commitment to them are equally important to their academic achievement. Twelve of the fourteen respondents mostly or totally agreed that their lecturers' expectations of them were clearly spelt out. The majority of respondents (13 of the 14) mostly or totally agreed that by being consistent in their marking, lecturers helped them to develop a positive attitude towards

assessment. All respondents (i.e. fourteen) mostly or totally agreed that their lecturers had mastered the course content which allowed them to perform as required.

In addition, ten of the fourteen respondents mostly or totally agreed that the attitude of their lecturers directly influenced their academic performance. Eleven of the fourteen respondents mostly or totally agreed that the attention that their lecturers gave to them in the first year had made them more motivated. Twelve of the fourteen respondents mostly or totally agreed that the help that their lecturers provided them with in the first year had made them more interested in their studies. The majority of respondents (13 of the 14) mostly or totally agreed that they performed well because their qualified lecturers were able to handle content-related matters. All respondents (i.e. fourteen) mostly or totally agreed that the workloads imposed on them by their lecturers made it necessary for them to engage in their work. Again, twelve of the fourteen respondents mostly or totally agreed that the continuous feedback that their lecturers gave contributed to their improved performance. Nonetheless, there was also disagreement on the above-mentioned items, ranging between 1 and 4, with 4 being the highest value on disagreement.

Table 4.3: Students' perceptions of their lecturers

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1) The impressions I get from the lecturers' personality make me find the course more understandable.	14	0	1	9	4
2) My lectures understood the background from where I was coming from during my first year of study.	14	7	5	1	1
3) My lecturers have played an important role in my achievement.	14	1	4	8	1
4) My academic potential was not revealed to my lecturers in my first year of study.	14	1	1	10	2
5) My lecturers' commitment to me is equally important to my academic achievement.	14	1	2	8	3
6) My lecturers availed themselves all the times for me to contact them when I needed assistance.	14	0	0	11	3
7) My lecturers' expectations of me have been clearly spelt out.	14	0	2	10	2
8) By being consistent in their marking, lecturers have made me develop a positive attitude towards assessment.	14	0	1	9	4
9) My lecturers have mastered the course content that allowed me to perform as required.	14	0	0	7	7
10) The attitude of my lecturer(s) has directly influenced my performance.	14	2	2	10	0
11) The efforts that my lecturers put into the course have made me to excel in the course.	14	1	4	8	1
12) The attention that my lecturers gave to me in the first year has made me more motivated.	14	1	2	9	2



Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
13) The help that my lecturers provided me with in the first year has made me more interested in the study.	14	2	0	8	4
14) The more work I was given by my lecturers, the better I performed in my studies.	14	1	4	4	5
15) I performed well because my qualified lecturers were able to handle content related matters.	14	0	1	8	5
16) The special time that my lecturer(s) reserved for me during my first year of study has made me improve a lot in my studies.	14	2	9	3	0
17) The workloads that the lecturers gave to me made it compulsory for me to engage in my work.	14	0	0	7	7
18) Continuous feedback that my lecturers gave has contributed to my better performance.	14	0	2	9	3

Top achievers indicated strong disagreement on two items, namely, items 2 and 16 (see table 4.3). This disagreement related to the statements that claimed that lecturers understood the background from which first-year students came (7 – totally disagree and 5 – mostly disagree) and the special time that the lecturers reserved during the first year of study made students improve in their studies (2 – totally disagree and 9 – mostly disagree). In contrast, only two and three respondents agreed with items 2 and 16 respectively.

#### 4.4.2 Class attendance by students

The contribution of class attendance to academic performance was indicated by top achievers' responses to fourteen statements (see table 4.4 below). Generally, class attendance was perceived to have been of assistance to all the respondents (item 3 in table 4.4). Although respondents reported mixed levels of attendance, most respondents (i.e. thirteen of the fourteen) seem to agree with the statement that referred to lecturers offering classes and the assistance it gave to students in understanding the work better.

Seemingly, top achievers (students) saw class attendance as contributing positively to their learning. For instance, the majority of respondents (12 of the 14) showed strong agreement with the statement that regular attendance of lectures was an important predictor of their success. Eleven respondents mostly or totally agreed that they liked the way in which the lecturers presented lectures and they also agreed that they learnt a lot by listening to stimulating discussions in class. Again, eleven of the fourteen respondents mostly or totally agreed that they got better results when they attended all the lectures and that they attended classes as feedback on assignments was given during the class. The majority of respondents

(13 of the 14) mostly or totally agreed that class attendance had made them more self-disciplined in their studies. Twelve respondents agreed that regular class attendance had helped them to understand the lecturers' way of asking questions (6 – totally agree and 6 – mostly agree). The highest disagreement in this regard was just four responses that stated either totally disagree or mostly disagree. The only high disagreement was indicated in response to the statement (item 10) that highlighted that the group-work in class helped students to master the course(s) better (3 – totally disagree and 7 – mostly disagree). This major finding is discussed in more detail in section 4.5.

Table 4.4: Class attendance by students

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1) Regular attendance at lectures has been an important predictor of my success.	14	1	1	4	8
2) I liked the way in which the lecturer(s) presented the lessons.	14	0	3	9	2
3) Class attendance assisted me in understanding the course content better.	14	0	0	9	5
4) I learn a lot by listening to stimulating discussions in class during the lesson.	14	0	3	3	8
5) I got better results when I attended all the lectures.	14	1	2	3	8
6) I attended classes because feedback on assignments was given during the classes.	14	2	1	8	3
7) Attending classes has assisted me with useful tips about tests in preparation for the exam.	14	0	0	6	8
8) Most of my knowledge of the courses comes from the notes I took in classes.	14	1	3	8	2
9) Class attendance has motivated me to study the course further.	14	0	4	7	3
10) The group work in class has helped me to master the course(s) better.	14	3	7	2	2
11) Class attendance has made me to be more self-discipline in my studies.	14	0	1	5	8
12) I attended classes because of the good conditions in the lecture halls.	14	2	4	8	0
13) The lecturers who were offering classes helped me to understand the work better.	14	0	1	11	2
14) Regular class attendance has helped me to understand the lecturers' way of asking questions.	14	0	2	6	6

#### 4.4.3 The availability of teaching and learning resources in the university

Table 4.5 below shows that all respondents agreed with the statement that being able to access resources like the internet made them become more interested in the coursework (item 4). In other items, top achievers' views were almost equally split between mostly agree and

totally agree. Top achievers gave the availability of resources at the university a high score. For instance, twelve of the fourteen respondents mostly or totally agreed that the quality of textbooks that the university provided had an impact on their performance. Again, twelve of the fourteen respondents mostly or totally agreed that well-structured study guides had made it easier for them to understand and interpret the course. The majority of respondents (thirteen of the fourteen) mostly or totally agreed that being able to access a library had assisted them a lot in their studies. Again, thirteen of the fourteen respondents mostly or totally agreed that extra reference sources that the lecturers made available on the university website developed their understanding of the course. On that note, eleven of the fourteen respondents mostly or totally agreed that regular use of the library benefitted their studies. However, disagreement in the form of either mostly disagree or totally disagree was also indicated in items 1 to 3 and in items 5 to 7. However, such disagreement was low with just one or three respondents disagreeing with these statements (see table 4.5 below).

Table 4.5: The availability of teaching and learning resources in the university

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1). Quality textbooks that the university has provided had an impact on my performance.	14	0	2	6	6
2) Well-structured study guides containing clearly defined outcomes have made it easier for me to understand the course.	14	0	2	7	5
3) Well-structured study guides have made it easier for me to interpret the course.	14	0	2	4	8
4) Being able to access resources like internet has made me to become more interested in my course work.	14	0	0	4	10
5) Being able to access the libraries has assisted me a lot in my studies.	14	1	0	6	7
6) Extra reference sources that the lecturers have made available on the university website have developed my understanding of the courses.	14	1	0	7	6
7) Regular use of the library has positively benefitted me in my studies.	14	2	1	6	5

#### 4.4.4 Support structures that a student need

It would seem that top achievers view support networks as important and influential for their academic performance. They (respondents) either totally agreed or mostly agreed with most statements with just a few disagreements. For instance, twelve of the fourteen respondents thought that family support is the necessary primary support and had a direct influence on their level of academic performance. Eleven of the fourteen respondents mostly or totally agreed that peer group support increased their focus on their academic work. Again, twelve of



the fourteen respondents mostly or totally agreed that the quality of the orientation by faculty made them adjust more easily to the environment. All the respondents (i.e. fourteen) mostly or totally agreed that the standard of accommodation at university made them adjust well to university. Twelve of the fourteen respondents mostly or totally agreed that the positive influence of their friends assisted them in coping with the demanding workload of the courses. Again, twelve of the fourteen respondents mostly or totally agreed that the availability of university bursaries motivated them to put more effort into their studies. On the other hand, it is also important to note that the respondents indicated high disagreement (2 – totally disagree and 4 – mostly disagree) with the statement that their financial position at university had a direct influence on their academic performance. The majority of respondents (13 of the 14) mostly or totally agreed that having a stable personal life had helped them to cope at university.

Table 4.6: Support structures that a student need

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1) I think the necessary primary support that has had a direct influence on my level of academic performance is family support.	14	0	2	5	7
2) My financial position at university has a direct influence on my academic performance.	14	2	4	7	1
3) Peer group support does motivate the focus I have on my academic work.	14	2	1	5	6
4) The quality of the orientation by the faculty makes me adjust more easily to the environment.	14	0	2	9	3
5) The standard of accommodation at the university makes me adjust well to the university.	14	0	0	5	9
6) The positive influence of my friends helps me to cope with the demanding workload of the courses.	14	1	1	3	9
7) The availability of university bursaries motivates me to put more effort into my studies.	14	1	1	7	5
8) Having a stable personal life has helped me to cope at university.	14	1	0	4	9

#### 4.4.5 Presentation of lectures

According to the data, top achievers' perceptions on presentation of the lectures they attended seemed to be almost the same despite being at different universities. Top achievers were able to link their ability to learn with the presentation of lectures and the contribution they made to their academic performance. Top achievers (respondents) either totally agreed or mostly agreed with statements in the section on presentation of lectures. However, most of the responses (i.e. the highest) were in total agreement. For instance, statements on well-

structured courses and presentations (items 1-3) accounted for 14 agreements with the exception of item 3, which accounted for 13 agreements (see table 4.7). The majority of respondents (10) totally agreed and 2 mostly agreed that regular comprehensive feedback has helped them to be more eager to learn. Again the majority of respondents (12 of the 14) totally agreed and two mostly agreed that they perform much better when the assignments are closely related to the lecture content. All respondents (i.e. fourteen) mostly or totally agreed that they have a better understanding about how to apply their knowledge more correctly when the subject is clearly defined. Moreover, thirteen of the fourteen respondents mostly or totally agreed that they are able to apply knowledge correctly when the subject is clearly demarcated.

Table 4.7 also shows that the majority of respondents (13 of the 14) mostly or totally agreed that their intellectual thinking abilities have been developed by the presentations of lectures that assisted them in putting theory into practice. All respondents (i.e. fourteen) mostly or totally agreed that being continuously assessed through tests has given them a better chance of improving their results. Responses on the issue of the language of learning and teaching show that students believed that the language of learning and teaching is important in their learning. This is revealed by the fact that twelve of the fourteen respondents mostly or totally agreed that their knowledge and understanding of the language of learning and teaching helped them to perform well in the course.

Table 4.7: Presentation of lectures

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1) I can master a course more easily when it is well-structured.	14	0	0	2	12
2) Well-structured presentations by lecturers have inspired me.	14	0	0	3	11
3) Well-structured presentations by lecturers have made me develop love for the course.	14	0	1	5	8
4) I tend to be more eager to learn when lecturers give regular comprehensive feedback on progress.	14	1	1	2	10
5) I perform much better when the assignments given are closely related to the lecture content.	14	0	0	2	12
6) I have a better understanding to apply my knowledge more correctly when lecturers clearly define the subject.	14	0	0	4	10
7) I can apply knowledge more correctly when lecturers clearly demarcate the subject.	14	0	1	4	9
8) My intellectual thinking ability has been developed by presentation of lectures that assist me in putting theory into practice.	14	0	1	10	3



Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
9) Being continuously assessed through tests has put me at a better chance of improving my achievement results.	14	0	0	5	9
10) My knowledge of the language of teaching and learning makes me perform well in the course.	14	0	2	6	6
11) My understanding of the language of teaching and learning makes me perform well in the course.	14	0	2	5	7
12) I develop more interest in the course when lectures are structured to link with the career world.	14	0	0	2	12
13) I think the more applicable the course content is, the more easily I master it.	14	0	0	3	11

All respondents (i.e. 14) also strongly agreed that they developed more interest in the courses when lectures were structured to link with the career world. Again, table 4.7 shows that all the respondents (i.e. 14) thought that the more applicable the course content, the more easily they mastered it.

In this section of the questionnaire only nine disagreements were registered in total, one in item 4, which was the only totally disagree, and eight responses of ‘mostly disagree’ in items 3, 4, 7, 8, 10 and 11; however, items 10 and 11 accounted for two mostly disagree each.

#### 4.4.6 Your learning abilities as a student

Table 4.8 shows that most respondents shared similar sentiments on their learning abilities; either mostly agreeing or totally agreeing with the statements presented in this section. The majority of respondents (13 of the 14) mostly or totally agreed that an appropriate balance between academic commitments and social life was necessary for them to achieve their educational goal, with only one disagreement with regard to this item.

Generally, the responses of top achievers were split between totally agree and mostly agree in this section. However, items 5, 6 and 8 only account for one disagreement each. Twelve of the fourteen respondents mostly or totally agreed that the more applicable the course content, the more easily they master it. The majority of respondents (13 of the 14) mostly or totally agreed that their creative thinking ability had helped them to score better marks during assessment. All respondents (i.e. 14) also strongly agreed that effective study methods and examination techniques had improved their performance and produced good results for them. In addition, the majority of respondents (13 of the 14) mostly or totally agreed that doing timely regular examination preparation in all courses also contributed to their success.

Table 4.8 shows that strong agreement was indicated (all 14 respondents) with the statement that having developed their logical reasoning capacity before coming to university assisted them in their studies. Again, the majority of respondents (13 of the 14) mostly or totally agreed that their ability to study other course-related material for enrichment assisted in generating a better understanding of the course. Twelve of the fourteen respondents thought that their ability to manage personal encounters like stress helped them to cope with the course’s workload. All respondents (i.e. 14) mostly or totally agreed that their ability to work independently had assisted them in realising that they still could perform better by putting more effort into those courses that require more from their side. As presented in the data in table 4.8, no high disagreement was registered with these items, except for item 3 and those indicated in statements above.

Table 4.8: Your learning abilities as a student

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1) I think the more applicable the course content is, the more easily I master it.	14	0	2	9	3
2). My creative thinking ability has helped me score better marks during assessment.	14	0	1	9	4
3). My ability to work as part of a group does also assist in developing more understanding in the content.	14	0	6	5	3
4). Using effective examination techniques has produced good results for me.	14	0	0	10	4
5) Doing timely regular examination preparations in all courses has been the best way for my success.	14	0	1	4	9
6) An appropriate balance between academic commitments and social life is necessary for me to achieve my educational goal.	14	1	0	2	11
7). I think having developed my logical reasoning capacity before coming to university does assist in my studies.	14	0	0	9	5
8) My ability to study other course related material for enrichment does assist in generating better understanding in the course.	14	1	0	8	5
9) I think my ability to manage personal encounters like stress makes me able to cope with the course’s workload.	14	0	2	6	6
10) Effective study methods that I used have improved my performance.	14	0	0	7	7
11). My ability to work independently has assisted me in realising that I still can perform better in putting effort to those courses that require more time from my side.	14	0	0	6	8

Respondents also indicated some disagreement (6 – mostly disagree) that their ability to work as part of a group also assisted them in developing more understanding of the content (see

table 4.8). This then implies that some of the students had not fully developed the ability to work as a group when learning nor did they like to work as a group, as they indicated that their ability to work independently assisted them in performing better.

#### 4.4.7 Student experiences of university conditions and their responses to them

Students' experiences of university conditions and their responses to their experiences in this regard reveal that students seem to see academic involvement in the university as having an influence or rather an impact on their studies. Thus, all fourteen respondents agreed that their academic involvement in the university had influenced them to pursue their goal of graduating.

Table 4.9: Student experiences of university conditions and their responses to them

Statement	n	Totally disagree	Mostly disagree	Mostly agree	Totally agree
1) I think that the quality faculty-student interaction that I had has helped to shape my progression through the university experience.	14	0	2	10	2
2) The university does show commitment to my success when it invests resources needed to enhance my success.	14	0	4	7	3
3) The university does show commitment to my success when it provides rewards needed to enhance my success.	14	0	2	9	3
4) I think my individual effort does determine the impact of an institution of higher learning.	14	0	1	10	3
5) I think that high university expectations do contribute to the change of faculty.	14	0	0	10	4
6) I think that high university expectations do contribute to the change of major courses.	14	0	1	11	2
7) My academical involvement in the university does influence me to persist with the hope to graduate.	14	0	0	5	9
8) For my effort to improve academically to serve the purpose, I need the university's commitment.	14	1	2	3	8
9) I think social support in the form of student help centre does contribute to my achievement.	14	0	7	4	3
10) I think social support in the form of counselling does contribute to my achievement.	13*	0	6	5	2
11) The availability of academic support in the form of supplemental instruction has been an important condition for my continuation in the university.	14	0	4	6	4
12) As a student, I am more likely to succeed when I find myself in settings that are committed to my success.	14	0	0	4	10
13) My lecturers do understand the community from which I come.	14	2	9	1	2

\*Missing values

Again, all respondents (i.e. 14) thought that high expectations of university contribute to the change of faculty. Likewise, similar sentiments were indicated when thirteen of the fourteen respondents thought that high expectations of university contribute to changing a major. Subsequent to that, all respondents (i.e. 14) mostly or totally agreed that as students, when they find themselves in settings that are committed to their success, they are more likely to succeed.

Most of the responses were split between totally agree and mostly agree. Twelve of the fourteen respondents thought that the quality faculty–student interaction that they experienced had helped to shape their progression through the university. Only ten of the fourteen respondents mostly or totally agreed that the university showed commitment to their success by providing the resources needed to enhance this. Twelve of the fourteen respondents mostly or totally agreed that the university showed commitment to their success by providing the rewards needed to enhance it. The results also show the attitude of top achievers towards their studies. The majority of respondents (13 of the 14) thought that their individual efforts might determine their impact on learning in an institution of higher learning. Eleven of the fourteen respondents mostly or totally agreed that for their efforts to improve academically to serve the purpose, they need the university’s commitment. Ten of the fourteen respondents mostly or totally agreed that the academic support availability in the form of supplemental instruction had been a significant condition for their continued study at university.

Disagreement with the last statement (item 13) was strongly indicated by eleven of the fourteen respondents mostly or totally disagreeing that their lecturers understood the community from which they came. Again, half the respondents (i.e. 7) disagreed that social support in the form of either a student help centre or counselling contributed to their achievement (see table 4.9).

## **4.5 DISCUSSION AND INTERPRETATION OF THE QUANTITATIVE RESULTS**

### **4.5.1 Self-discipline and self-motivation**

Concepts related to motivation and their influence on learning, especially in higher education, were discussed in detail in chapter 2 of this study. These include intrinsic motivation, which entails people doing an activity for the pleasure it provides or for its own sake; such motivation is autonomous and represents the prototype of self-determination. Hence,

according to Sarrazin, Tessier, Pelletier, Trouilloud and Chanal (2006), higher levels of self-determined motivation are related to positive outcomes, such as academic achievement, effort, engagement, the quality of conceptual learning, preference for optimal challenge, rates of retention and creativity.

The results indicate that the top achievers (students) in this study believed that being self-disciplined plays a significant role in academic success. The respondents revealed that being self-disciplined had contributed significantly to them studying further (see table 4.2). This result confirms Fraser and Killen's (2005) findings in both their studies that lecturers and students strongly agree on the significance of self-discipline and self-motivation as factors that contribute to success and lack of self-discipline as a factor that leads to failure. Furthermore, Crosling, Heagney and Thomas (2009) argue that the classroom is an important introductory point for helping students to begin to master key disciplinary concepts, since the academic success which underpins student retention requires more than merely the acquisition of knowledge.

Most respondents indicated that self-motivation is an important aspect that helped them to persist by putting more effort on the course workload (see table 4.2). According to Munteanu et al. (2011), studies conducted previously have shown that an individual's academic performance can be shaped by the help of several personality factors. Thus, Munteanu et al. (2011) contend that, generally, motivation is a construct that is believed to have an impact on the variance in academic performance. Self-motivation, as applied by the top achievers in this study, refers to a person believing in his/her own capacity to achieve, which in turn produces effective results. Therefore, self-motivation may be regarded as a 'key trigger' of academic performance or achievement. The results of this study on motivation confirm Munteanu et al.'s (2011) argument that self-motivation as a personality factor has huge implications for the manner in which students learn academic material.

The results presented in section 4.4.6 indicate top achievers' self-concept concerning their learning process. Generally, according to the findings of this study, top achievers have a positive self-concept about their learning. The results indicate that top achievers believe that they have certain abilities that assist them in their learning process and add to their self-concept, including one's ability to study other course-related material for enrichment, creative thinking ability, logical reasoning capacity, ability to manage personal encounters

like stress, ability to work independently and the ability to balance academic commitments and social life (see table 4.8).

#### **4.5.2 Personal academic interest**

Students will put in more effort into succeeding if they perceive what they are doing as meaningful, although this does not apply to higher education students only. The results also present evidence that the top achievers in this study were of the view that having an interest in the course they were doing was important, because this might lead to perceiving the course as being more achievable. Chapter 2 of this study cites Sikhwari (2007), who argued that interest, since it involves the selection of and persistence in processing information, is integral to motivation. To a great extent, the top achievers' perceptions of the factors that contributed to their motivation to study and their academic performance have answered McCoach's (2002) questioning statement: "why some students achieve in school and others do not, remains a mystery". Seemingly, according to the results, top achievers know exactly what worked for them in their studies especially in their first year at university. Therefore, the results show that top achievers' interest in their studies has a great influence on their behaviour both academically and non-academically.

#### **4.5.3 Lecturers' support for students**

According to Ramrathan (2013), lecturers are expected to nurture students; play a mentoring role and be involved in establishing learning communities to ensure student retention.

The results indicate two important aspects of the students' experiences and perceptions of lecturers. Firstly is the impression that students have about the availability of lecturers when they needed assistance and, secondly, is the attitude of lecturers (see § 4.4.1). The respondents believed that among others, lecturers' commitment, clear expectations, consistence in marking, lecturers' qualifications and content mastery are some of the positive contributory factors in the academic performance in first year. The responses of top achievers indicate their openness, honesty and fairness in their opinions and experiences of their lecturers, reflecting a positive attitude to and experiences with lecturers at their universities.

Accordingly, the results indicate that in the students' opinion, lecturers did make themselves available all the times to be contacted when students needed assistance. Therefore, it would seem that lecturers did provide students with support of some kind outside the classroom. Similar sentiments were indicated on item 13 (see table 4.3), with regard to the statement:



‘the help that lecturers provided their students with in the first year has made them (students) more interested in the study’. Suffice it to say that items 6, 12 and 13 show the perceptions of students on the support that the lecturers offered to their students (see table 4.3). Likewise, according to the results of the questionnaire, the top achievers had responded favourably to the association between competence and performance (see table 4.3). Again, the results reveal lecturers as qualified, competent and skilled because the top achievers indicated that lecturers had mastered the course content which then allowed them to perform as required. Linked to this is the fact that top achievers in their responses stated that they believed that they had performed well because their qualified lecturers were able to handle content-related matters, (see table 4.3).

Having lecturers available for students to contact when they need assistance shows that there is some kind of support network or structures to ensure that students do perform as required in their courses. Nevertheless, Tinto and Pusser (2006) claim that when students are given academic support in a specific course, they are able to immediately apply this support to help them succeed in that course; extra instruction programmes appear to be particularly effective in this regard.

Again, the results indicate that most respondents believed that the attitude of their lecturers directly influenced their academic performance. The results therefore, reveal that students attributed their academic performance to the good lecturers they had (see § 4.4.2). Likewise, Modipane (2011) advises that if students find that their lecturers are unfriendly, uncommitted to their work and inaudible in class and that the students are crammed into classrooms and overloaded with course work, it is likely to result in a culture shock and may encourage students to drop out or even drive them away. On that note, Tait et al. (2002) highlight the findings of their study, which seem to indicate that some learners have a perception that their success is dependent more on the performance of lecturers than on their own efforts. Hence, Modipane (2011) reports that the performance of lecturers is considered to be a factor that may also contribute to either the achievement or non-achievement of first-year students.

Although most top achievers acknowledged the help that the lecturers provided, the majority (i.e. 11) of the top achievers indicated their disagreement with the statement that the special time that their lecturers reserved for them during their first year of study had resulted in an improvement in their results (see table 4.3). In this regard, there are two important aspects that should be noted. Firstly, it can happen that no special time is reserved by lecturers for

students and, secondly, even if such an arrangement does prevail there may be no improvement in the students' results (see table 4.3).

#### **4.5.4 Student academic workload**

Many researchers maintain that there are various factors that contribute to whether or not students proceed with their studies. It is therefore important to indicate here that what takes place in the teaching and learning programme in HEIs is important for student retention.

The top achievers (students) in this study also responded positively to the statement that highlighted that the workload that the lecturers impose on them made it compulsory for them to engage in their work. This interpretation is based on the data presented in table 4.3. Generally, the results also reveal that students had more academic work to do; hence these top achievers revealed that their workloads made it compulsory for them to engage in their work (see § 4.4.1). On that note, Modipane (2011) warns that sometimes students complain about heavy workloads which could mean that they will never cope with the amount of work at hand, which has implications for curriculum development. In the same vein, Modipane (2011) takes the argument further by indicating that HEIs should ask themselves the question as to how they accommodate students who enter the system with poor language proficiency and who have not been exposed to a heavy workload.

Nevertheless, Shalem et al. (2013) suggest that for the quality of learning in higher education to improve, “university teachers may first need to determine students’ perceptions of the assessment, their workload, the clarity of goals and standards, the teaching they receive and the learning choices they receive”. They (Shalem et al., 2013) further emphasise that the way students conceive tasks affects their approach to learning in a particular situation and subsequently the outcomes of their learning task. This suggestion of Shalem et al. (2013) attests to the aim of this study, because in my study I considered students’ perceptions and their experiences of university study to be critically important both in their learning and their academic performance. In addition, it is not surprising that Shalem et al. (2013) conclude their argument by acknowledging that individuals learn differently and that teachers need to tailor pedagogy to match the different student approaches.

#### **4.5.5 Class attendance by students**

The results clearly show that although the top achievers in this study were studying at different universities, they share the same sentiments on class attendance. Generally, the

results revealed that top achievers are comfortable with attending classes or lectures. According to the data, top achievers believe that class attendance assisted them in understanding the course content better, assisted them with useful tips about tests in preparation for the examinations, helped them to understand the lecturers' way of asking questions and that the classes offered by lecturers helped them to understand the work better (see § 4.4.2). According to the data presented here, this then implies that, as first- or second-year students, top achievers did not underestimate the importance of class attendance in striving for excellent performance. Apart from these aspects, the data also revealed that top achievers believed that they got better results when they attended all the lectures (see table 4.4 and § 4.4.2). This interpretation is based on the evidence presented by the results about the positive perceptions and attitudes of top achievers towards their lecturers' presentation of lessons. Stance (2006) reveals in this regard that a positive and significant relationship between lecture attendance and student performance still exists.

Besides assisting them academically, the majority of students believed that class attendance had instilled more self-discipline in them (see table 4.4). Likewise, the data show that top achievers viewed class attendance as important and that has made them more disciplined in their studies. Discipline, as intrinsic motivation, plays a significant role in the kind of behaviour that an individual might display in different environments. This then implies that if more disciplined, students would see it as important to attend their classes no matter what the circumstances around them. Furthermore, having used the Heckman two-step model, Horn et al.'s (2011) study found that the attendance of lectures and tutorials contributed positively to academic success, which in turn suggests that academic support such as tutorials should form an integral part of any university academic programme.

The results also reveal that both students in the university residences and those staying off campus were positive about class or lecture attendance. This is in contrast with Horn et al.'s (2011) study, which revealed that students staying in university residences perform better in examinations than those staying off campus. Horn et al. (2011) further claim that students staying on campus have access to learning and study facilities after hours and enjoy the benefits of connecting with their peers as they also save time by not having to travel to and from campus. Likewise, top achievers have good perceptions about their lecturers. This interpretation is based on the evidence revealed by the data that most students strongly agreed that lecturers who offered classes helped them to understand the coursework better.

Seemingly, lecturers were of assistance to the top achievers (students). I would therefore argue that based on the evidence of the data how could students absent themselves from lectures (i.e. if they did) if their lecturers were helpful when offering classes.

#### **4.5.6 Students' attitude towards group-work**

Morosanu, Handley and O'Donovan (2010) argue that evidence of students' negative views on group work is widespread, although tutors often use group work as a strategy for making learning simpler and more interesting for students. Students might also see being "put into groups" as a "forced socialisation".

Furthermore, the results indicate that most top achievers are of the opinion that the group work done in class has not assisted them in mastering the course(s) better (see table 4.4 and § 4.4.2). The top achievers' attitudes on this issue reflect a serious concern about how the group work in class was administered, with their opinions in this regard showing the possibility that they may not appreciate the value of group work in their learning.

It is important to mention here that the extent to which participating or non-participating in group work has an impact on students' academic performance still remains to be investigated. Morosanu et al. (2010) insists that students perceived group work as more of a burden than a relief, despite being involved in different tutor-imposed strategies designed to ease students' struggles, such as collaborative learning methods and group work. In addition, as Hrabowski III (2005) argued earlier, first-year college students tend to frown on the notion of group activity. This then confirms the findings of this study in regard to students' perceptions of group work. Nevertheless, I need to mention that the issue of group work and its impact on academic performance, especially at first-year of university, should not be overlooked as it could also assist in directing academic support where it is needed. I also believe that this could help universities to identify which academic support works when and where. Ultimately, Armien and Le Roux (2010) state that other studies have also claimed that the benefits of group work include gains in academic success.

#### **4.5.7 Resources and tutorial material**

The results present evidence of the fact that to a certain extent top achievers (students) do have access to the minimum required teaching and learning resources. Regarding study material, such as textbooks, study guides and extra reference sources, top achievers revealed that these were available and also noted that they were of assistance in ensuring that the

courses were made easier for them (see table 4.5). The data presented reveals that almost all the students did not complain about a lack or shortage of study materials in whatever form. It is therefore believed that these top achievers use these materials effectively to improve their performance.

Apart from study material, access to resources such as libraries was also viewed by most students as having positively benefited their studies (see table 4.5 and §4.4.3). Having access to a library implies two important aspects, namely, having access to a study space and also access to the required study material. Nevertheless, since respondents also indicated regular use of the library as having positively benefitted them in their studies, I believe that having access to the library and the resources (study material) without doubt assisted students in their studies.

As part of the results, the top achievers indicated that the internet was a significant learning and teaching resource available in the universities and that having access to it was important. Unlike in the past when everything was presented in hard copy (i.e. paper), the present generation enjoys the privilege of accessing every kind of information by merely connecting to the internet. Indeed, scholars refer to this latest generation of student as “the digital natives”. According to the results this therefore calls for universities to be up to date in meeting the current technology demands that also make learning and teaching much easier for the present generation. Van Zyl, Gravett and De Bruin’s (2012) study revealed in this regard that some pre-entry attributes are time sensitive, such that a student’s self-rated internet and computer skills were found to be statistically important as predictors of academic performance during the first semester but not during the second. Therefore, Van Zyl et al.’s (2012) study supports the validity of Tinto’s ideas about the importance of pre-entry attributes in the highly heterogeneous context, as is found in South Africa.

#### **4.5.8 Support available for students**

In this section, support focuses on all the support or support services that HEIs (i.e. universities) offer to their students. Tinto’s theory postulates that in order for students to persist through to degree completion, they have to successfully commit to and integrate into both the academic and social spheres of university life (Van Zyl et al., 2012). Likewise, Viljoen and Deacon (2013) stress that research on higher education reveals that students’ success is well predicted by good career choices, competent academic staff, sufficient support, academic preparedness, motivation and student engagement.

All the top achievers responded positively to the statement that highlighted that the standard of accommodation at university that they experienced was good and that it allowed them to adjust well to the university, although a few students indicated that they were staying off campus. Top achievers chose, among others, factors such as family support, the positive influence of friends, the availability of university bursaries and having a stable personal life as the most important support structures that they need while being at university. Seemingly, support in any form is regarded as a prerequisite for excellent academic performance. According to the results, the respondents (students) believed that the primary support (i.e. family support), peer group support and support from friends all in one way or another contribute to academic performance (see table 4.6 and §4.4.4). Nevertheless, this reveals that students do really need such support be it from friends or parents. According to Viljoen and Deacon (2013), if students experience a sense of social support there will be an increase in their overall well-being, which will in turn assist them in adapting to student life more easily. Social support may be seen as a positive predictor of engagement and could entail support from peers, tutors and family (Viljoen & Deacon, 2013).

Respondents (students) also viewed the orientation by their faculties as helpful in their adjustment to the universities. This means that the orientations that universities provide to their first-year students demonstrate the universities' support for their students. Again, the results show that top achievers also saw the availability of university bursaries as a motivation for them to put more effort into their studies.

#### **4.5.9 Structured presentation of lectures**

The results clearly show that the top achievers believe that the well-structured presentation of lectures positively contributed to their attitude towards the course. Positive aspects in this regard include clearly demarcating and defining the subject. Although respondents attended different universities, almost all top achievers indicated that their knowledge and understanding of the language of learning and teaching allowed them to perform well in the course (see table 4.7 and §4.4.5). Therefore, this implies that most respondents (top achievers) would not attribute negative performance to the fact that they did not have full command of the language of learning and teaching. As Krause (2005) states, students that are most likely to express intentions to stay at university are typically those students that have positive perceptions of teaching.

Most importantly, Cook and Leckey (1999) found in a study conducted in Australia that the quality of teaching and learning is influenced by the daily interactions between academics and students. On that note, one might say that the perceptions of students on the presentation of lectures might also have contributed to the positive attitude to class or lecture attendance (as revealed by the findings).

#### **4.5.10 Students' study skills**

Besides all the aspects mentioned, the results also reveal that the top achievers attributed their academic performance to the fact that they had used effective examination techniques, made timely, regular examination preparations and applied effective study methods. According to Kleemann's (1994) report, the perceptions of students about their own abilities contributed more to their success than past academic achievement. The results of the current study revealed that almost all top achievers agreed that using effective examination techniques and effective study methods contributed significantly to their academic performance. This shows a very high commitment of students towards their studies. Likewise, Fraser and Killen (2005) reported that, in both studies they conducted, lecturers scored "timely and regular examination preparation" as one of the top three "success" aspects and "inadequate or poor exam preparation" as one of the two critical contributors to failure. Most significantly, most top achievers indicated that the most important factor contributing to their performance was ensuring a reasonable balance between academic commitment and social life. This implies that an indication of students' academic self-image, which is a core factor in their successful academic integration into higher education, is revealed by students' belief in their ability to persist. Furthermore, the results indicated that top achievers spent a lot of time studying their coursework, which might be another factor contributing to their academic success. On that note, Parker (2006) found that more time spent on study had a significant positive effect on course grade according to models of achievement.

I would mention here that, as highlighted in the results, the top achievers in the study did demonstrate the abilities they personally had acquired and applied in ensuring that they performed academically as required in their first and even second year of study. However, based on the results there is one aspect in which top achievers indicated to be having no interest in, namely, "the ability to work as part of a group" (see table 4.8). Earlier on in the presentation of the results (i.e. §4.4.2) on class attendance, a similar finding was detected. In section 4.4.2, top achievers disagreed that the group work in class had helped them to master

the course(s) better. Moreover, it is not easy to ascertain whether the top achievers had a negative attitude towards group work in class or that they did not have enough skills to cooperate and work as a group in classes.

#### **4.5.11 University expectations and commitment to students**

Shalem, Dison, Gennrich and Nkambule (2013) maintain that the transition from secondary school to university is generally a challenge for first-year students, as they have to acquire a “feel for the game”. Subsequent to that, Shalem et al. (2013) further argue that the difference between what is accepted at school and what is expected and accepted at university can be confusing for first-year students. Hence, Crosling et al. (2009) contend that the high expectations that the institution and teachers hold of students in their learning are some of things that underpin students’ engagement and thus their persistence in their studies.

Experiences of university conditions vary from student to student and from university to university. The results presented in table 4.9 and section 4.4.7 show that top achievers (students) view their universities as being committed to their success, as they invest in the resources needed to enhance success. In addition, students were of the opinion that universities have high expectations which contribute to the change of faculty or of major courses. This means that, in essence, whenever students cannot meet the expectations in a particular course, they (students) then resort to change of course or faculty. In support of the above-mentioned statement, students also reported a positive attitude to the academic support available in the form of supplemental instruction, which is viewed as a significant contributor to their continuation in the university. This then means that top achievers (according to the results) acknowledge the role of supplemental instruction in their learning process. According to the results, academic support was never reported as being insufficient or lacking by any student in this study. It would therefore seem that top achievers also believed that if their efforts to improve academically were to be effective they also needed the university’s commitment (see table 4.9).

The results provide evidence to show that, to a certain extent, universities have high expectations on students. According to Cook and Leckey (1999), there is a widespread belief that it is essential for university staff to have an informed view of the diversity in the backgrounds, needs and aspirations of the students they teach so as to ease student transition. This implies that to a certain extent, lecturers’ assumptions about students could influence their behaviour and they might directly or indirectly have an impact on the students’



adjustment to university. Furthermore, Modipane (2011) argues that what the university environment emphasises and how it projects itself to the students also influences how the student respond or adapt.

The results indicate that all top achievers were of the opinion that it would be possible for them to succeed academically when they are in the kind of environment that is concerned about their studies and promotes their success. This is also a finding that was presented by Tinto and Pusser (2006), who contend that in settings that are committed to their success, hold expectations for their success, provide needed academic and social support, provide frequent feedback and actively involve them, especially with other students and faculty in learning, students are more likely to succeed.

#### **4.6 CONCLUSION**

Being located within higher education, the study investigated academic performance and students' experiences of their first year at university. The first phase of the study examined the motivation behind the student's wish to study further at HEIs. In addition, this phase further explored students' experiences and their perceptions of lecturers, class attendance by students and the availability of teaching and learning resources at the university. Furthermore, support structures that a student needs, presentation of lectures, students' abilities and the students' experiences of university conditions were also investigated.

From the initial sample of 20 identified, only 14 students participated in this study by responding to a 128-item Likert-scaled instrument (see Appendix D). The results of this study provided descriptions of students' attitudes, opinions, beliefs, thoughts and perceptions relating to their academic achievement in their first year at university.

From the data which was obtained from the responses to the questionnaire that was administered, I was able to identify some aspects that top achievers viewed as important and as contributing to keeping the momentum going for them (students) to maintain success. The top achievers attributed their academic performance to self-discipline, self-motivation, self-confidence, interest in the course, academic preparedness, effort, maturity and the belief they had about themselves. However, one of the positive aspects related to self-discipline is that as an attribute it plays a special role in regard to the other attributes.

With regard to teaching and learning generally, the top achievers' opinions mostly revealed that they were provided with the academic help that would assist them in their studies. Perhaps the most critical finding with regard to university teaching and learning is the fact that a majority of top achievers saw class attendance as another factor benefitting their studies. In relation to lecture or class attendance, it would not be proper for top achievers to see such as important if it did not bear any fruit. From the data presented by students, it would seem that the lecturing staff at different universities had a good command of their subjects or courses. This may also have contributed positively to students keeping the momentum going when striving for academic success.

Finally, despite all the challenging aspects (e.g. lecturers did not understand the students' background, lack of social support in the form of student help centre/counselling) reported in the data, it should be mentioned that these top achievers made an effort to ensure that they always kept their academic performance at an acceptable level. For instance, students' disagreement with the statement that the special time that their lecturer(s) reserved for them during first year of study made them to improve a lot in their studies might in one way or another reveal some disappointment on the students' part. However, as to how important such an arrangement is for academic performance in the first year will be explored in more detail in the next chapter. In other words, the significance of such an arrangement (if it really does exist) will be extracted from the data that will be discussed in the next chapter.

For purposes of this study, the collection of quantitative data preceded the qualitative study because some of the interview questions were drawn from items that formed part of the quantitative study. As indicated in chapter 3, the study adopted a sequential approach (i.e. quantitative first and followed by qualitative approach), therefore, the results of the qualitative study would explain the quantitative findings.

## CHAPTER 5

### QUALITATIVE DATA ANALYSIS AND DISCUSSION

#### 5.1 INTRODUCTION

The main purpose of this chapter is to make sense of the qualitative data collected from the interviews held with participants. Hence, this chapter is based on a narration of participants' expectations, thoughts and experiences of their first year at university. Hence, these qualitative interviews are said to be sessions that offer an opportunity for investigators to learn about social life through the experiences, perspectives and language of those living it (Hesse-Biber & Leavy, 2006:128).

The main objective of this chapter is to analyse and synthesise the research participants' experiences in the form of words and statements. These words or statements, in the form of quotes, are those of the research participants; however, where necessary some words or statements of my own are used in interpreting what the research participants have said during the interviews. This was done taking serious precautions not to misinterpret the participants.

Importantly, it should be noted that qualitative research is 'interpretive' research, where one makes a personal judgement or assessment of a description that is appropriate to the situation or the themes that capture the major categories of information (Creswell, 2012:238).

#### 5.2 BACKGROUND

As indicated earlier, the study is located within the field of higher education and was based on university students who were top achievers in their final matric year, namely, the Mpumalanga 2011 and 2012 matric top ten learners. Every year the top ten learners of the province receive an award from the Mpumalanga Department of Education for their excellent performance. These students are currently enrolled at different universities across the country (i.e. South Africa) where they are pursuing their various fields of study.

Since the study was based on the matric learners for 2011 and 2012 only, it is therefore important to provide a picture of the academic performance in Mpumalanga Province during those academic years. This is done to assist both the study and the readers in attaching meaning to the reason why those particular students were awarded. In other words, this would also answer the question, did their performance improve Mpumalanga's matric results or

what was the nature of the performance of matriculants in Mpumalanga province generally in the academic year 2011 and 2012?

The table below presents the academic performance of matric learners in Mpumalanga province in 2011 and 2012.

Table 5.1: Mpumalanga Department of Education's pass rate for 2011 and 2012 compared with that of national level.

Year	National average %	Mpumalanga average %
2011	70.2	64.8
2012	73.9	70

Table 5.1 shows how the Mpumalanga Province performed in the NSC or matric in both 2011 and 2012. For purposes of this current study, it was crucial for this section to highlight on the academic performance of Mpumalanga province since the study emanates from the performance of Mpumalanga matric learners. The average percentage indicated in the table above shows how Mpumalanga Province has improved from the previous year, coming very close to the national average percentage in 2012.

Since the research is based on different students at different universities; their biographical data would also assist in critically analysing the qualitative data collected (see table 4.1).

### 5.3 DATA COLLECTION PROCEDURE

#### 5.3.1 Sampling

The sample for this study comprised Mpumalanga province's 2011 and 2012 matric or Grade 12 top achievers; that is, the top ten matric learners in the respective academic years. As indicated in chapter 3, for this study I used non-probability, purposive convenience sampling. As Creswell (2009) points out, purposeful sampling in qualitative data collection is used so that participants are chosen on the basis of their experience of the central phenomenon. On the other hand, Edmonds and Kennedy (2013) state that in purposive sampling individuals are selected by the researcher to participate based on a specific need or purpose (e.g. based on the research objectives, design and target population).

For this phase of the study, eleven university students participated in the interviews. Though I contacted all twenty students to participate in this study, three of them indicated they would only respond to the questionnaire. The remaining six students, one of whom seemed already

to be a university drop-out did not return their consent forms and kept on postponing their appointments with me. I would drive to some of their residences only to find that they did not turn up for the appointment. The students who formed part of this study were in their first and second year at university: that is, seven second-year and four first-year students.

### **5.3.2 Data collection strategy: interviews**

Interviews were used to gather the qualitative data. As Shulamit Reinharz (1992, in Hesse-Biber & Leavy, 2006:123) notes, “interviewing offers researchers access to people’s ideas, thoughts and memories in their own words rather than in the words of the researcher”. Qualitative interviews are thus a special type of conversation that occurs between two parties to produce knowledge (Hesse-Biber & Leavy, 2006:128). This motivated me to conduct individual interviews with my participants. I also believed that individual interviews would make participants more open in responding to interview questions.

For the purposes of this study, the qualitative data was collected through open-ended interviews. This was based on the findings of some researchers who observe that while the researcher has a specific topic for his/her study, he or she permits the research participants to take the conversation wherever they want so that each interview becomes highly individual.

#### **5.3.2.1 One-on-one interview to collect data**

To get at ‘deep’ information or knowledge, I had to employ qualitative open-ended interviews, where individual research participants were free to share their perceptions, experiences and academic performance at first-year university level. These interviews were conducted individually because I wanted to enable my interviewees to express their attitudes and feelings freely, without being disturbed or influenced by their counterparts.

#### **5.3.2.2 Recording the interviews**

Since the participants were studying at different universities in South Africa (SA), I had to travel to some of the participants’ homes for the appointment to conduct interviews. As indicated in chapter 3 of this study, I went to the research sites with a tape recorder to record the conversations so as to avoid misinterpretations. Fortunately, all the interviews were recorded. However, in addition to recorded interviews, I also took some short notes of the facial expressions of participants that could not be captured by the tape recorder. Each participant was only interviewed once; these interviews took from an hour to an hour and a

half. Nonetheless, owing to the fact that our time was properly planned for the interviews, no participant felt like leaving before the interview was finished.

### **5.3.3 Transcribing the interviews**

After having conducted the interviews, the recordings had to be transcribed, for which I used the services of a professional transcriber. The audio recordings of interviews were then transformed into transcripts. In other words, the audio recordings of the interviews were then presented as written data (i.e. word by word) by the professional transcriber. These transcripts ranged from between 25 and 30 typed pages for each interview.

### **5.3.4 Coding and themes**

Teddlie and Tashakkori (2009) emphasise that QUAL analytical techniques involve creating emergent themes that emanate from the study of specific pieces of information that the researcher has collected. In other words, themes are the most common features of the person or situation; those qualities of place, person or object that define or describe identity.

As indicated in chapter 3, for qualitative data analysis the results are presented in the form of themes and subthemes and these are supported by quotations. The words or quoted statements in italics are the direct quotes of participants. I also coded the transcribed data so that it made sense during the analysis and the writing up of the results. As Friese (2012) states in simpler terms, coding refers to the process of providing categories, concepts or “codes” (i.e. more generally speaking) to pieces of information that are important or of interest to one’s research objectives.

Where ordinary codes were easily constructed from the statements, only letters of the alphabet were used to explain or substitute the statements, for example FYCTM for first-year challenges, time management. However, in cases where it was difficult to use letters of the alphabet only, figures were attached to the codes to indicate similar and different meanings, for instance EXP1 for expectation number 1.

## **5.4 QUALITATIVE ANALYSIS OF DATA**

This section presents the different responses to the research questions of this study. Each research question is dealt with in a separate section so that justice can be done to all aspects of each research question. Accordingly, the research questions in this study are restated in this section. The following research questions guided this inquiry:

- What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?
- How do Grade 12 top achievers respond to the challenges of the first year at university?
- How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?
- How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?

Each section presents the responses to the questions in accordance with the research questions.

#### **5.4.1 How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?**

##### 5.4.1.1 Participants' descriptions of their high school life

Although the main focus of the study was on higher education, students' experience of high school was deemed important because it formed the basis of their academic success. Based on the individual interviews with participants who were students at different universities, I got a general sense that although almost all participants were from public schools, there was very little in terms of a systemic standard gap on their side. In other words, there was a lack of what I could term 'products of disadvantageous environments'. Although the current study did not undertake a comparatively oriented method, given the evidence of the data it would seem that whether participants came from public or private schools including former model C schools did not determine their academic performance.

In having to explore participants' academic performance and experiences in their first-year university programme, it was also very useful to find out about their school life in matric. It is for this reason that in interviewing participants from different universities, I began by focusing on the following question: 'What kind of school did you attend and how was it to you?'

Pertaining to the type of school that the participants attended in their matric, most of them (i.e. 10 out of 11) indicated that they had attended a public school [PS]. This information is also presented in table 4.1 on the participants' biographical information. Most of the participants state that their schools were good [SG] and generally well-resourced [SWR] to

meet their educational needs. To illustrate what their schools looked like and what they offered, participants told their stories as follows:

*It was a public school, public and it was only a high school, so from Grade 8 to Grade 12 (Interview with Participant 4, 14/11/2013).*

In the same interview, Participants 4 and 11 further indicated their impressions about their schools:

*I enjoyed my time there. I had a good ... well studying is not always very nice but I had a good time and I had a very good relationship with my teachers as well (Interview with Participant 4, 14/11/2013).*

*I enjoyed school very much. I enjoyed everything about school not only the academics. I also enjoyed all the extra-curricular activities and also the sport and especially the culture the school brought to us and also the social interaction with other people. So I enjoyed school very much (Interview with Participant 11, 13/01/2014).*

Similar verbatim remarks were also indicated by Participant 10 during the interview. This is how she expressed her feelings about the school she attended:

*It's government school. Ja, it's a public school. It was very good. Ja, we had really good teachers and ja it was very nice (Interview with Participant 10, 12/12/2013).*

Having indicated that her school was very nice [SVN], I found Participants 10's response to be too broad to understand what she meant clearly. Because I did not want to misinterpret her statement, I afforded her a chance to elaborate. Accordingly, she indicated that:

*In which sense, the teachers were involved in whatever we were doing, they made sure that we did our work and they made sure that they arranged camps so that we can study and ja. They did proper follow up on how we were doing, even the principal also checked the mark schedule to see whether we performing very well and asked us why not when we were not performing really well and they arranged extra tutors from other schools. Yes (Interview with Participant 10, 12/12/2013).*

Like Participant 4, Participant 10 also indicated that her teachers were involved [TI] in what they were doing. Interestingly, Participant 10 mentioned that even the school principal showed concern [SPC] for their education because learners' mark schedules were checked or monitored to verify that they were performing well and if not they had to explain to the



principal. What is worthy of note is that among all participants interviewed, the issue of the school principal checking the mark schedules [PCP] and seeking accountability on the side of learners was only highlighted by Participant 10. Although this (i.e. monitoring learners' performance) is a critical curriculum management aspect, for this present study it might not be concluded that only Participant 10's school had everything under control in monitoring curriculum.

Another participant clearly spelt out what his school looked like:

*It was a technical school, it was a government sort of technical school, but it was a technical school (Interview with Participant 5, 7/12/2013).*

In elaborating further about his school, Participant 5 gave the following explanation:

*... it wasn't as bad because there was good leadership and all that so previously it was an ordinary school, it wasn't a very nice place to me, not even one of the best. But then as time went on, I think maybe because of good leadership that the headmaster had as a result it had an impact on the school's results because pupils started performing well and all that. So I found it very er, it wasn't bad at all it was ... it's a good school even now, I think so (Interview with Participant 5, 7/12/2013).*

Although Participant 5 indicated that his school was not bad [SNB], he acknowledged that the school had good leadership [SGL] which benefitted the school in terms of performance. I would therefore argue that unlike the other participants, Participant 5 was more observant of what happened in his school. For instance, citing "leadership issues" and "performance" as a former learner of the school shows that he was aware of and concerned about what was done in his school. This implies that Participant 5 has already responded to one of the critical interviews questions, on what factors might have contributed positively to academic performance. However, this question will be dealt with in more detail later on in this section.

In the same vein, Participant 2 also provided a description of his school:

*Ah it was a government school, ja! It was a government school, a Dinaledi school it was known for its achievement in student getting high marks (Interview with Participant 2, 10/11/2013).*

What makes Participant 2's remarks different from those of the other participants is that he indicated that although a government school his school was known as a Dinaledi school.<sup>8</sup> In the same interview he (Participant 2) elaborated that:

*It means that in that particular circuit it achieved more bachelors than the other schools around in that circuit, so that's why it is refer to as the Dinaledi school (Interview with Participant 2, 10/11/2013).*

In providing his memories of his high school, Participant 2 with a great smile indicated that:

*It was a great school, the teachers were great, everyone was supportive of the students and they taught us what we needed to know in order to pass the exams we had (Interview with Participant 2, 10/11/2013).*

According to Participant 2, his teachers were great [TG] and everyone supported them [SSE] in their studies. Another version on how participants experienced their schools is that given by Participant 9 in his narration. Like the other participants stated above, Participant 9 also claimed to have had a good time at school.

On that note Participant 9, explained:

*I enjoyed my high school. I think I got very good education throughout, I mean ja, I've been, my parents had been involved in the school for very long ... like way before, like I went there also. So for me stepping into that was easy. I mean I knew a lot of people around there. A lot of my friends that I've had before high school ... for me it was a wonderful experience and I got very good opportunities and I liked it a lot (Interview with Participant 9, 11/12/2013).*

Generally, both Participants 4 and 9 had good memories of their schools [SGM] though they each gave their stories according to their experiences. For instance, Participant 4 mentioned the good relationship that she had with teachers [TGR] as remarkable and unforgettable, while Participant 9 on the other side cited the friends he had [FA] as the one thing that made him have a wonderful experience of school. According to Participant 9, the impact of his parents being involved in the school [PIV] for some time was also felt when he attended school. Participants 4 and 9 used different words to convince me how satisfied they were with their public schools. In that regard, Participant 4 highlighted that she “*had a good time*”

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<sup>8</sup> Dinaledi school- are government schools which are specifically geared towards improving Mathematics and Physical Science marks, especially in historically disadvantaged learners.

while Participant 9 put it that he “*got very good opportunities*”. Seemingly most participants enjoyed their years at the public schools that they attended.

There were exceptions, though. Participants 1 and 7 experienced their schools totally differently, although they both went to public schools. This is how Participant 7 elaborated on his argument:

*It wasn't a well off school I should say, it's just a public school, you know the kinds of schools that are in townships, it didn't have the resources I think most of the private schools have. So it was just a school, a normal school, normal public school with teachers who are just committed in their work and so are the learners. So it wasn't a good school (Interview with Participant 7, 11/12/2013).*

Critical to what Participant 7 stated is the fact that his school did not have resources [SUR] like private schools do. Irrespective of the conditions in his school, Participant 7 seemed to be more attached to his school though according to his narration it was not at the level of other schools. This emanates from his understanding as he stated that his school was a normal public school [NPS] with teachers who are just committed [TC] in their work. According to Participant 7's remarks, it seems that the commitment teachers displayed happened to turn what he called a normal public school into an acceptable school, one could be happy to be part of.

Similar remarks were made by Participants 1 and 3 during their interviews. As they put it:

*As I said, it was a public school that was not that much resourced. There were no facilities like you might have had in a well advanced school. It was more an average school. But to me that school was the best experience and believe that environment there was conducive enough for me to progress forward (Interview with Participant 1, 10/11/2013).*

*... it was like on the lowest range of schools, poor disadvantaged schools. It was a government school (Interview with Participant 3, 26/11/2013).*

Seemingly Participants 1, 3 and 7 had serious common concerns about their schools. They (Participant 1, 3 and 7) all lamented that the schools had no resources (SUR). Despite all they mentioned, they seemed to be positive about their schools. Hence, Participant 3 used the word “poor” just to describe his school conditions.

#### 5.4.1.2 Challenges encountered by top achievers in attending school

Though it is not the main aim of this study to investigate the negative influences on the academic performance and the experiences of first-year university students, this aspect is an important objective in answering research questions. In an attempt to address the second research question: How do Grade 12 top achievers respond to the challenges experienced in the first year at university, the background information about challenges that participants encountered at high school and how they dealt with those challenges lay a very solid foundation for answering the second research question mentioned above.

One of the questions that I asked the participants during the interviews was what their challenges in attending school were. The idea behind this question was to find out whether there were any negative factors that might have hindered “more excellent” performance than those that have been obtained. In other words, the main idea was to investigate if these participants performed as they did at high school because of the excellent, conducive schooling experiences. Furthermore, the question was asked with a view to obtaining participants’ experiences of high school and adaptation into university first-year.

It is of interest to note that participants who attended public schools never experienced serious “life changing” challenges. Although other participants cited some challenges as minor, others felt they just had to focus on what they were at school for and forget about other things that might make them compromise their educational goal. In that regard, only three participants highlighted their challenges in attending school. These varied from personal to educational (i.e. those that were in the school). I need to mention that participants were very open to me about their situation at school and how their challenges made it difficult for them to cope.

To illustrate the challenges he experienced at school, Participant 1 explained that:

*My family background, I must say I am from a family ... not well to do financially. At some stage I struggled just to get school uniform. A situation where you also can see that it's really tough and ash, you also want to be like other children but you really can't. You can't afford the basics that you really really need for your education. Ash! You know such things. I actually believe that I was lucky to be in this family. Also my teachers supported me a lot at all times (Interview with Participant 1, 10/11/2013).*

This sentiment was also echoed by Participant 5 who also highlighted that his home background was not good:

*I'm not from a very good background and all that, so I had some challenges sort of like, as in, at times you will find that it's raining and when you tend to walk to school, at times you will be late ... well that's how it was. My mother didn't have cash to give us every morning, so we just have to attend school and all that. So that's how it was, well it wasn't much of a challenge because I got myself used to it, so then I just accepted it as my fate. But then I was developed by that sort of situation because now I think I can face life and so on, those were the minor challenges (Interview with Participant 5, 7/12/2013).*

Interestingly, despite having articulated what he did above, Participant 1 considered himself to be lucky to have gone through all those hardships. Furthermore, he claimed that he managed to deal with those challenges because of his good teachers [TG].

What is notable from the data is that some of the participants seemed not to have experienced any challenges in their high school because of the fact that they had a good stable family background. This can be detected from the data pertaining to the two participants (i.e. Participants 1 and 5) who both cited their family background [CFB] as one of the factors that impacted negatively on their schooling. Given the situation, I would therefore argue that though these participants (students) attended public schools [PS], there were no school-based negative influences on their schooling.

It is also worth noting that although the participants cited different challenges when attending school, they all were able to indicate how these challenges had affected their schooling and how they dealt with those challenges in order to carry through with their education to matric. Specifically, Participant 7 showed some changes in facial expression when revealing to me the kind of challenges he had in attending school:

*Well I ... it was like er, in some cases you would find that teachers are not around, the example in other subjects I think in Physics, the teacher that we had he wasn't a Physical Science teacher. He was good in Chemistry, he is an Environmental Scientist so he just went to school because he had no job, loved school and he loved teaching, the profession of teaching. So and then he got hired because there are very few people who can teach and deliver Physical Sciences in the standard that is required particularly at matric level (Interview with Participant 7, 11/12/2013).*

In elaborating further Participant 7 had this to say:

*So those were some of the challenges in having to understand that this person is not really good enough for the job but it was the commitment and the cooperation ... that learners and both the teachers to really make sure that we are successful in whatever we are doing (Interview with Participant 7, 11/12/2013).*

Participant 1 reported more profoundly in this regard:

*Another thing especially the stream that I was in, we had a shortage of resources ranging from having a teacher and so and then resources like textbooks and other things. Those were the main challenges I faced in high school (Interview with Participant 1, 10/11/2013).*

Elaborating further Participant 1 highlighted that:

*In Accountings and Economics, remember we had to spend from the beginning of the year until about midyear without a teacher in those two subjects and it was tough on us. Because we were in Grade 12 at that time, we had to find a way to be ready for the final examination but it was difficult because we needed someone who had more knowledge and experience in those two subjects. So we needed someone to guide us though we had someone at times once in a while to help us but most of the time we had to struggle alone. Then around midyear, that was when the school found someone to help us and then that was when that kind of a challenge sort of got solved (Interview with Participant 1, 10/11/2013).*

This is, in essence, what this research attempted to investigate. Unfortunately, according to Participants 1 and 7, the challenges they went through during their matric were far worse to compare to any (i.e. on issue of teaching and learning). Perhaps having no teacher(s) [CTA] for major subjects like Physical Sciences, Accounting and Economics in matric might be viewed as the worst challenge, but it takes students like Participants 1 and 7 to make their dreams come true irrespective of the challenges that might prevail in one's environment.

Seemingly, Participant 7 believed that although he had encountered such challenges, it was *"the commitment and the cooperation that learners and the teachers had"* to ensure that they were successful in whatever they did. Likewise, Participant 1 indicated that as students they had to find a way to prepare themselves for examinations. Besides the educational challenges that Participant 7 mentioned, I was amazed to hear him mentioning something about his

school environment. To further illustrate his challenges at school, Participant 7 registered this complaint:

*This place, as ... for scholars, for people who are scholars, it's a place that is dominated by gangsterism and most people, particularly are gangsters so each and every day we had to deal with that, sometimes these people would come to our school and disturb the learning and ja, most of the learners had joined gangsterism, so it was a challenge for us but we kept on pushing (Interview with Participant 7, 11/12/2013).*

In fact, the situation at Participant 7's school was totally different from that of other participants as far as school safety is concerned. This area of school safety is the focal point of the Department of Basic Education and the provincial departments of education. Currently, all South African schools have a 'School Safety policy' which has to be implemented and monitored. The aim of this is to ensure that all learners are safe at school from any act of intimidation and life-threatening conditions. While acknowledging the move by the Department of Basic Education and its provincial departments, it is imperative to ensure school safety beyond policy formulation. Accordingly, important as it may be to develop and design policies, I would suggest that such policies should address problems specifically encountered in the individual environments.

Participant 11 also indicated that she had experienced challenges that meant that she did not fit easily into the school environment. Participant 11 explained that:

*Well in school, I am not a very sporty type of girl so it was difficult for me to fit in initially because usually the people who do good in sport make friends easier and I am not very good at sport so I did not make friends initially very easily. And also I am quite perfectionistic type of girl or I was when I was younger and it was quite hard for me to not do my best or to slack in something and I put a lot of pressure on myself. So, that was quite stressful in school (Participant 11, 13/01/2014).*

Participant 11's main concern was that she did not make friends easily (CMF). Having highlighted this challenge, Participant 11 also seemed quite aware of what contributed to it, as she indicated that she was not a sporty type of person. To her, sporty people are the ones who make friends more easily. Like Participant 11, Participant 2 also had a problem not fitting in with his peers during his schooldays. In other words, like Participant 11, Participant 2 could not make friends too [CMF]. Participant 2's verbatim remarks demonstrated the hardship that he went through as a school boy by then. As he explained:

*Ah! My challenges were I didn't make much friends until I was high up there around Grade 10. So I had problems communicating with other children because so they saw me as someone who knew it all, the genius. They wouldn't associate with me that kind of person 'cause they will seem as if they were stupid in front of me. That's what they told me (Interview with Participant 2, 10/11/2013).*

The reasons that Participant 2 reported for the treatment that he received from his classmates were quite disturbing because one would not expect such behaviour from the classmates one grew up with. This is how Participant 2 explained this:

*The thing is when I was in primary school I had friends but we split up around high school when we get into Grade 8 people saw how much I could achieve in class they started sidelining me as if I was an outcast because I would get extremely high marks and teachers would compliment me in class and that in turn make some of the children feel left out (Interview with Participant 2, 10/11/2013).*

#### 5.4.1.3 The popularity of Grade 12 subjects

One of the questions that I asked the participants during the individual interviews was which subject(s) did they like most in Grade 12, particularly given the fact that they were the fourth and fifth group to fall under the National Curriculum Statement (NCS), which was firstly implemented in matric in 2008. The main idea behind this question was to get a clear indication from the students/participants as to whether there was any change in the complexity of subjects that might also contribute to students' love for the subject(s). Furthermore, the question was asked to ascertain the extent to which the perceptions of participants might have influenced the attitude to and love of other subjects.

The participants cited a preference for various school subjects and gave various reasons for doing so during the interviews. As these data would assist the present study, the participants' own words are used here so that the reader can see the similarities and the differences. For instance, some participants indicated that they loved Mathematics, but their way of reasoning it out was totally different.

The data show that the students-participants fall into three groups according to their ranking of the subjects they like. First would be the group that listed Mathematics [PMSM] as their favourable subject, secondly those who loved Accounting [PMSA] and, lastly, Physical Sciences [PMSPS] and other subjects. There are, however, also areas where, for example, one participant ranked Mathematics [PMSM] as his/her second choice subject and Accounting



[PMSA] was given first preference and vice versa. In that regard, the data has influenced the current study to present its findings by grouping the participants according to their favourite subjects.

This is how Participant 1 explained this:

*The subject I like most was Mathematics and then Economics and Accounting. Those were the main three subjects that I liked and also Life Orientation as well. Most of the time I got bored I would go for Mathematics or maybe do Economics or Accounting rather than to do maybe Business Studies or something else. So let me rather use the word enjoy. What I enjoyed most was Mathematics because those subjects are more of numbers than theory, because in other subjects like Business Studies or languages you need to read them and sort of understand. And that for me was a very difficult thing to do (Interview with Participant 1, 10/11/2013).*

Participant 1 expressed his love for Mathematics [PMSM] as emanating from the following:

*Numbers for me is pretty much easier to understand than the theoretical part of things because theory I believe needs too much attention sometimes (Interview with Participant 1, 10/11/2013).*

On the same note Participant 2 also indicated his love for two subjects, Mathematics and Physical Science. As he puts it:

*Mathematics and Physical Science, they use to challenge me very hard because if I was doing Maths I have to think like to such an extent that I would want to get that answer, even when it was difficult. So, I like that challenge the subject brought out to me (Interview with Participant 2, 10/11/2013).*

Participant 2's love for Mathematics [PMSM] was as a result of the challenge that the subject presents. A similar sentiment was voiced by Participants 5 and 7. They also indicated that their love of Mathematics [PMSM] emanated from their interest in working with numbers [RIN], as they elaborated in their narration. This is what Participant 5 highlighted during the interview:

*Well I've always liked Maths because it's doable. It's, ja it's doable. But then I just spread my time evenly for Maths, Science and other technical subjects. So ... well because I finished the syllabus earlier for Maths, I finished the syllabus I think it was in May or so or*

*... May or April. So I spent most of my time with the other, Physical Science and other technical subjects. So but then I just like Maths (Interview with Participant 5, 7/12/2013).*

Participant 7 shared a similar story:

*I loved Mathematics, it was one of the subjects that I really like, actually throughout my schooling career, I really found ... I found it interesting, working with numbers hence I am now doing Engineering (Interview with Participant 7, 11/12/2013).*

What is of interest is that having listed the subjects they liked most in matric, participants were also able to provide reasons for doing so. Seemingly, both Participants 5 and 7 developed a love of Mathematics early in their secondary schooling. In other words, none of them just fell in love with the subject in matric. According to their narration they enjoyed the subject [RES] Mathematics [PMSM] throughout their school career. This is an important aspect not to be ignored or overlooked because in essence it would reveal the perceptions that participants might have had about certain subjects while they were still at school and how that influenced their perceptions of courses or subjects at university. Participant 7 expressed his love for Mathematics [PMSM] as emanating from the following:

*I think ... okay first it's just I was excellent, I found myself that I was excelling in that subject, I really loved it for that and then the teachers I got in the classes were good, were people who were encouraging us to actually love Mathematics and Science. And ja, ... just for the fact that it was a subject which was not liked by many other learners, so I found it, for me to be unique, you know just to have fun with that subject, the subject that everyone is scared of (Interview with Participant 7, 11/12/2013).*

On the other hand, Participant 5 indicated that his love for Mathematics [PMSM] was as a result of:

*Well, basically I think I was just capable, just the capability of doing Maths, and then like, ja it was just like that. Like with me, it has always been, I've always found it easy to do because it's numbers and it challenges your thinking so, not to say I dislike theory but then I prefer numbers (Interview with Participant 5, 7/12/2013).*

Worthy to note is the fact that both participants believed that their love of Mathematics [RLM] was an inborn thing. They both believed that they loved Mathematics because they were 'capable' [RCM] or 'excellent' [REM] in Mathematics. Their use of the words, 'capable' and 'excellent' respectively indicates the confidence they had in saying what they

believe about themselves. Remarkably, Participant 7 also made mention of good teachers [RTG] who encouraged him to love Mathematics. Clearly, this highlights other factors that might have contributed to participants' love for particular subjects. I would therefore argue that, although students might have loved certain subjects the motivation that they also got from teachers or other support systems might have also contributed positively to the love of that particular subject(s).

A love of Mathematics was expressed by most of the participants of this study, though they all had their own special reasons for that. Participant 3 reported that:

*I liked most Life Science and Mathematics and Physical Sciences because like those ones are the ones that I knew I was gonna pursue in my first year at university when I'm doing Medicine. So, they correlate with what I'm doing now, so I enjoyed those ones, because I knew what I wanted to do when I was in Grade 12 already (Interview with Participant 3, 26/11/2013).*

In the same interview, Participant 3 cited the following as reasons that made him to like the subjects:

*And also the fact that like those are a bit like logical subjects and they are interactive subjects with the teacher. I'm not saying English is boring but ja English is fine, but is not as interactive as logical subjects, ja (Interview with Participant 3, 26/11/2013).*

The main reason for Participant 3's love of Mathematics (PMSM), Physical Sciences (PMSPS) and Life Sciences [PMSLS] was that they were according to him logical subjects [RLS] and interactive subjects [RIS].

Participant 11 also had her story to tell about her love of Mathematics (PMSM) which she believed it came naturally. This is how she expressed her love for some school subjects:

*I liked Maths because it was not too hard for me to do. It came naturally for me and I liked my teacher as well, a lot. And Art I liked a lot because it was an expression of my feelings and it was also a very creative subject obviously so I enjoyed being creative. And it also taught me how to think in a different way and what a lot of people don't know about Art is that it challenges your innovative capacity and it also broadens your mind in a way which other subjects did not do for me. And Physical Science I just also liked because it was – a part of it is related to Maths. And I also liked my teacher and it was a fun class maybe as*

*well. But the subject itself, the subject matter was also interesting to me (Interview with Participant 11, 13/01/2014).*

Like the other participants, Participant 11 noted that Mathematics (PMSM) was not too hard for her to do. Participants 11 also cited Art (PMSAR) as another subject that she liked most because, according to her, it is one of the creative subjects (RCS) and it challenged one's innovative capacity (RCI) and broadened one's mind (RBM). Interestingly, Participant 11 indicated that with Physical Sciences (PMSPS) her love for the subject emanated from the fact that she liked her teacher (RTL) and the class was fun.

Besides Mathematics, other participants cited Accounting [PMSA] as another choice of the subjects that were liked in Grade 12. Participant 9 put it simply "*Accounting and Maths*" (Participant 9, 11/12/2013) when asked which subject(s) he liked most in Grade 12. On the other hand, Participant 4, who shared Participant 9's sentiments, had this to say:

*in Grade 12, oh, Accounting was very nice but Biology was still my favourite. So Biology and Accounting I enjoyed the most (Participant 4, 14/11/2013).*

Both participants indicated that their love for Accounting was because they love challenges [RLC] and problem solving [RLPS]. For them having to do Accounting was about a new challenge each day. However, for Participant 4, Biology [PMSB] also comes into the picture as one of her favourite subjects. Below is an illustration made by Participant 9:

*Well I enjoy working with numbers and like doing calculations and ja, working through problems that you have to solve, like I like problem solving and things like that. Another thing with that I liked to, like if I get a problem I would sit with that thing even though it takes me hours, just to get it done. I liked that challenge of knowing you know I've finished this, I've done it. ... ja I love challenges I think that's the main thing, it was Maths and Accounting is something that's basically ... ja that's what the subject is all about, it's challenges that you have to figure out (Interview with Participant 9, 11/12/2013).*

Similar sentiments are shared by Participant 4:

*... but what I liked about Accounting is that each day was a new challenge, you had to fill it out and it had to balance and if it didn't balance you knew you did something wrong and then you had to look for the mistakes. It was really critical thinking that I liked there, and problem solving (Interview with Participant 4, 14/11/2013).*

From the interview data, it was clear that Accounting [PMSA] was one of the popular school subjects favoured by the participants. I would therefore argue that most participants of the present study seemed to have enjoyed working with figures. I accordingly link this to their academic performance in the first year, the degrees they are currently studying and the overall average percentages they got in the first-year end-of-year examinations. However, evidence of this type is only dealt with later in this chapter when the different themes are discussed.

Participant 8, in stating the subjects he liked most in Grade 12, stated:

*that would be IT, Information Technology and ... I liked Science and that but not that much, it was a lot of work and I liked Accounting as well* (Interview with Participant 8, 11/12/2013).

The only reason that Participant 8 gave for his love for the subjects is as follows:

*they were in my interest ... even the homework was not always that bad compared to other work that we had to do”* (Interview with Participant 8, 11/12/2013).

What is of interest is that although most participants indicated that Accounting was one of their favourite subjects, giving reasons for this, there were other subjects that rivalled Accounting; for instance, Participant 8 mentioned IT [PMSIT] and Science [PMSPS], besides Accounting [PMSA]. I would also argue that participants might also have looked at the demands of the labour market and this influenced their love for the subjects mentioned.

On the other hand, one participant gave a totally different subject and accompanying reasons. Participant 10 narrated as follows:

*I always loved Physics but Geography was always first. I always loved Geography because I felt like it explained everything that I saw in my surroundings and it was very practical and Physics, Physics was fun, it was challenging. It's not nice when everything is so easy, but Physics made everything a little harder. So it made me work harder every day, it gave me the reason to wake up every day and study, so that's why I liked it* (Interview with Participant 10, 12/12/2013).

In explaining this further, Participant 10 also remarked:

*They seemed to apply to the real world considering the fact that I want to be a Doctor so I like things that are practical, things that I can relate to ja* (Interview with Participant 10, 12/12/2013).

In reference to the question on subject(s) most liked by participants in Grade 12, the participants were able to justify their love for a particular subject. In addition, there were remarkable similarities among participants' favourite subjects and there were similarities in their reasons for liking them.

The data revealed that although students might be in different environments far apart from each other, their reasoning could sometimes be the same. In other words, their perceptions were what drove their understanding of the meaning and importance of the different subjects. In acknowledging their love of and positive attitude to the subjects they listed as the ones that they liked the most in Grade 12, I was surprised that the participants liked the subjects that are perceived to be the most difficult by their counterparts. The participants also mentioned enjoying dealing with challenges [RLC] (i.e. Accounting) and one participant claimed with regard to Mathematics that "*working with Maths is having fun*". Such narratives reveal a great deal about these "top achievers" on whom the present study is focused.

#### 5.4.1.4 Top achievers' success factors at high school

From interviews (i.e. with individual participant) I decided to cluster all the significant factors that were listed by the participants as having contributed positively to their academic performance at school. All the factors listed emanated from individual participants' experiences of schooling. While coming from different school environments they attributed their academic performance to hard work, support from parents, teachers, community members, friends, background, stable home and discipline.

Although, participants gave different reasons why they believed certain factors contributed to their academic performance at school, the reasons provided by some are similar to those given by other participants. In other words, there is a kind of uniformity in their discussions on factors that contributed to academic performance at high school. Participant 4 could not stop smiling when she said:

*Okay so I think nothing can be without the support of a family, so my parents, although they're not here now, I mean they ... they were my greatest inspiration and my greatest,*

*they really helped a lot when I was in school because I still lived with them. Now that I'm living far away, they still support me and we speak every day and things like that* (Interview with Participant 4, 14/11/2013).

Participant 5 shared similar sentiments to Participant 4. They both raised the issue of family [SFSF] as the starting point. However, Participant 5 also touched on the issue of motivation (i.e. extrinsic) [SFSM]; one of his teachers used to offer him incentives for performing excellently. This is how Participant 5 expressed his emotions on this.

*Well at school I think it would be the support I got from home and from the teachers at school because like they were supportive in the most rather amazing way because like ... ja I think the support and encouragement that I got, well most of them were very supportive. For instance, there was one teacher ja, she would just ... after maybe the ... because there were usually prize giving functions at school, then she would take me somewhere as a learner and all that, sort of the motivation thereof and the prizes that I got from high school because I got lots and lots of prizes, like every so ... I think that was the motivation, that was the factor which contributed to my success* (Interview with Participant 5, 7/12/2013).

Similarly, Participant 11 elaborated:

*Well I definitely think my teachers were good teachers and they were knowledgeable. And also my parents were very supportive and helped me through that. And my friends also definitely supported me. I also think that I worked quite hard and that is also a good thing to note. You cannot expect to do good and not work hard. And also I believe in God and I believe that He was the One that carried me apart from all these other people. And He strengthened me* (Interview with Participant 11, 13/01/2014).

What Participants 4 and 5 raised above was also reported by Participant 11. Although Participant 11 cited her good teachers (SFST) as the basis for her success at high school, she also indicated that her parents (SFSP) and friends (SFSFR) were very supportive. On the other hand, Participants 2 and 11 also believed that God (SFSG) strengthened them while they also worked very hard as individuals.

The above sentiments were also reported by Participant 2:

*First I will say God, I am a Christian so I used to go to church and abide by the rules and standards set in church ... secondly my parents were pretty supportive and strict, in*

*teaching me how to control my time to study. My teachers used to ... they did create that time so that ... they use to motivate us at least once in a month in a formal session where they gave us tips on how to study and ... ja! And my principal, he was a very great guy. He used to motivate us and give us incentives when we got high marks in certain subjects (Interview with Participant 2, 10/11/2013).*

Factors indicated by these four participants (i.e. Participant 2, 4, 5 and 11) were also strongly underlined by Participant 10 and 8. This is how Participant 8 elaborated:

*I'd say my parents put a lot of pressure on me to study and get in varsity, I get good marks in order to apply for university and it was ... (Interview with Participant 8, 11/12/2013).*

Seemingly, from the conversations with the participants mentioned above, parents [SFSP] are valued as having contributed significantly to the success of participants at high school. This theme reveals the influence of parents on the academic performance and success of participants in secondary school. In other words, the responses of the participants indicated that their academic performance at school was primarily influenced and determined by their parents' support.

To a large extent, the participants had similar ideas about the factors that contributed to their academic performance. This therefore confirms the argument in chapter 2 of the present study with regard the concept of 'support'. Support was emphasised as important by almost all of the participants. This support varied from that provided by parents, teachers, friends and the community. What is evident is that support in whatever form is important. This is how Participant 10 acknowledged this:

*Factors, studying hard, very hard, support, what else, factors ... otherwise discipline, ja a lot of discipline and sacrifice, and I don't know, yes just those things (Interview with Participant 10, 12/12/2013).*

Participant 10 elaborated further on the support she referred to in her narration.

*I mean the support from parents as well ... if they really are there just for you ... teachers as well hey ... (Interview with Participant 10, 12/12/2013).*

Besides the support from parents [SFSP], Participant 10 also saw factors like studying hard [SFSSH], discipline [SFSD] and sacrifice [SFSS] as having impacted positively on her academic success at high school. Critical to what Participant 10 highlighted is the fact that



she happened to be more personal than general in responding to the question about what contributed to her success at high school. In other words, she looked at what the present study refers to as “internal attributes”. For instance, she talked about discipline [SFSD] and sacrifice [SFSS]. This is based on the theoretical framework that the present study has adopted in its investigation. Apart from these internal attributes, Participant 10 also attributed her success to studying hard [SFSSH], which according to the theoretical framework would be referred to as an “external attribute” that is controllable. This then translates into theory confirmation that people would attribute their success or academic performance to various factors within themselves and also external to their environment.

The above sentiments were supported by Participant 3 who also highlighted the importance of parental support:

*Is the fact that my parents they also taught at the same school I was attending, so they monitored my discipline, they also encouraged me and also my mum since she was just doing Accounting at home, so she could teach me Accounting, ja. And also as friends, we would meet as friends sometimes, like during the weekend, we will do like sort of extra classes, sort of wrap it up formal sessions, where we would sort of like wrap up like what we have done throughout the week and revising and revising (Interview with Participant 3, 26/11/2013).*

Interestingly, Participant 3 indicated that the fact that his father was a teacher [SFSPT] at his school assisted him a lot because he could monitor his discipline. In addition, Participant 3 cited the help that he received from his mother in Accounting [SFSHS], which I refer to as home schooling, as well as the extra classes [SFSEC] they did with his friends [SFSFR].

In the same interview, Participant 3 also reported how working in groups [SFSGW] at high school has benefited him and the entire school. Notwithstanding support from home [SFSHS], in the form of moral [SFSMS] and social support [SFSSS], Participant 3 saw working in groups [SFSGW] to have assisted them. He reported in this regard:

*Okay the fact that I had support from like at home; since they say charity begins at home so you have to like succeed at home first before you can go out there. So I received all the moral support and also social support at home, because it's not all about like academics like, if you have to succeed in academics is not all about standard, read that, you make your psychology well centred. So and also the fact that, like, as I said, we were working in groups with some of my former school mates, because we actually, there are about 5*

*people at our school who had like distinctions in all the subjects, so ja* (Interview with Participant 3, 26/11/2013).

Although the factors identified by the participants seem similar, they presented their stories differently. For example, Participant 8 considered himself lucky to have come from a stable background [SFSSB] (i.e. stable home) where both parents were there if he had a problem. However, Participant 7 felt that although he was from a background that was not well to do, it did somehow motivate him to push for the best in his education and not to let his family down in any way. This is how Participant 7 reported his story:

*Er! The support from teachers, I think and the support from parents, the support from community members, I remember we studied one day at school, women, ladies around the community they came and they prayed for us, so you know there was that kind of support. But for me I think as well the kind of background I come from it sort of was a motivation somehow, some sort of motivation for me because I used to tell myself that you know I don't want my kids to experience the same thing, the same situation that I'm experiencing. So ja I think ...* (Interview with Participant 7, 11/12/2013).

From the evidence presented by the interview data, none of the participants attributed their success at high school solely to themselves; they all acknowledged the support that they received from various individuals, be it parents, teachers and even friends. This is an important aspect, particularly given the fact that there are serious academic debates and engagements that the Department of Basic Education is embarking on pertaining to issues of parents' involvement in the education of their children. This came about as a result of serious challenges noted because of the behaviour of students in schools and high failure rates that are associated with socio-economic factors and family background.

To conclude this section, it should be highlighted that this notion of support has major implications for the way students view and receive support and also the objectives for support. I would argue that the level or degree of support from parents differently influenced the participants' academic performance. In other words, those who attach serious meaning to support from parents [SFSP] would always excel if they do receive such support as expected. This addresses the concept of motivation, which was dealt with in chapter 2 of the present study. Hence, one participant argued that “*if parents support you not only financially*” you would then be able to deal with some of the challenges. In other words, for one to succeed

academically, one does not need extrinsic motivation alone but the intrinsic motivation provided by the appreciation you get from parents.

Interestingly, I should mention that Participant 1 had a different story to tell about his success at high school:

*I saw high school as an opportunity to progress forward in life. That in itself motivated me and pushed me. Particularly in Grade 12 there were other things that added to it. Because there was a little bit of competition there and also I was ahead of the competition so there was a challenge towards me to say we expect this kind of achievement from you. So that was another thing that motivated me. So all in all the motivation was basically in the fact that I was also determined in myself to make a success of high school. Maybe the conditions we lived in at that time pushed us to be not compatible and to try and get out of those conditions. That meant we had to work hard and make the best you can make out of high school (Interview with Participant 1, 10/11/2013).*

According to Participant 1, the major factors that contributed to his success at high school were the motivation [SFMS], competition [SFSC] that was there and also his self-determination [SFSSD]. Worthy of note is the fact that Participant 1 saw high school as an opportunity to progress in life.

#### 5.4.1.5 Top achievers' career choice

Career choice is every student's personal decision even before they are admitted to HEIs. This choice can be based on a number of factors that might influence the student's decision to opt for a specific course or degree of study. These factors might be located within the individual, or may be influenced by the family or the school. However, most commonly students pursue a particular degree because of the interest they have in the course or field. In other words, students pursue different degrees for different reasons. In tracing the academic performance and the experiences of top achievers, the study had to find out about the participants' career choices and the reasons for those careers.

All participants had a story to tell when asked about their career choices. Fortunately, none of the participants indicated that he/she was studying for a particular course by accident. In our conversations, the participants elaborated on the reasons for them studying the course they were in, though some indicated that they also had to do thorough research on their career choice.

For the data collected on the subject to make sense, I had to identify all the different career choices of the participants and the reasons they gave for such and try to present that in tabular form. The grouping of career choices and reasons in a table allowed the presentation of a large volume of information within a small space. This also provided a good snapshot of the identity of the participants as university students.

The table below presents the different career choices and the reasons participants gave for them to have enrolled for those courses.

Table 5.2: Top achievers' career choices

Participants and their career choices	Reasons
Participant 1 Chartered Accountant	They had a career expo and he got more information about the career. Additional information showed that there is a huge shortage of chartered accountants in the country. He learnt that you need to be good at numbers so he saw himself as a person who could actually go that route and also the way it was marketed attracted him.
Participant 2 Chemical Engineering	He like Mathematics and Physical Science. Chemical engineers who work with Chemistry and he loved that part. He then pursued another career.
Participant 3 Medicine	There is integrity attached to doing medicine. Medicine is not all about intelligence but it is about how you devote your life to it.
Participant 4 Medicine	She is by nature a caring person, wanted to care for people, she went to study advisors and a psychologist who told her she could do medicine. She likes interacting with people and has a caring nature, she once shadowed other professions in the health sector but they did not appeal to her. She shadowed a local GP for a week and concluded that that was really what she wanted. She wants to be a GP in a small town, look after people, have time for people and help them.
Participant 5 BSc Mining Engineering	Marketability, countless opportunities, SA is rich in minerals, like managing people, have a management skill because most engineers in mines manage people, they do vocational work.
Participant 6 B Com Accounting	She really liked Maths, Accounting is more logical and interesting. "When things do balance in Accounting you just feel you are in control." It was her own choice and she had no other choices.
Participant 7 Mechanical Engineering	He loved mechanical engineering the most, from Grade 10 he thought of it. He used to watch engineering shows teaching about science and engineering at home, he had fun with Physics and Maths which made him realise that he could be a mechanical engineer.
Participant 8 Mechanical Engineering	It is his field of interest, salary is not too bad, it is a challenging career, and has a strong passion to become a mechanical engineer.
Participant 9 Chartered Accountant/ Forensic Auditing	Investigate fraud in companies, solving problems, like detective kind of work, inborn love to figure things out and enjoys such job. Love auditing or accounting.
Participant 10 Medicine	Live her parents' (dad) dream, make her daddy proud, to make a change in the local hospital, people always complain about poor service in the local hospital, there aren't any doctors, doctors are rich, want to become rich, contribute to the community towards their health, money – everyone wants to live a good life.
Participant 11 B Accounting and LLB (Accounting and Law)	It will be a platform to allow her to do what she wants to do. She will be able to run a production house. She will then need business basics and knowledge of law.

At the time of the study, all the participants were certain about their career choices since some were already in their second year of study. Only Participant 9 still had to make a final choice about his two preferred career choices. This is how he (Participant 9) puts his story:

*My career choice is I want to be a Chartered Accountant, I think part of that is, sho! when I officially ... when I decided on the career choices, I wanted to do Forensic Auditing which is basically I mean when there's fraud in the company or something they needed like the people that go in and investigate it and things like that. But to be honest it was like through my studies ... I would say that I'm not considering it anymore but in a sense like I got exposed to new directions and other things that I can also do and in that ... to be honest with you at this stage I'm not 100% certain exactly ... like I'm going to become a CA I think but the exact line of work I'm doing I'm still not a 100% sure if I can put it in that way. But ja, definitely something in Auditing or Accounting (Interview with Participant 9, 11/12/2013).*

I should mention here that Participant 11, though being aware of what she was doing in her studies they were not her initial plan. She had some reservations about the degree that she was pursuing. This is how she explained that:

*Well this is quite interesting because what I'm studying is not what I really want to do. But I think it is going to be a platform that is going to allow me to do what I want to do. I wanted in school to do something more creative actually. When I was in matric I wanted to sing and I wanted to write and I wanted in the end of the day to have a production house (Interview with Participant 11, 13/01/2014).*

#### 5.4.1.6 Factors that contributed to admission to university

In order to paint a complete picture of the experiences of first-year university students, starting from how they ended up at the institutions where they are today, I had to determine what contributed to their admission to university. Most participants cited their performance in matric [AFMP] as the sole reason for them to be admitted to university. All participants indicated that their results [AFMR] played a significant role in their admission even in those so-called “first class universities”. Worth mentioning is the fact that all the participants obtained distinctions in all their subjects in matric, ranging from seven to nine distinctions, depending on how many subjects they had in matric. For instance, some of the participants confidently reported the following:

*I got 9 distinctions. Because I had German as an extra subject as well as Maths Paper 3 (Interview with Participant 4, 14/11/2013).*

Another participant also noted that:

*I had 7 distinctions ... I did 7 subjects (Interview with Participant 7, 11/12/2013).*

On the very same note Participant 5 expressed his feelings of joy as he put it:

*We had like 7 subjects; I got A's in all oh! Distinctions by the way ... (Interview with Participant 5, 7/12/2013).*

The data offered helpful information about who these top achievers really are that this study is so committed to and provided background on where these top achievers came from and the nature of their goals.

Participant 5 could not stop smiling about his performance that led to his admission to university, saying “*well it was my results because they were good from Grade 10*”.

Participant 5 attributed his good performance to hard work [GPHW] from Grade 10. Another important fact he mentioned was that of having realised that education is the only way to make it in life. Participant 5 stated that:

*I think it's the results well, well as I've said that I started working hard like from Grade 10. Ja, I was ... I just started working hard, I just realised that the only way to make it would be through education so I worked myself off like very, very hard. So as a result it paid off, because like I got no less than five A's, every year ... and we had like seven subjects. So ja, I think it was my results (Interview with Participant 5, 7/12/2013).*

The above sentiments were supported by Participant 2 who also highlighted the importance of school academic performance:

*Mostly the marks I used to get in high school. The marks I got in Grade 12 so they will check the report and see who got the high marks, so admission was offered in that way (Interview with Participant 2, 10/11/2013).*

While also acknowledging the importance of results [AFMR] in being admitted to university, Participant 7 confidently stated that:

*Obviously it has to be my performance, the results that I had, 7 distinctions, and I can tell you this ... universities would actually admit me having those kinds of results, ja and ... ja I think it's the results (Interview with Participant 7, 11/12/2013).*

The same idea was shared by another participant. This participant believed that it is not only good marks [AFGM] that can create opportunities for a person at university, but also the motivation letters [AFML] that you write when applying for admission. However, according to Participant 10, good marks [AFGM] are critical for admission to university:

*... okay I do have an idea, it's good marks. Good marks always earn you a spot. And the motivation you write on your letters about your background and what inspires you I think that's just it. But the first thing that makes a person acquire admission in a university is good marks. Everyone needs good marks but you have to have like really good marks for you to be taken first and then the others just get squeezed in kind of thing (Interview with Participant 10, 12/12/2013).*

This sentiment was shared by another participant. According to Participant 4, besides the good marks [AFGM], the reference letters [AFRL] about community work that one sends with one's application for admission also play a significant role in admission to university. Though there might be other factors, good marks [AFGM] are first in the criteria for admission according to Participant 4:

*I think, okay obviously also my marks because I had way above the minimum criteria that you needed and then I did a lot of like community work. I had built up over the years a lot of hours that I did, working in old age homes, working in hospitals and things like that and then I also had reference letters from all the people that I had actually ... where I actually worked and I think that helped a lot and then I don't know why. And also because, I guess the leadership that I had in my school and things like that. They looked at all different things (Interview with Participant 4, 14/11/2013).*

Participant 3 added to this:

*And also the biography questionnaire needed for Medicine like, to show that you have done some community services, that also contributed to me getting admitted (Interview with Participant 3, 26/11/2013).*

Interestingly, Participant 3 was also able to give a clear picture of his academic performance in matric. As he put it:

*I did 8 subjects and my lowest was Sepedi, I got 84%, ja because Sepedi that one I had problems, English I got 88%, Life Orientation 93%, Agriculture 96%, then these ones they bored me, I got Physics 99% and Life Science 99%, and the other two Maths and Accounting I got 100%. So these ones, Physics and Life Science I got 99 and it was eish! I was like one more, if I got 97 I was actually gonna be feeling even better than the 99, because they are like I'm 1 short, but it's fine because I did very well (Interview with Participant 3, 26/11/2013).*

Similar remarks were indicated by Participants 1 and 11 during the interviews. These participants also believed that good marks [AFGM] contributed to their admission to university. This is how they illustrated on this issue:

*The university need a certain percentage of marks in order to admit you so a positive contribution would be that I met the requirements (Interview with Participant 1, 10/11/2013).*

*I definitely think my marks. For my university degree my marks is actually the only thing they take into account when they allow you into a certain course (Interview with Participant 11, 13/01/2014).*

Another participant who also expressed similar thoughts on the issue of admission to university is Participant 8. In illustrating this notion further, Participant 8 reported that:

*I think it was, mostly not only my marks, also there was some achievements that I had at school like being top in certain subjects or doing extra-curricular stuffs ... (Interview with Participant 8, 11/12/2013).*

Apart from good marks [AFGM], Participant 6 believed that for her to be admitted to one of the most prestigious universities was not good marks [AFGM] alone but also:

*Maybe it's like the thing that ... personally you need to make your own choices, and it gave me like ... the opportunity, ... freedom and ja, and when you know you are in charge that's it (Interview with Participant 6, 9/12/2013).*



Participant 6 further elaborated that:

*Because it was the only path for me I wanted to get into university I don't really have like other thoughts and they're not in ... I'm also blessed my parents supported it during my schooling (Interview with Participant 6, 9/12/2013).*

The belief in good marks [AFGM] was echoed by all participants as the main contributory factor to admission to university. Moreover, some of the participants also mentioned other factors that were directly linked to their performance (marks) as having also contributed to their admission to university.

Besides his good marks, Participant 9 also highlighted the fact that:

*I think definitely my background from my home and also ... a good schooling background as well. I mean I think our school has also done academically very well in the past, so I think that's obviously when you apply to a university and they see from like which school you come I think that also contributes a lot. Well it helps in the sense like I mean they realised okay this is good education so you can rely on the marks that the people has received, that it's proper marks and it's at the standard, it's at the right level and things like that (Interview with Participant 9, 11/12/2013).*

Out of eleven participants, Participant 9 is an exception. He was the only one to mention the issue of home [AFHB] and school background [AFSB] as having positively contributed to his admission to university. However, like all participants he also mentioned his marks [AFM] as having contributed positively to his admission.

The issue of admission to university was responded to according to participants' different views, thoughts and experiences. Clearly, academic performance (i.e. matric results) [AFMR] did play an important role in the admission of all participants to university. In other words, all participants were given first preference by universities. Hence, Participant 10 argued that "... good marks for you to be taken first and then the others get squeezed in kind of thing".

#### 5.4.1.7 Top achievers' individual contribution to academic performance

The current study agrees with other studies (Park & Kerr, 1990; Fraser & Killen, 2005; Parker, 2006; Goodman et al., 2011) that academic performance is greatly influenced by the amount of personal effort an individual puts into his/her education. Sommer and Dumont (2011) further argue that research shows that students who are intrinsically motivated

employs self-initiated exploratory strategies and are likely to display autonomy. However, many of the findings of recent studies have been on students generally and not top achievers. Therefore, this study also reveals that the individual's personal motivation does influence academic performance or success.

In response to the question of how the participants as individuals had contributed positively to their academic performance, all the participants cited factors such as self-motivation, family background, working hard, self-care, research, interest, attending classes, discipline, studying hard, communicating with other students and helping other students.

Based on their experiences as narrated during the interviews, some of the participants rated self-motivation [TACSM] as the major contributory factor to their academic performance or success. What is of interest here is that these data confirm the evidence presented in the literature review in chapter 2. One of the critical concepts for this study, namely, motivation, was also clearly explained and its significance for academic performance or success was also outlined. The participants' narration below is an illustration of how the participants as individuals put effort into their academic performance.

As one participant indicated in regard to his experiences on this issue:

*Individually I am a ... I think a strong person, I'm self-motivated, so I think that's one of the things that really helped me in making sure that I adapt well at university, I'm a person who can draw the line between personal stuff and academic stuff. So ja, even though there were some of ... you know problems that were going on in the family my strength as a person, my motivation of being self-motivated as a person I think it helped me to sort of like keep holding on at university and making sure that I get the job done (Interview with Participant 7, 11/12/2013).*

On the same note another participant explained:

*I think I kept myself motivated because I knew that failing doesn't only mean a year, there's a lot of money as well, so I didn't want to put my parents in a very difficult financial situation and I didn't want to put myself under a lot of stress by not studying hard and you know ... repeating. I think it's very important if you do it correct the first time (Interview with Participant 8, 11/12/2013).*

The concept of motivation came up strongly in most of the conversations, although each participant expressed it in their own way. According to these participants, motivation [TACM] can generally be referred to as the main driver for one to consider in taking a step towards carrying out a particular duty. Hence, Participant 10 also elaborated:

*So it was just finding that particular thing and focusing on it and being disciplined, and being driven internally, ... maybe by my family background, by the expectations that my family had, and by the expectations that God has upon me because I believe that he has a purpose for my life, like in my life the things that I should accomplish and people's lives that I should impact and things that I should change in the world. And if I do not respect that, I will actually not achieve it in the future (Interview with Participant 10, 12/12/2013).*

Similar sentiments on the self were shared by Participant 1:

*The way in which I conducted myself in the first year in being consistent and making sure that I understand my work very well and prepare well for tests and so. In that sense maybe the university provided sufficient resources for me to learn. I understood very well that in the end of the day I am the one who has to see to it that I am prepared for tests and pass tests. So for me, I forced myself to always working hard to see myself out of first year. So that is how I contributed to my own success in my first year ... Being determined consistently (Interview with Participant 1, 10/11/2013).*

Participant 1 raised important issues relating to being consistent (TACC) and determined (TACD). Other information supporting what the participants mentioned above is that provided by Participant 5. This provided another version of the story on how individual participants personally contributed to their academic performance. Participant 5 reported that:

*I worked pretty hard like I worked hard; well it was even more than I did with my Grade 12. I worked very, very hard because now, it was, for me it was a challenge to fall in the region of 60s because usually I used to be on top, so I think that was sort of the motivation I had back from high school to varsity to say "you don't belong there". So then I've been trying just to push and push, ja so which is ... which seems to be working of course. My results aren't that bad now I guess (Interview with Participant 5, 7/12/2013).*

Besides motivation, the concept of interest also dominated some of the participants' conversations. The argument that these participants made is that studying hard alone is not enough for one to succeed academically. These participants highlighted in their conversations how having an interest [TACI] in what you are doing or studying can drive you to find out

more about the course or subject. According to these participants, the academic performance of students with an interest [TACI] in their study differs totally from those without any interest. The issues of interest and motivation as internal attributes are therefore very important and valuable elements of the study. Thus, Participant 10 commented:

*Individually, a lot of studying, researching and having an interest in what I'm actually studying because studying alone doesn't drive me, at times it gets boring. So when I find something that I'm particularly interested in I research it and I dwell much on it because maybe that's what's gonna drive me, I might never know it might appear in the exam (Interview with Participant 10, 12/12/2013).*

Like Participant 10, Participant 9 also subscribed to the important role that interest in the subject [TACI] plays in determining academic success. The statement made by these participants also reaffirms what the literature review (i.e. Chapter 2) of this current study suggested. However, this will not be discussed in detail in this section.

Scholars who have written on the subject of 'interest' view it as a driving force not only in education. However, some of these scholars also warn that for one to succeed, interest needs to be sustained. In other words, as interest decreases, so the chances of succeeding diminish. Worse, interest as an attribute is often an internal and personal choice and cannot be reinforced in an individual like studying hard and regularly attending classes. Therefore, the information provided by Participant 9 below also paints a picture of interest:

*Positively I think definitely, obviously hard work, taking an interest in the subject, or well like attending classes, I think that's the one thing, I mean I attended in all my classes, hard work, going through work doing each questions, examples, things like that. The other thing was I mean chatting with other people around the work, like helping others with like, I mean obviously if you help somebody else then you're helping yourself as well because once you explain something to someone else then you understand it and it's also a lot better. That's something that I also learnt a lot, so with helping others that also contributed a lot like I think it was something positive. That also contributed to my success (Interview with Participant 9, 11/12/2013).*

Similar sentiments on helping each other were reported by Participant 2:

*Ah! I used to stay at res so the people I was staying with were pretty competitive. We were staying in a communal area. The people I was staying with we were sort of doing the same*

*modules ... if you didn't perform well there was a penalty involved to motivate you to ... Because I was staying with those people who did Accounting, they would help me out when I didn't not understand some of the stuff* (Interview with Participant 2, 10/11/2013).

Participant 2 attributed his academic performance to the friends or classmates who assisted him [TACFS] in, for instance, Accounting and also the competitive spirit [TACC] they had. Seemingly, both Participants 9 and 11 saw attending classes (TACCA) as one of the important positive factors that contributed to their academic performance. Participant 9's opinion was supported by Participant 11 during the interview. This is how Participant 11 elaborated:

*I think the fact that I studied. I had to study for some subjects quite a lot because they were difficult for understanding. And I attended classes so I understood the work. I just studied and attended classes. I think that is the most important things that you can do in first year* (Interview with Participant 11, 13/01/2014).

The participants' perceptions were basically influenced by their different experiences. This section also attempted to answer the third research question, although it has been personalised here. Thus this section sought to understand how the top achievers had personally developed and maintained academic excellence in their first year. I need to mention that in other sections the question is addressed more generally than in this section.

To conclude this section, reference is made to the reports of some of the participants when elaborating further on their own personal contributions to their academic performance. During the interviews, participants were given enough time to share with me some of their personal experiences and strategies they had applied.

Interestingly, during the interviews three participants shared with me other positive things that they had done that had contributed to their academic performance; these included looking after oneself [TACTC] or having a balanced lifestyle [TACBL]. These participants illustrated their views on this as follows:

*... and then also looking after myself. Eating right, sleeping enough, getting exercise, spiritually going to church, reading the bible, just ja, praying and things like that. ... you have to take care of yourself and also allow yourself to have fun sometimes* (Interview with Participant 4, 14/11/2013).

Participant 4 went on to explain how she did that:

*I eat the right things, I sleep enough, I exercise and then I socialise, things like that (Interview with Participant 4, 14/11/2013).*

Similarly, Participant 9 shared the following:

*Positive things that I did that contributed. Well I think also with that balanced lifestyle, like getting exercise, sleeping enough, not partying too much, things like that. Like I think just knowing that you've got a responsibility while you're there and that I couldn't mess this up. Just to have that realisation throughout the whole year and just ... I knew that I had to be responsible (Interview with Participant 9, 11/12/2013).*

These sentiments were supported by another participant who also highlighted the importance of living a balanced life [TACBL] in order to perform as required:

*I think it was the time that I spent behind my books because I really worked hard and I think I lived a balanced life and when you live a balance life ... I don't know how it works but you really have much more time then. So I think the time spent down on my books was effectively spent and I didn't just sit there and I made sure I get enough sleep and get enough practice and spent time with friends that helped (Interview with Participant 6, 9/12/2013).*

Interestingly, three of the participants interviewed in this study believed that living a balanced lifestyle [TACBL] contributed positively to their academic performance. I found it to be of interest that these participants strongly believed in a principle of 'a sound mind in a sound body'. However, these participants also did not forget the responsibility of having to study.

5.4.1.8 Description of the academic performance of top achievers in the first year of study  
Since the study is based on investigating the academic experiences of the top ten high school learners in their first year at university, it was imperative for the study to ask the participants to describe their academic achievement in this first year of study.

With regard to their academic performance, some of the participants were not happy with their academic achievement, especially in the first semester, citing various reasons for their unsatisfactory results. Participants who performed well believed that their dedication, discipline, hard work, communicating with others, interest and motivation were some of the factors that contributed positively to such performance. However, participants who were not

happy with their academic performance cited adaptation in the first semester, the time factor (i.e. having too little time) and laziness as some of the reasons for fair or unsatisfactory performance.

Nonetheless, findings from the interviews revealed that some of the participants were able to excel right from the beginning, while still adjusting to university. Many of the participants obtained distinctions in the first semester in three modules or courses, therefore proving beyond doubt that irrespective of the university where the participants were studying, if the required support systems are in place, students will perform well at all stages.

Before presenting their average performance picture, some of the participants shared with me their different experiences pertaining to their academic performance. As a researcher I then gave them an opportunity to express their feelings in the belief that whatever the participants shared would benefit this study. For instance, Participant 5 explained:

*Well there's a number of issues which affect your performance at varsity. Not only whether or not you study that's the sad part about varsity. So it's more of understanding whatever you are doing and then you just try and communicate with others. You just have to realise that a man is not an island, he is rather a part of a big picture, you have to work with other people, you have to socialise with other people well in a good sense that is (Interview with Participant 5, 7/12/2013).*

In the same interview, Participant 5 openly shared his experience about how your academic performance can be negatively affected by the power of influence [FYPPPI] if you do not know what you really want:

*There are certain modules of which you are told that this one you just have to do it twice or three times it's normal, it's normal at university to ... "oh! it's that module, it's fine I can do it the next year or the year after" – so it's then now you get yourself into that mentality of thinking that certain modules are not passed the first time. Well because I remember the other day we were doing this assignment I think, so then a guy comes, he asks, "is that Material Sciences that you are busy with?" I said ja, he said "okay with that one you don't have to worry you can always do it next year". I was like ja, so it's just generally accepted that you can fail, because people even deregister modules. They just deregister modules, it's just the freedom that's associated with varsity (Interview with Participant 5, 7/12/2013).*

The information that the participants shared in the interviews gave me a clear picture of the actual experiences of first-year university students. Participant 5 reported on how some of the senior students could exercise their power of influence [FYPPI] in discouraging other students when studying. The participants' narrations especially with regard to their academic performance are very important and play a very crucial role in addressing the research questions of the study with regard to investigating the academic experiences of first-year university students.

In describing her academic achievement in the first year, Participant 10 reported as follows:

*It wasn't that great, but I still think I could have done better maybe if I had proper mentoring maybe from people in second year who mentored me. There was someone who was mentoring me but ja it was just that. But I felt like if I had known previously maybe when I was in Grade 12 that this is what I should expect, these are the courses I should do, and this is the way I should handle them ... because this one is harder than this one so I must concentrate on this one. So I sort of like had to figure out most of the things myself without getting advice from someone else. So I think it wasn't that bad. ... I should have improved in a way (Interview with Participant 10, 12/12/2013).*

In short, Participant 10 reflected on the issue of having not known what she should expect [FYPEU], what courses to do and which one to focus her attention on. Participant 10 believed that if she had known these things her performance could have been somewhere better. Her greatest challenge was that she had to figure things out on her own.

Not surprisingly, Participant 10's opinion is supported by another participant. Participant 9 simply and with great confidence blamed his performance on having to adapt [FYPPFA] in the first year, stating this as follows:

*I think the first while it took some adaptation, but once I adapted I think, well my marks, when I compare to the rest of my class I still was always one of the top performers in most of my subjects. And I think at first while I was still adapting, the first term it wasn't quite where I wanted it to be, then it got a bit better and then what happened, well I'm gonna have to be honest, was in the second term, once I ... after the first semester you know you think okay, great, now I know how the systems work, and then the third term I didn't work nearly as hard as the first semester because obviously you know I'm used to system and then my marks dropped a bit (Interview with Participant 9, 11/12/2013).*



Having to adapt to university and at the same time being expected to perform as required was a great challenge for Participant 9. According to Participant 9, to adapt means fixing after fixing. In other words, when he was sure that he had adapted he relaxed, which negatively affected his performance again and he had to go back and readjust again. Fortunately, Participant 9 acknowledged the fact and went on to fix it, as he elaborated below:

*And like just before the exams now, well in the end of year I still had good marks, I still like my first year, but the thing was ... ja I think the second semester caused me a bit because I didn't work as hard as I should have because of the whole thing that okay I know how the system works, I've just adjusted, I don't have to work as hard as I worked in the first term. I think I didn't need necessary to work as I did in the beginning but the thing is I still didn't work hard enough (Interview with Participant 9, 11/12/2013).*

Since the study is mainly on academic achievement in the first year, participants were also expected to give a clear picture of their academic achievement in their first year at university. Accordingly, during the interviews the participants were asked to highlight their academic achievement in the first year of study. Interestingly, none of the participants' academic performance average was below 65%.

The participants attributed their good performance to various factors. As part of this section, the next analysis provides some snapshots of the academic performance of top achievers in their first year at university as they described it during the interviews. Subsequently, participants were also given a chance to comment on their performance by indicating whether they were satisfied with it or not.

The following snapshots of participants provide examples of how the participants performed in their first year of university studies. One participant described his academic performance at first year as follows:

*Well my performance it wasn't as expected because like I had well, at least higher expectations, but then for the first semester I only got an A for Calculus, which was an 80 and then the other modules were like 63/68 including the Material Sciences which is one module of which most people fail. So then but ... but then now I got like three A's and then the other one is a 70 that's Mechanics, the other ones are 68 which is Calculus, I still feel that maybe they are unfair somehow and then ja. No it's ... as I've already indicated it's ... I think maybe it's ... once you've adjusted you can know what works and what doesn't so you can move forward (Interview with Participant 5, 7/12/2013).*

Two other participants (Participants 7 and 8) doing the same degree (i.e. Mechanical Engineering), although at different universities, also reported on their academic performance in first year with great pride. I should mention that while conducting the interviews I observed the confidence displayed by the participants. Although citing various challenges that were impacting negatively on their academic performance, participants described their performance in different courses as follows:

*Yes, my first semester, I think I had ... for my five subjects I averaged about 85 I'm quite happy with that. And now my final average for this year is at 97 or something, so I also obtain 80% other subjects this first year. And the second semester I had a few subjects that were a bit more difficult, for instance Science, I don't know 68% and Maths I also got 68, so that brought my average down a bit but I'm still happy with my marks. I told myself I don't have to worry about that I just want to get my marks above 65% so I don't have to worry that much about passing, 65% is alright at university level. I'm satisfied with getting a 65% at university level (Interview with Participant 8, 11/12/2013).*

Nonetheless, Participant 8 concluded his story by indicating that he was satisfied with 65% at university. This is the total opposite of what other participants believed. Similarly, one of the participants also shared the same sentiments on this subject. This is what she (Participant 4) had to say:

*I was very grateful, it was again something that I didn't expect, but I worked very, very hard last year and sometimes I feel I work too much, I didn't enjoy my first year as much as I was supposed to, but it paid off in the end and I'm happy about it. But I learned a lot as well (Interview with Participant 4, 14/11/2013).*

Unlike Participant 8, most participants believed that you can be happy with an average of 65% as it is good, but it is not something that you can claim to be satisfied with. For instance, this is what Participant 7 reported on this issue:

*Well judging by the difficulties I have faced at university, well I can say I am happy even though I'm not fully satisfied, I believe that I could have done better but ja I will take it from here going forward (Interview with Participant 7, 11/12/2013).*

The claim made by Participant 7 is clearly supported by the opinion tabled by Participant 5 during the interview. Participant 5 was also of the opinion that one should not reach a point of

being satisfied about whatever he/she expects so that one can push for more in life. Asked if he was satisfied with his academic performance, he (Participant 5) explained that:

*Well I believe that if we live with satisfaction then you are not moving forward, but that's just my philosophy. I think maybe if you believe in satisfaction then you are not moving forward because you become too relaxed and then relaxation is never good for an individual because I think growth is natural, you just have to keep growing, if you get a 90 you push for a 100, that's just what I believe in (Interview with Participant 5, 7/12/2013).*

Another Mechanical Engineering student-participant, who had just indicated that he was happy with his academic performance though not satisfied, described his academic performance during the interview as follows:

*Okay I, first semester I was doing six modules, I passed all my modules but I ended up getting three distinctions that's on my majors, I'm doing Physical Science as my major, Physics, Maths as well as Mechanics Technology. So I got distinctions in those modules. Second semester I also got three distinctions but I think the average performance compared to the one for first semester it really, it increased because I achieved an average percentage of 76% on average, ja having got three distinctions, ja I think I did well. I did well in second semester than in first semester (Interview with Participant 7, 11/12/2013).*

The most common point registered by participants in their narrations of their academic performance is that they generally did better in the second semester than the first semester. I believe that this is because of the serious challenges that some of the participants mentioned with regard to adapting or adjusting to university. Some attached serious meaning to the availability of mentors [FYPMA] in the second semester, which assisted a lot although it was almost too late to make up the first semester's academic performance.

Having an average of 79/80 made Participant 9 feel very proud of himself thus taking ownership of his results. Though he (Participant 9) could not clearly state in which subjects or courses he got what, Participant 9, who is studying for one of the scarce professions, reported that he got seven distinctions out of the nine subjects he studied in his first year.

*My average was about 79/80 something around there, my final average at the end of the year. I think my best mark was 89% and my lowest mark was 71 the rest was equally distributed between that, I think I had 9 subjects throughout my first year and I got 7 distinctions from the 9 subjects, ja (Interview with Participant 9, 11/12/2013).*

As a researcher, I think having provided the participants with an opportunity to describe their academic performance in their first year assisted me in identifying, knowing and understanding better who these top achievers were. At one stage, I was really impressed about how the participants believed in themselves and the task that they said they had to carry to ensure that their academic performance was not dragged downwards. Instead, many improved on their performance in matric. None of the participants was willing to accept average performance on their part, even if it seemed to be very high. Suffice it to say, that an average of +80% might seem to be a ceiling to other students, but not to the participants who happened to be top achievers in matric.

The study also had the advantage of having two participants who were studying medicine at different universities. This then rendered the data obtained as more reliable, since it was presented by participants who were studying in different environments.

One of these participants, Participant 10, who had an average of 65% in the first year, also described her academic performance in different modules. With a lot of smile and confidence, Participant 10 stated, “*My average maybe it was like 65% first year*”. As she put it:

*Ja, they divide them into semesters right, for my Chemistry, I'm not sure, where are my results I have them somewhere. This one we had Afrikaans, I did, I think I had 72% and then we had Becoming a Health Professional, I had 75 and Becoming a Professional that was in first semester, sort of like 72/73 and then I had Human Integrated Health Sciences, that is my major, Human Biology, I got 68 first semester and ja nearly the same mark in second semester, there's part 1 and part 2 ... the other course that I had, Chemistry, I got a sub in first semester, I got a sub for my Chemistry and I got a 67 for my sub and for my Physics I got I think 61/62 I'm not sure (Interview with Participant 10, 12/12/2013).*

Another participant with an aggregate of 78% in the first year shared her story. Like Participant 10, she was also studying medicine and was in her second year. Interestingly, this participant got distinctions in all her subject in the first year.

*At the end of the year I had an aggregate of 78. And I got distinctions in all my subjects. So I got above 75 in all my subjects. I had I think it was 6 in the first semester, and five in the second semester, I'm not quite sure I think, but I can remember having distinctions in all my subjects. As far as I can remember it was Chemistry. I think I got 83 for Chemistry and I think that was my highest mark. And then also the first block that we did in second*

*semester, which was Physiology and Anatomy combined, I also did well in that one (Interview with Participant 4, 14/11/2013).*

Academic performance percentages like the ones that were presented by Participant 4 clearly reveal the commitment and dedication that participants had to their studies. I would therefore argue that although it is still too early to conclude, I believe that the participants will further develop and maintain the excellent academic performance of their first year of study. Likewise, Participant 3 who also happened to be studying medicine at another university revealed this about his academic performance at first-year level:

*I did about 6 subjects in first year, and two of them were like half courses ... then the other four were like full year courses, I do them throughout the year. So, the performance was a bit like unbalanced because like here the work is too much. Okay Physics I think I got 86%, ja and Biology I got 82%, Chemistry I got 90% then Psychology as you know I didn't do very well, I got 60 and the other one I got 64% Sociology, then Medical Practice I got 79%, ja so it was four distinctions of which the distinctions at university starts at 75% (Interview with Participant 3, 26/11/2013).*

Although not studying the same course as Participants 10, 3 and 4, Participant 6 described her academic performance in the first year of study as follows:

*Okay, last year it really went well, I can't remember but I think my average was 74 or something and this year was 77 ja, it was good. I can't remember, but this year I did six, no I did 7, two semester, this year I did seven modules, 5 year-subjects and 2 semester subjects, and last year I think it was 5 (Interview with Participant 6, 9/12/2013).*

Participant 6 also elaborated on her academic performance:

*Last year I got 89 for Accounting and 86 for Information Systems and round about 75 for Maths, and 65 Statistics and 50 for Actuarial Science and Economics I got ja 69. Something ... Industrial I got a 70 I think but it was around there ja. And this year about 75 for Accounting and 75 for Information Systems and 73 for Maths and 69 for ... and 57 for Administrative Law ... (Interview with Participant 6, 9/12/2013).*

Participants 1 and 11, who were doing similar courses, had this to say in describing their academic achievement in their first year at university:

*I relatively performed very well because I remember I had to do about 15 modules in the first year and I passed 10 of them with distinctions and maybe the rest very close to*

*distinctions. So that was my performance. So it was pretty much a very good performance as I look at it because it was above average* (Interview with Participant 1, 10/11/2013).

Participant 1 elaborated further on his academic performance in the first year of study:

*We had subjects like Statistics. In Statistics I managed to get 100%. Then we had this troublesome course/subject which was introduced to us for the first time in 2012. So it was a very tough subject but I still managed to get a distinction and in our group I was the only one that got a distinction. ... But for me the one I remember is Financial Management 100 and then Statistics mainly for those reasons. All the other ones I remember I got distinctions* (Interview with Participant 1, 10/11/2013).

Participant 11 also expressed her feelings of joy:

*But still I think in Economics I got 84% so it was quite good. But the Law subjects that I had I did not do that well; I just got 60% or so because I had never encountered such a subject in my life. It was different from anything else I had seen in school. And for Criminal Law I got 70 so that was alright. Oh ... and Statistics which is quite the same as Maths I got 75% and for Information Systems, that was also a computer subject which I never had I got 73 and for Introduction to Law I think I got 63%* (Interview with Participant 11, 13/01/2014).

Interestingly, what the participants said about their academic performance during the interviews showed that they were generally coping with the academic demands of their universities. However, it should be clearly stated that though these participants cited different factors that impacted negatively on their academic performance they personally put in a great deal of effort in order to succeed academically. There are three very important observations to be made here based on what the participants voiced during their interviews. Although the students experienced problems or challenges they were able to accommodate these, thus succeeding in the end. This then also answers the question as to how the Grade 12 top achievers responded to challenges at university.

#### 5.4.1.9 Mechanisms used by top achievers in studying and in preparation for exams

Studying for examinations in particular demands extra effort on the part of students, and when the students start preparing or studying their work is important. In other words, do they allow themselves sufficient time to revise their work? From the evidence presented by the data discussed earlier on, participants were happy with their academic performance although

some indicated that they were not satisfied. Again, participants cited various factors as having positively contributed to their academic performance. Now the question entertained in this section relates to the mechanisms or strategies that participants used when studying and preparing for their examinations. The evidence provided below shows how each participant justified his/her claim on the strategies used. One participant shared her experience:

*I think the most important thing that I did or do is that I study every day I come home from class and I go through the day's work so that I don't fall behind and usually what I do is I do that every afternoon and then on weekends I recap the entire week's work. In that way I never fall behind and then I do make summaries but if we do get lecture notes from lecturers that they put up on click up, I generally use those and study those then I don't summarise the textbook or things like that. So I do summaries if we have a textbook and we don't have notes but if we have notes I use the notes. But most of all I study every day and I don't let the work keep piling up (Interview with Participant 4, 14/11/2013).*

The same information was shared by Participant 11. As she explained that:

*Well I studied the textbook firstly. That is very important. And my class notes then. So I usually read through my textbook to have a basic understanding of the work. And then I studied the relevant sections highlighted in class and then extra material. Sometimes they also, like in Law, you need to read a lot of cases. So I read a lot of cases and do a lot of summaries about those cases – so case summaries, I do a lot of them so I understand the certain cases that are relevant for the certain type of work (Interview with Participant 11, 13/01/2014).*

On this issue Participant 5 made the following claim:

*Mm, ... I think I just had to redo the work, well not in detail because I have to do study by then, just redoing the work, making notes and then reading my notes and all that and just trying to work with other people because as I've indicated what you think is correct might be incorrect that's what I just discovered with varsity because like there's this module, like Material Sciences, it's a very tricky module which I think has the highest failure rate at [Jupiter University]<sup>9</sup>. So it's always a challenge, so if you don't talk to other people, discuss the work, then it's going to be a problem for you. So then you just discuss the work*

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<sup>9</sup> Jupiter University. is an alias used instead of the proper name of one of the South African universities. This was done for confidentiality reasons. I have used the names of planets instead of those of universities because planets are also well known just like universities.

*with others and then and just redo the work, review my notes and then I go for the exam (Interview with Participant 5, 7/12/2013).*

Besides studying every day [SMSSED], Participant 4, like Participants 5 and 11, made their own notes [SMMN] and studied the notes [SMSN] instead of going back to the textbook which might waste time. However, Participant 5 also acknowledged the importance of consulting with other fellow students [SMCP]. According to Participant 5, this is important because during such discussions one could clarify certain aspects that were confusing him or her. Important for Participant 11 was ensuring that, she verified her notes from the textbook [SMST].

The above sentiments were supported by another participant, who also believed in repeating more than once [SMRS] whatever work that he might be studying. Participant 9 stated in this regard:

*Just read and repeat, that's the ... I think the method that works best for me when I study theory and if it's something where it's got a lot of examples just go through it as much questions as I can in the time that I have available (Interview with Participant 9, 11/12/2013).*

The same sentiments were echoed by Participant 11 as she explained that:

*I just learned later on that you cannot only go through the work once. You must actually do it two or three times. But yes, it worked sufficiently for me to pass everything and to do well in some subject (Interview with Participant 11, 13/01/2014).*

According to the data, Participants 9 and 11 shared the same practices with Participant 5. They all believed in repeating [SMRS] whatever they were reading or studying. In fact, both participants emphasised the importance of focusing on a topic on repeated occasions and not just once during study time.

Like Participant 5, Participant 10 attested to the practice of writing notes [SMMN] while studying, although she also added the issue of mind map [SMMM]. As she explained it during the interview:

*Do you know what I do when I study for my exams? I have this thing; I think it's a mental issue. When I study I always have to write everything down, so I feel like when I didn't write something down it's not recorded in my mind. So I mind map, I mind map things. I*



*used to have like posters in my room when I was in first year, that's how I used to study*  
(Interview with Participant 10, 12/12/2013).

Seemingly, the issue of creating mind maps [SMMM] for studying was a favourite strategy of some of the participants. These participants also expressed how fruitful they had found this method when studying or preparing for the examinations. Participant 6 indicated that she also used mind maps [SMMM] in preparation for examinations or in studying. In voicing her experience, she stated that:

*No! No! Like is already in like a picture in my mind map, I use mind maps so when I first came to study I had a mind map of the important things. So when exam time comes I only study notes and then it saves a lot of time and then it only refresh your mind. So then after that I revise assignment and even ja, tutorials, a lot of tutorials and examples in a study guide* (Interview with Participant 6, 9/12/2013).

One of the aspects that most of the participants in this study mentioned is that of making their own notes [SMMN] and studying them more than once [SMRS]. As a researcher, having observed that Participant 10 was full of energy and confidence to share her practices, I had to allow her to narrate her story uninterrupted:

*I used to take big sheets of paper on campus and I used to buy markers, colourful markers and I used to write my notes down ... I used to study Afrikaans like that too, to see a word there every day, made a difference because I would maybe register it quickly. So I used to write everything down, my room was full of posters, big posters that I used to wake up and read every morning like I would read through everything else. It used to help because when I was writing a test I would remember that, that was on my wall I remember that picture, and if they ask me to draw something it would be like yes!!, then I would draw that picture that was always on my wall and I would label it properly because it was always on my wall* (Interview with Participant 10, 12/12/2013).

In the same interview, the latter participant further explained her practices in studying or preparing for the examinations:

*That's how I used to study, I used to write on the walls and I used to read repeatedly, I used to highlight my notes again, even on my laptop, that's how I used to do things, I used to repeat stuff and it really helped me* (Interview with Participant 10, 12/12/2013).

Interestingly, to Participant 10 ‘seeing is learning’. Based on what she presented on this matter, Participant 10 had identified what really worked for her. The study methods that she had adopted, really did work for her and she confidently told me of the strategies that she had adopted when studying.

According to the participants, mechanisms that one can use in studying and preparing for examinations differ from one subject to another. In other words, the kind of material to be studied and the volume thereof also determine the kind of mechanisms one would apply in studying or preparing for examinations. A good example to illustrate this point is presented by one participant:

*Yo! well it differs from subject to subject I mean obviously I think one of the best ways to study is go through examples and then do the questions and sit down work through the work, that’s one way I enjoy a lot like to work out questions. Go through the work, in other subjects, like we can’t really do questions, like where it’s a lot of theory or something, the only thing that really works is to sit down and to go through the work, two or three times, read through it and I think the way that I study is ... well a lot of people, ja study in that way is like I basically ... read through it and I will repeat it (Interview with Participant 9, 11/12/2013).*

Another participant considered finding an environment that is suitable for studying as the most important aspect. In addition, this participant mentioned having to study hard [SMSH] in preparation for study group discussions [SMPGD]. Basically, I think other students should adopt this behaviour because it would reduce the unnecessary time-wasting arguments during discussions that emanate from not having prepared thoroughly for the session. What Participant 7 highlighted makes good sense and may even assist other students. This is how he expressed it:

*I used to do what I call a self-study. I used to go to the library or maybe unoccupied buildings where I could sit myself, alone, study hard, look at my books and then if I find anything that maybe needs to be discussed or something that I’m not sure of, I would then consult people, who are ... I also was part of a group with my friends, we used to have a study group around 6 to 9 pm. So we would study together and help each other whenever we do not understand. If we are finding difficulties, consult the lecturers themselves for the available tutors (Interview with Participant 7, 11/12/2013).*

In addition, Participant 7 indicated that he also relied on the tutorial and lectures on YouTube on the internet. He also revealed that *“I think another thing I also did is I used to learn from the Internet. So I used to make use of the resources”*.

Making use of the resources that are available at the university can assist in improving academic performance, and in some instances it can assist students to maintain and sustain excellent performance. This theme then addressed the third research question; that is, how Grade 12 top achievers develop and maintain academic excellence in their first year at university. Like Participant 7, it is advisable for university students not to rely only on the lecturers for their academic success. Rather, students should learn to make use of all support systems that are put in place to help them perform. Another participant explained his situation:

*First I went through the theory like of ... if you have a theory subject or what, I studied the notes and the drawings so quite often and that gave me the background knowledge to understand the work that I was studying and then I worked ... I went on to study like techniques for solving problems then I ... then I think I had to underline notes. Someone gave me a good idea that I have to study old exam papers and some questions that came in the exam were relatively similar to the old questions that I had studied, I think that's very important to work out old question papers (Interview with Participant 8, 11/12/2013).*

The same sentiments were echoed by Participants 1 and 3, though they put it in different words:

*Study is more factual at knowledge but preparation for exam, most subjects they are of the nature that if you do a lot of previous question papers you will be ready which turns out to be true in those subjects. So for me that was the technique I had because in the end of the day I need to pass this test which means I need to get to the test and get most marks. Getting most marks meant if I go through enough question papers then I may know what their way of structuring questions is. What is the expected response, how do you structure your responses, those kind of things. So that very technique I even use it today (Interview with Participant 1, 10/11/2013).*

Participant 1 further elaborated that:

*To do those questions papers at least I need a certain level of information and knowledge on that subject. Lecturers in class use slides to lecture. So what I do is I check the slides to see if this is the main focus of this lecturer (Interview with Participant 1, 10/11/2013).*

Participant 3 then shared similar experiences as follows:

*So I would study using past papers and I would also do ... since here there's free internet at the university, I would look up YouTube videos for extra tutorial videos, and also I would research like more and more information to add like, sort of like extra curricula to just enforce what you've been told in class, because on YouTube videos there are a lot of like lectures and tutorials and plenty of them, so ja. I had to use all the resources available (Interview with Participant 3, 26/11/2013).*

Besides having to share their experiences on study mechanisms, participants were also able to cite a few strategies that they had put in place to guide and control their study process.

Though speaking from the point of view of different universities, participants were also able to, among other things, list writing notes, reading notes, group discussions, and repeat reading notes more than twice as some of the strategies that worked for them in studying or preparing for examinations. Some participants indicated that for studying they have never relied on any timetable, as they just studied the courses they found to be difficult more than the rest. When finding that this worked for them, they just continued like that.

However, some participants strongly believed in putting things into perspective. For instance, Participant 9 listed setting out a timetable, setting out goals, taking regular breaks and getting enough exercise as strategies that had positively worked for him in studying and preparing for examinations. Participant 9 illustrated his position as he argued that:

*... okay that's something that you have to plan ahead, like obviously if I think you know a test is coming up, go through work, see how much work it is and then ... I rarely stick to it but at least if you've got that down it helps you a lot in a sense, you set out a time-table. Just set out goals for yourself and with that goals like sort of achievements, you know you say to yourself okay if I'm done with this, then I can think of something fun to do, whatever that doesn't take too much time, work it out and if you achieve your goal you reward yourself. ... that's something that works for me, to give myself goals. And another thing that also is, to take regular breaks, but not too long. Like study for about an hour and half and take 10/15 minutes and then ... get out of your learning environment. If you study at your desk, when you break don't sit there at your desk and do something else. Go outside and just get a bit of fresh air (Interview with Participant 9, 11/12/2013).*

Participant 9 went on to illustrate his practices and experiences when studying or preparing for examinations:

*And also which is important, if you write like an exam or something when you're studying you need to get enough exercise as well, because sometimes you think okay I don't have time for anything else, you just study, study, study, but then in the end you get tired and your brain like gets mushed up and then in the end you become so less effective. So it's also important to get enough exercise, just to renew yourself and just to get your head clear and things like that ... with studying hard you need to relax and you need to get out just to get your brain fresh (Interview with Participant 9, 11/12/2013).*

Participant 2 further elaborated on the mechanisms that he used in studying that seemed to be working for him:

*As I said I used mnemonics, the memory trick that I used and I also came to know of another mnemonic trick that I learnt here from a friend is called, memory palace. So I would use a familiar place like my township, the whole township because I will remember all the houses. I would know who stays where and what kind of a person. I will remember all the houses like 50 houses from where I stay. I will put my studies like if I had to know long essays I will put my essay in those 50 houses and if I walk from home I will remember ... (Interview with Participant 2, 10/11/2013).*

What Participant 2 alluded to is studying by making associations between things. According to Participant 2 using mnemonics [SMMC] significantly contributed to his academic performance.

Generally, a strategy that worked for one participant would not work for another participant. In fact, one participant indicated that she never even had a study timetable, she always decided on what she really needed to study and then just took it from there. In other words, she never formalised her study time. There were also, however, participants who stated that they had to follow a timetable or study schedule in order for them to focus.

#### 5.4.1.10 Summary

The information gathered in this section assisted me in coming to a better understanding of how the Grade 12 top achievers developed their academic excellence, which they also had to maintain in their first year and throughout university. Accordingly, the data presented here reveal that the degree to which the challenges mentioned affect the academic performance of

participants varies and that might possibly account for the different levels of academic performance in matric and in the first year at university. Apart from the challenges that some of the participants cited as having impacted negatively on their academic performance, these participants were able to maintain their good performance during both their first and second-year university studies.

#### **5.4.2 What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?**

##### **5.4.2.1 Top achievers' expectations of university in the first year of study**

In trying to answer one of the research question on the perceptions and expectations of Grade 12 top achievers of first-year university teaching and learning, during the interviews the participants were given enough time to narrate their stories. When dealing with this question, I also inquired as to whether those expectations were met by universities and if not which ones were not met. It should be mentioned that almost all participants indicated different expectations that they came with into university. For instance, some of the participants indicated that although they never set foot in a university previously they nevertheless expected university to be the kind of environment that they perceived.

In her response to the question on expectations, Participant 4 explained in this regard:

*Okay I would like you to, okay first of all to make me feel welcome. The first day I come here I want you to say that you are glad that I'm here. And then also just that everything is organised, that I know what's going to happen when and where and when I have to be where and that you also should tell me what you expect of me. So that you know you're supposed to go to classes, you know you're supposed to come and attend lectures, to attend practicals and things like that. So everything has to be structured that's a very important thing for me, that it has to be organised (Interview with Participant 4, 14/11/2013).*

Besides having some expectations of university, Participant 4 also believed that what is inevitable and imperative is that the university should tell her what it expects of her [EXP3]. This implies that for Participant 4, the university should then set standards for its students so that they do what is expected of them at all times. In other words, students would not come with excuses if asked to account for something. According to Participant 4, everything needs to be structured [EXP4], which then calls for proper planning on the part of the university.

In response to the interview question, the other participants also voiced their perceptions and experiences of their universities. I should mention that during the interviews, I observed that most of the participants were very open in responding to the question. For example, Participant 9 stated that:

*... for me I think my expectations was obviously that it's gonna be difficult, it's gonna be hard work, it's gonna be a lot of people that's like, I mean obviously you get a lot of different mind-sets and there's lots of temptations and things that you don't have when you're living at home. I mean for me also I was in the residence which I wasn't used, I've lived at home for 18 years of my life. So my expectation was obviously you know it's gonna be challenging, it's gonna take hard work, you know you really gonna have to study hard, you have to work hard (Interview with Participant 9, 11/12/2013).*

The same sentiments were echoed by Participants 8 and 11 although they put them into different words:

*I was a bit anxious because it was out of my comfort zone, it was ... I knew there would be a lot of work, of course I was a bit dubious, difficult to tell whether I would be able to do that, I'll need to be motivated enough to putting all those hours to complete that work and consult the seniors ... (Interview with Participant 8, 11/12/2013).*

*I expected it to be difficult. I expected that course to be quite hard and academically challenging. And before I came I expected the people to be not so nice. I had no idea of people living in .... I thought they were better than everyone else because they live there (Interview with Participant 11, 13/01/2014).*

Participant 6 also had similar thoughts on the expectations of university. However, in her narration she pointed out that there were lots of expectations but to my surprise she did not openly disclose much of that in her verbatim remarks. For instance, she pointed out that:

*There's lots of expectations, ja, some of the expectations is just everyone telling you it's gonna be hard work and that expectations, you know it also came to be real because you realise oh well, people always told me it was gonna be hard and ... Okay ja ... but really realise but okay it's really harder ja (Interview with Participant 6, 9/12/2013).*

Participant 6 then explained further:

*... nobody ever told you that you are only just a small person in this world, when you go to university, things change a bit and you realise it's not that ... but they say like one of the*

*best and now everyone seemingly is one of the best. So life isn't about being the best, but being the best you can be in your eyes and ja, that's what I think* (Interview with Participant 6, 9/12/2013).

Another participant had similar thoughts about expectations of the university. Participant 7 remarked as follows:

*Obviously I expected it to be a bit difficult than school. So from myself having performed well at school, I knew that it wasn't, I wouldn't expect myself to get the same results I got at school. So I just made sure that I go there and adapt and make sure that I survive before I can think of excelling, but of course I settled well and I started doing well. But ja, in terms of expectations I expected it to be a bit difficult, I also expected fun ... people used to say that at university there's fun, they are having fun. But ja, academic wise I think I expected it to be a bit difficult than it was for me at school* (Interview with Participant 7, 11/12/2013).

As is evident from the responses presented above, most participants expected university to be more difficult [EXP1] or challenging than high school. These participants alluded to the problems of having to adapt, with too much work that demanded that they work hard on their part. Hence, one participant (i.e. Participant 7) cited above further argued that based on the difficulty he expected, he never even expected that he would get the same results as he got at school. Another participant (i.e. Participant 9) cited above also argued that for the past 18 years he never stayed anywhere except at his own home so going away to university, he believed, might require him to adapt a lot.

For participants who raised the issue of university being more difficult [EXP1] than school and involving hard work [EXP2], in the conversations about their expectations of university, one participant came out very strongly on his experience at university. Participant 7 argued that the kind of support [EXP5] that the university provided for first-year students was not sufficient. According to Participant 7, the university needs to find out about students' challenges so that whatever support system that is put in place addressed the needs of first-year students. Apart from that, Participant 7 further argued that for first-year students the language of instruction plays a very important role in learning and teaching and thus affects academic performance. Thus Participant 7 suggested what the university should also do in order to meet the expectations of the first year students.



*I think the support that they provide, particularly to first years; I don't think that they are doing enough. Because I mean first the workload is just ... it is too much; you get to do a lot of work within a short period of time. I think at least there are tutorial sessions but I don't think that they are doing enough for people who are just first years at university, they don't know how the teaching and learning is at the university, they just ... even the language that is sort of used, I mean it's strictly English, there are some students who are really battling, they are sort of afraid in expressing themselves. So I think in terms of the availability of the personnel who can help the students, particularly the first years, I think universities are not doing enough. My university is not doing enough (Interview with Participant 7, 11/12/2013).*

On the other hand, Participant 9 argued that even having those expectations from the university charges the students with the responsibility of learning to adapt. In other words, Participant 9 acknowledged that although university can be difficult [EXP1], as they perceived it to be in their first year, the onus is on the student as an individual and whether he/she is prepared to change so as to adapt accordingly. This is how Participant 9 viewed it:

*You gonna have to learn to adapt, you gonna have to change certain things you know, your mind-set about certain things is gonna have to change, like the study methods and things like that, also might have to change, the way that you approach your work. The big thing for me I had to adapt, I had to learn to change and I had to work hard and another thing which I was worried about was to find the right balance between working hard and still have like time for social things and just to relax as well. I mean if you don't have a balanced lifestyle, then somewhere something is gonna go wrong. My expectation was ... I'm gonna have to change a lot of what I am and I also you know gonna have to work very hard (Interview with Participant 9, 11/12/2013).*

From the data collected, it would seem that the participants expected university to be more difficult [EXP1] than school. They all had this belief in common, whether it emanated from their inner self or from other people.

Interestingly, another participant was very open about sharing her own 'personal' expectations of the university with me. In sharing the same sentiments as the other participants, she stated that she had also expected university to be more difficult [EXP1] than school. Participant 10 expressed her emotions openly on this aspect:

*Freedom of speech which I never had previously, freedom of being myself, because you know when you are yourself your potential even increases. So I felt like wherever I was, like my environment was restricting so I felt as if I go to varsity then I would actually get to explore myself, know myself better, and fully express myself to the people around me without having that fear that someone will judge me or someone will want to change me ... That was my greatest expectation, that's why I couldn't wait to go to varsity, it was for that reason (Interview with Participant 10, 12/12/2013).*

In concluding her narration on the expectations of the university, Participant 10 also gave a picture of what her university looked like and stated that it exceeded her expectations. In other words, she was more than satisfied with the university and its level of operation. According to her, the picture that she had of the university and what one would get from it had motivated her to apply to this university. This is how she reported this:

*Oh! ja, knowing that ... Mercury University offers the best Medicine so that's why I went there. So I wanted to get like the best skills there that's why I went to Mercury University, I applied there because of that reason. So I wanted expert help, like I wanted good lecturers, good resources, so that I acquire good skills and become a very good doctor which my community needs (Interview with Participant 10, 12/12/2013).*

The data collected on the subject, students' expectations of university, presented a 'one-size-fits-all' type of scenario. This is because although participants were studying at different universities in South Africa they all raised common elements relating to their expectations of university, namely, difficulty [EXP1] and hard work [EXP2]. Again, participants were able to indicate that their universities were engaging in some initiatives and trying to support them as first-year students to meet the university expectations by addressing their needs. Only one participant, Participant 7, voiced the concern that his university was not doing enough (in terms of support) for first-year students. In expressing his anger he said,

*So I think in terms of the availability of the personnel who can help the students, particularly the first years, I think universities are not doing enough. My university is not doing enough (Interview with Participant 7, 11/12/2013).*

I believe that Participant 7 knew that the kind of support that his university had in place for first-year students was actually not addressing the needs of first-year students; thus, he concluded that his university was not doing enough.

A different perspective with regard to this issue was provided by Participants 1 and 3, who explained that:

*I expected university to be a walking in the park. Because from past experience I knew myself as a person who does not struggle that much in obtaining good marks. But university proved me wrong. The way, in which you do things and all that, it is different in university level and high school level. But at that time when I started my first year I expected to do these things and expected to get good marks but it was not that easy. I had to put in even extra effort than I thought I would have to put in, in order to meet my expectations (Interview with Participant 1, 10/11/2014).*

*Ja, of course the social life that I expected, I expected a high class social life, of which I'm experiencing it and I'm witnessing it, ja. But the fact that it was gonna be an easy run to study at university is not being met like, I'm realising that that's not the case. You have to work even more harder (Interview with Participant 3, 26/11/2013).*

According to the interview data, both Participants 1's and 3's opinion differed from that of the other participants. Unlike other participants, Participant 1 expected university to be a walk in the park [EXP 6] or, as Participant 3 referred to it, "an easy run". In other words, they expected university to be very easy. However, according to Participant 1 university proved not to be as simple as he thought.

As part of the question on expectations of university, participants were also asked if those expectations were met by the universities. In responding to this question, most participants (i.e. 9 out of the 11) indicated that their expectations were indeed met by the universities. Based on their experiences, this is how some of the participants explained the situation:

*Ja, they did actually meet my expectations, even more like there are other things I didn't even know about before I went there but now that I'm there I see actually [Mercury University] is actually better than I thought, like the resources there, the materials there, it's even very good in research. So, I was like okay maybe I'm gonna grow, not in terms of Medicine only but I could also focus on other things like research, of which could be my interest in the future, ja (Interview with Participant 10, 12/12/2013).*

Participant 10 further explained that:

*Oh ja I have really good lecturers, isn't that I expected people with a lot of skills who are gonna give me skills too. So ja I had very good lecturers and they are very concerned*

*about students and they know that Medicine is not supposed to be easy because we are dealing with the human body and it's a very delicate thing. So I actually ... they did meet my expectations, they offered really good help in terms of study skills and study resources and materials. Okay (Interview with Participant 10, 12/12/2013).*

Participant 10 reported that she had really good lecturers [GL] who were very concerned about the students [CS]. Other participants expressed similarly that their expectations in their first year of study had been met by the universities. However, it is important to highlight that these participants were speaking about different universities although in certain instances some of the participants were from the same university. As they put it:

*Yes, yes they did, it was more work that I was originally told, but it was fun if I can say so, it wasn't always that bad doing it, the homework, and the tasks and the studying for exams it was not always fun but it was ... I knew it would always be fun but so I got so worried, and people told me that the university is like the best time of their life ... for me it very hectic (Interview with Participant 8, 11/12/2013).*

*The course itself was not as hard as I expected it to be. It was manageable. And the people that I met were wonderful. And the residence where I lived I made a lot of new friends that I initially thought I was not going to do. The course was actually quite interesting and it was challenging, I am not going to lie about that but it was not undoable. The university also helped a lot you know. They have a lot of programmes that ease you into the university experience. In my residence we also had mentors - academic mentors that helped us to register for everything, helped us to talk to people and to learn about our courses – what works and what does not work and what books to buy (Interview with Participant 11, 13/01/2014).*

*Sho! Maybe ja, at this stage I don't really think there was ... nothing that I expected that I didn't get (Interview with Participant 9, 11/12/2013).*

*Like I said earlier, to me it proved to be what I expected, but it could also play a role that my sister is older than I and then she told me a lot of how university is going to be and I think that also set the frame in my mind, of how university is going to be and that's why I actually felt that my expectations were met when I came here (Interview with Participant 4, 14/11/2013).*

Participant 5 expressed his satisfaction with the university in a more profound manner.

*Mm, well, before this year I've never stepped my foot at any university. So I did have expectations such as like, well, meeting new people, making friends and that and then like you have issues of focusing, you have to focus on your studies and all that. So I think it did meet all the expectations, well the little expectations I had and more. It had other things I never thought about (Interview with Participant 5, 7/12/2013).*

As these questions related to the main research questions and were also linked to the research title, as a researcher I had to relax and give the participants enough time to narrate their different stories since this study is based on their experiences of first-year university study. Two of the eleven participants, from different universities, indicated that their expectations of university were not fully met. Importantly, this discussion shows how exactly each participant was fair to himself/herself in relating about his/her experience of first-year university and also spelling out different views on different issues. In other words, as a researcher I was not biased because I applied one-on-one type of interviews with all eleven participants in different places and time. Participant 7 clarified his position as follows:

*Academic support as well as I think, on the psychological part of the students, we need to be made to sort of like feel free, but I mean from a person who is from rural areas, going to a big city at university, a world class university it's sort of very difficult to adapt and deal with the workload. So I think they need to provide academic support which I think they are but they are not doing enough as well as ... you know just people who are going to deal with the social aspect of the students (Interview with Participant 7, 11/12/2013).*

In elaborating further on this issue, Participant 7 felt strongly that:

*Sort of like, you know maybe there can be sort of like groups, where students can be taught about university life, the challenges that are there at university and what are the things that ... or the people they can go to if they are facing those challenges because there are a lot of things at university that ... I mean poor students are vulnerable of. So I think we need people who can be there for the students (Interview with Participant 7, 11/12/2013).*

Another participant also attested to what Participant 7 has recounted. This is how Participant 1 argued:

*In our department, especially the Accounting department, there is a rule that the lecturers and the Accounting staff they will play their fifty percent role and then you have to play*

*your fifty percent role. So, the university played its role by providing sufficient and even more than enough resources, you know in creating that environment for me like providing lecturers (Interview with Participant 1, 10/11/2013).*

In elaborating further Participant 1 had this to say:

*Academically, the university is trying but they also need to put in place people who will support students when having other, say social or personal problems. Sometimes the pressure is too much on the side of students and they can't study. So, the university can assist by providing people like Psychologists or counselling professionals. Yes, that will assist a lot I think. These people should be available 24/7 for students to consult (Interview with Participant 1, 10/11/2013).*

I think what the two participants (Participants 1 and 7) stated is critical to the study because it addresses the issue of academic support, which has an impact on academic performance. These participants were concerned about the social welfare of students. I think unlike other students (participants), these participants were very critical in responding to the question hence they thought of students' expectations of university more holistically rather than just considering the most obvious aspects. I could also attach their reasoning to the fact that unlike other participants, these two were more observant of what happened in their universities during their first year of study.

However, with respect to the issue of students' expectations of universities, none of the participants indicated that they had no expectations of the university. While making it clear that they expected university to be difficult [EXP1], some of the participants also explained that their perceptions were as a result of what they had been told about university.

Some of the participants in this study did not hide the fact that they had serious challenges in dealing with the first-year workload. Hence, the proposal made by Participants 1 and 7 that universities should assist students especially in the first year by putting in place some support groups to assist them in dealing with both academic and non-academic issues. These participants were, however, more concerned about the impact that students' welfare issues might have on their academic performance. As part of the discussion, I should mention that the argument raised by Participants 1 and 7 should not be taken as a complaint but should rather lay the foundation for discussions on policy review at universities. In other words, the

information that was shared by the participants should not only benefit the present study but it should also inform policy formulation processes.

I need to mention that almost all the participants indicated that their expectations were met by the universities. Those who had some concerns did acknowledge the efforts made by the universities. This is how Participant 11 expressed her satisfaction with the university:

*I think they met all my expectations. They actually superseded [sic] it* (Interview with Participant 11, 13/01/2014).

#### 5.4.2.2 Top achievers' experiences of teaching and learning in first year university studies

Taking the question of expectations further, participants were asked about the way learning and teaching activities in first-year university met their expectations. In response to the question, participants expressed themselves as if they all belonged to one institution (i.e. university). This made me to realise that I needed to be very careful in each and every interview, so that all the conversations could produce enough qualitative data to assist the study and future research. Despite the fact that the participants came from different, far-flung universities, with different management and policies, they also cited similar factors with regard to learning and teaching activities in the first year. In this study I employed a one-on-one type of interview with participants (who are university students) and I believe that that was the best choice because it did indeed benefit this study positively, owing to the quality and reliability of the data that I obtained from each individual interview conducted. Again, my observation during the interviews was that all participants used the freedom they had to express their feelings or voice their concerns and experiences, and I believe it was the first time they had been given an opportunity to talk about their experiences.

Participant 1 provided his experience of learning and teaching in first-year as follows:

*Yo! It was a very different experience from high school in rural areas. The way teaching happened is different from how we now started to experience it at university. For example they lecture in English. That environment we had to adapt to it in particular to me to be taught in another language. But I eventually managed to cope with that* (Interview with Participant 1, 10/11/2013).

Participant 1 revealed that for him teaching and learning in first year was totally different [TLD] from that of high school. Most participants (9 out of 11) claimed in this regard that the teaching and learning activities in their first year were good [TLG], with sufficient resources

[TLGR], and were thus effective. Whether or not this is true will be attested to by the data collected from the participants. Some of the verbatim narrations of participants are therefore presented below:

*Well to be honest I think it met my expectations in the sense that we got ... the lecturers did a good job, we had enough resources and I got everything that I expected that I was going to get there. One thing that was changing for me was you know the personal relationship with your teacher is a bit more distant, I know like in school I knew all my teachers very well. And I think last year I don't think there was a single lecturer that even knew my name. So that was one thing that was a big adaptation for me. I sort of expected that as well, because everybody sort of told me you gonna realise when you get there, the chances of you just being a number in the system are there. And in a sense I never felt that I was anyway prejudiced by that (Interview with Participant 9, 11/12/2013).*

The latter participant further indicated how he perceived his lecturers in addition to the expectations he had of the teaching and learning activities:

*No, I think I never felt where I written a test or something or I felt like this teacher was very unfair or something went wrong, but obviously that isn't adaptation. Because you know when you get to something and you don't understand or there's a difficult situation around a task if you know the teacher is so much easier to just go to them and explain the situation. And at university that's something that's not really there. So had to go through that ... (Interview with Participant 9, 11/12/2013).*

The above sentiments were supported by Participant 5 who also highlighted that teaching at university was at its best as he illustrated that:

*Well as ... in lower grades like 10, 11, well from high school we heard that at university there's no teaching and learning they just give you stuff then you have to figure that out yourself. But then I realised that that's not the case with the university, well with university in general, because like it's ... I think it's even better at university level because they teach, like there's no relaxation whatsoever. When it's teaching it's teaching and then like they are so disciplined about it, you just don't have a choice but to adapt to that sort of environment. So the teaching and learning I think it's quite effective. It just depends on the individual whether or not he/she wants to do the work or not but then it's quite engaging I would say (Interview with Participant 5, 7/12/2013).*



Similar experiences of teaching and learning were outlined by Participant 11. As she put it:

*The teaching and learning activities I initially thought was going to be much harder than school. I thought it was going to be a very big gap. But it is actually not so. Or it was not so in my case. I did not find it much harder than the subjects in school. The only difference is that in school you are forced to go to class and you are forced to do your homework. But the lectures were stimulating. Not all of them were that stimulating. I found that some of them were quite boring and that classes were harder to attend. It was harder to go to a class where the lecturer just read out of the study-guide you know. You don't want a lecturer like that. But there were a lot of lecturers who were actually passionate about what they did and that for me was wonderful (Interview with Participant 11, 13/01/2014).*

All three participants cited a number of interesting things they experienced in their first year of study. For instance, Participant 5 alluded to the fact that lecturers did a good job, while another participant indicated that “*when it's teaching it's teaching and they are so disciplined about it*”. From the concepts used by these participants in their statements, I think it is proper to believe that participants also attributed their academic performance to good teaching and learning [TLG] in their first year of study. Participant 11 also highlighted the fact that some lectures were stimulating [TSL] though not all of them.

A different version of university teaching and learning meeting the expectations of students was provided by Participant 10. As she put it:

*Jo! Actually they did meet my expectations really well and they even went beyond because there was even this programme, what is it called, IP intervention programme. Jo! That programme scared people, like it scared people because if you didn't do well in your Chemistry and your Physics, you had a chance of being in that programme, it's like you failed but they never want to term it like you failed but no one ever wants to be in that programme. So, there are programmes like that put in place for us, even though we never want to utilise them because, it has this certain stigma behind it. But ja, they actually did try to help us (Interview with Participant 10, 12/12/2013).*

Participant 10 further explained that:

*Ja, they really did try because there's even this lady they used to connect us with as students in the undergraduate office. So, she actually checks people's performances, so if she sees that you're struggling in Chemistry she will send you an email “please come see me in my office” and then she will ask you what the problem is and then she will ask you*

*whether you need a tutor, she will connect you with people, I also did, experts – so there's a lot of Chemistry tutors, Physics tutors, like we have tutors for everything, both on campus and at res and they are available 24/7 like the ones at res you can actually go to their rooms and ask them are you free can you explain this for me, I don't really understand. And there's also a lot of people, maybe who are doing second year or third year who are willing to help. So it was very nice (Interview with Participant 10, 12/12/2013).*

This is an interesting point of reference for other institutions when putting in place support systems that would address the needs of students. While acknowledging that students are always expected to ensure that they perform as expected, this university (i.e. Participant 10's university) did have the interests of students at heart. This means that the issue of students performing as required was emphasised by the university. This academic support by university simply means that students are not alone in efforts of trying to perform as required.

However, two participants (i.e. Participants 4 and 7) argued that teaching and learning in their first year was a big challenge [TLBC]. These participants cited the differences in what they were used to in high school compared to what they were faced with in their first-year at university. The most significant factor that they both lamented on was the teaching style at university [TLTS], which according to them was totally different from school. With some doubts Participant 7 explained that:

*Er, I'm not sure in terms of meeting, but ja it was quite tough for me. In school I was used to like sitting in class and listening to the teacher, but at university I learnt that you don't do it like that. Actually you have to listen and write at the same time which I found to be difficult, but I adapted, but then ja it was tough (Interview with Participant 7, 11/12/2013).*

On the very same account, Participant 4 clarified her position as follows:

*Well I knew that it was going to be very different to school, in school they spoon feed you they tell you, you study chapter one page this to that. Now they give you a textbook and they say know this and in that way I expected it but it was quite difficult to adjust at first because like what we did in Physics, an entire year in matric we finished in a week at varsity. So it was just mind blowing, the amount of work that you had to get through but I think you get used to it ... It's just a matter of setting your mind and being prepared, to work much harder (Interview with Participant 4, 14/11/2013).*

Interestingly, what I found to be common in both participants is that they both acknowledged that they had the worst experiences in teaching and learning activities in their first year but they both concluded the conversation by indicating that though it was difficult they had to adapt to their situation. In context this addresses one of the research questions: how did the Grade 12 top achievers respond to challenges encountered at university?

However, there were other participants who indicated different expectations about first-year teaching and learning. These participants explained how they personally viewed their relationship with the teaching personnel [TLRP] and the nature of this relationship. Another participant expressed her experience as follows:

*Teaching, it was much ... it was not so personal like in school, so it was a bit impersonal and that was not good for me ja. I didn't know, it's quite big change so much about the stuff and ... it makes it interesting to learn. So, you know I like that eventually* (Interview with Participant 6, 9/12/2013).

In contrast to what Participant 6 stated above, Participant 8 had a different story about his experience of teaching and learning. Describing his experience, Participant 8 stated that:

*I was expecting a more unpersonal approach by the lecturers and the tutors but I was pleasantly surprised the teaching personnel and if you go to them you need help they give you help and er! The classrooms were bigger than I thought they would be, and a lot of work* (Interview with Participant 8, 11/12/2013).

In his closing remarks above, Participant 8 reported that his classrooms were bigger [TLCB] than he had expected. I should mention that, in acknowledging this as one of the important areas for this study, I had to ask Participant 8 to elaborate on this issue as he presented it. To my surprise, this is how he put it:

*The biggest classes were around 300 but some class a 100 ... students* (Interview with Participant 8, 11/12/2013).

In essence, what Participant 8 was referring to was overcrowding in classes or lecture halls. It should be mentioned that this issue of big classes [TLCB] was reported by most of the participants. This is also one area of great significance to effective teaching and learning that cannot be overlooked. It was therefore for this reason that I began to be very attentive and observant when the participants talked about class sizes in other interviews. Surprisingly, the

participants shared their experiences of big classes or overcrowded lecture halls without me having to ask or probe.

On the same theme, teaching and learning activities during the first year of university, I was amazed how all participants hinted on the issue of class size. This is one of the common experiences related to teaching and learning at university. My observation during the interviews was that most participants raised this (class size) issue demonstrating feelings of anger. In some participants I could even notice changes in their facial expression, a loss of interest in their talking and running short of words to clearly express their feelings on this issue. As the latter participant stated, *“the classroom were bigger than I thought they would be, and a lot of work”*.

Based on their experiences, different participants had this to say on the issue:

*The lecture hall, ah! Well most classes were like modern and sufficient and I think the one class we're a bit full, at the beginning of the year when everybody started attending lectures, but as the year like developed I mean people started ... I think well basically what happened, I just presumed some people stopped attending lectures ... but in the beginning there were some classes that were very full and then you sometimes had to sit on the stairs or something like that. But that was the only problem that we faced with the lecture halls* (Interview with Participant 9, 11/12/2013).

On that note Participant 9 further clarified the issue as follows:

*Like all the chairs were like full ... About between 400/450 I think* (Interview with Participant 9, 11/12/2013).

One participant was too bored and showed anger when discussing the issue; he could not even give an estimation of the figure; instead he chose to complain that:

*Classroom matters, it's quite big classes like for university, there's hundreds of you there so it's a bit of a challenge to even ask a question with your affluence and all that but then it's ... I think it's ... in the classroom it's engaging because like there are others that do ask questions and then because there's even consultation hours, you can go and consult and then I think that maybe ... that is very helpful because I used it also and then it proved to be quite helpful* (Interview with Participant 5, 7/12/2013).

Again Participant 4 presented her argument:

*(Laugh) There was also a big difference because at first, the first six months we were here on main campus, and there we didn't have a class that had less than 500 students. So it was always ... you were one of many, you were just another one of many and ... like we were Physio and BSc students and Medicine students and so it wasn't really focused on Medicine as much. So often in my first semester I felt a bit bored with the work because a lot of work that I had to do didn't interest me at all (Interview with Participant 4, 14/11/2013).*

Similar sentiments on the issue were shared by Participants 10 and 11:

*Jo! Hai! That's a very different place hey! It's like the teacher just delivers, it's either you listen, you get it or you don't and if you don't it's your duty to go back and actually learn, and the lectures are like 15 minutes, one after the other. So I don't think they help much but it's just that they are there if you have a question you can ask but I don't think they are that significant, they're just there for you to know how much we expect you to know, in what detail and from where to where. So that's just it otherwise. ... Our class is like 220 people (Interview with Participant 10, 12/12/2013).*

*So the largest classes I attended was probably 500 people and the smallest was probably – no actually in my first year all my classes were between 200 and 500 people in a class (Interview with Participant 11, 13/01/2014).*

The class size [TLCB] that the participants complained about ranged between 250 to 800 students in one class. This highlights the significance of the interview question asked here about teaching and learning activities in the first year of university studies. In view of these big class sizes in the first year at university, it is appropriate to ask how the students adjust and become effective in their academic activities so that they succeed as expected.

Seemingly, all participants found the big class size issue [TLCB] disconcerting. Their concern revealed how the universities have compromised the core business of effective learning and teaching. Worse, as one participant (i.e. Participant 9) reported they sometimes had to sit on the stairs because there were no empty chairs. This issue pertains to one of the research questions – how do Grade 12 top achievers develop and maintain academic excellence in their first year at university? In other words, after having performed as they did in Grade 12, how then would these participants develop and maintain excellence in the first

year and beyond. Would their good academic performance continue in the first year? It is an accepted fact that the school environment is totally different from that of university, nevertheless, would students who had experienced classes of 25 at school cope in a lecture hall containing 500 to 800 people in their first year. Therefore, discussions on how class size at university impacted on academic performance unfolded based on the findings of this study. Suffice it to say that this is a serious matter that has to be addressed by the Council on Higher Education (CHE) in assisting institutions of higher learning.

Three other participants also shared their experiences of overcrowded classes. According to them the issue of too many drop-outs in the second semester was because of overcrowded classes. According to these participants (i.e. Participants 5, 7 and 10) this seems to be a mechanism for reducing the number of students in each course. It should be noted that these participants were all at different universities. The most significant issue here, which was raised by Participant 7, is the discrepancy between school marks and university marks [TLMD].

This is how Participant 7 reported the issue:

*It was the things that I've just mentioned, the lack of academic support, you know some students they really failed to deal with the workload, as well as socially, you would find that some students who were not staying at proper residence, so it was quite tough for them. Ja another thing that I think as I said that we need people like who are experts in Psychology to sort of like address us as new comers, because you could find that there are some students who were fooled by I think the results they got at school, you know they said okay well I have got 10 distinctions, I will just keep on doing the way I did at school, just take things lightly I know I can perform, that killed a lot of them, so ja (Interview with Participant 7, 11/12/2013).*

In illustrating how the issue is important, Participant 7 further elaborated that:

*Ja, actually I had a friend who had around 10 distinctions, he was doing 10 subjects at school and ja he dropped out along the way so it was tough. But I think I learnt at university that it's not about how intelligent you are sometimes, it's about how hard do you work, how often do you practice and ja ... (Interview with Participant 7, 11/12/2013).*

In order to fully answer the first research question, participants were also requested to describe their experience of teaching and learning. In response, most participants reported

first year to be a difficult time and the most challenging experience to which they had to adjust. However, the most critical aspects that the participants reported in learning and teaching were the pace of learning and teaching [TLP], first semester teaching not being focused [TLNF], teaching style [TLTS] and workload [TLWL]. Though the participants presented their concerns in different words, the core issues captured in their conversations remain the same. In this case all participants were able to draw a distinction between their high school experiences of learning and teaching and the learning and teaching in their first year at university.

One participant responded sadly, complaining that:

*The pace is quite fast like it's a speed of light, because like you can do one chapter in like three days or so. It's horrible. Well for the first few weeks I struggled, because I think maybe ... it's those problems of adjusting to that level of commitment. I think that's why maybe there are so many drop outs and all that because you now have to be committed to your studies, there's no one pushing you, there's no one after you saying why didn't you study. If you fail they don't care ... you just work hard, you don't become easily demotivated because the first few weeks, ai! the results they didn't ... well some broke into tears but then it's just that because while I was the top ten in Mpumalanga but hey it was ... I just couldn't believe it the first few weeks, 20% marks etc., but then it was the tutorial classes because there were tutorial problems (Interview with Participant 5, 7/12/2013).*

The above sentiments were supported by Participant 1 who also alluded to the pace of teaching in the first year:

*Like I said, I am that person that used to prepare first in order to benefit in class because in my first year, what I found was the pace, the university pace at which teaching happen – for example back in high school days we would take about one month to do one chapter. Now here at tertiary what would happen is that maybe they take a week and then they would be done with that. So the pace was too fast for me (Interview with Participant 1, 10/11/2013).*

What Participant 5 has highlighted above is an important indication of how as a student he took responsibility because the lecturers were also doing their part. Participant 5's response clearly indicates what really contributed to drop-out or non-completion of studies by students. Though this is not central to the objectives of the study, it does shed light on the academic experiences of first-year university students as the research topic suggests.

In addition to what was presented by Participant 5, Participant 8's verbatim remarks are presented below. He stated that:

*From the moment we walked into the classrooms we knew that there would be a lot of work and so it was ... we had to concentrate the entire time in the lecture otherwise you would lose the thread and that's often why we don't know what was going on and then you had to really struggle to catching up afterwards, if you take a lot of work without someone explaining to you how it is put together, but if you concentrated in class you could understand the work and if it's really good presentation (Interview with Participant 8, 11/12/2013).*

In the same interview, Participant 8 further illustrated how he reacted to this kind of situation:

*... the kind of support network, like 10/12 guys studying Mechanical Engineering first year and if you had a problem, not everyone also had the same problem, so someone could help you if you really had a problem and you could help someone who had a problem. And that really helped when you're under a lot of pressure, or have a lot of work and you just won't figure out one thing or so (Interview with Participant 8, 11/12/2013).*

In illustrating his experiences of teaching and learning, Participant 8 shared with me how the support network [TLSN] they had as students benefitted their studies. Heirdsfield et al. (2007) maintain that as students transition, the establishment of social networks is really important. The data indicated that besides having to adjust in their first year, students also needed to acquire some good listening skills so as to move with the pace of the lecturers. The data also showed that participants needed to train themselves to concentrate during lectures.

The teaching style [TLTS] came out as one of the factors that participants had identified as having an impact on teaching and learning since it was done differently at university. This was one of the popular areas of concern for participants. Participant 7 elaborated as follows:

*It's completely different to how it is done at school. The lecturer just comes and it's ... they sort of summarise the whole concepts, so you don't get the profound understanding, the fundamental understanding. So it's something that you have to do yourself. So lecturers are not there to sort of teach at universities, they are just there to help you see the way, but ja you do the job yourself (Interview with Participant 7, 11/12/2013).*

The above sentiments were supported by Participant 3 who also highlighted that at university you are expected to do more. This is how he illustrated it:



*So you are the one who have to put almost like 90% of the work on your own. The lecturers are just there to give you tips as to you need to know this; you need to know that, so like it teaches you responsibility like, you have to be responsible, unlike receiving notes like from my school. Here you have to write your own notes and everything, be responsible, make sure you cover your work and keep up the pace (Interview with Participant 3, 26/11/2013).*

According to Participants 3 and 7, unlike teachers who teach, lecturers are only there to help [TLLH] and not to teach. Participant 3 said that they are just there to give you tips. Thus, both Participants 3 and 7 believed that the rest of the learning work needs to be done by the students. Like all the participants, Participants 3 and 7 also experienced all this for the first time in their first year at university.

The data presented under this topic shows that most of the aspects or areas of concern in teaching and learning raised by the participants were strongly felt in the first semester of their first year of study. Again, significant changes were also experienced in the second semester when the number of students in the lecture halls dropped. This is how Participant 4 reported it:

*But I knew that it was just a transition phase and that Medicine would actually only start in the second semester. And when that started we were only ... our class got reduced to 200 and that's now only Medicine students and Dentistry students which made it a lot easier because then er, all of you were aimed at the same goal and also the lecturers they already became, it became a more personal thing, you were allowed to ask more questions in class and they really made an effort and they also, they keep on referring to things, one day in practice you will see this and one day you will experience this. And that makes it nice for me to be constantly reminded of where I am going. So definitely in second semester when we started on Medical campus, and we started with our Physiology and our Anatomy and things that are real, I was really interested and the whole experience got a lot nicer for me (Interview with Participant 4, 14/11/2013).*

Similar ideas were highlighted by Participant 10 as she voiced her concerns and frustrations. It is worth mentioning here that both participants who alluded to this were doing the same degree although at different universities.

*The reason why maybe I couldn't actually grasp a lot of things and certain concepts easily is because I felt like everything was just scattered everywhere, nothing actually made sense, maybe until second semester, towards the end though it was starting to seem to*

*make sense and it was not related to Medicine whatsoever. I felt like I was doing some degree in Chemistry or Physics of which I didn't see the significance of such but they would tell us "ja you know Physics, you still need to do Physics because it makes people like you not to be here next year". So like really so they're using it to eliminate us. So I was like okay I'm just gonna make sure that I pass through this phase of my life (Interview with Participant 10, 12/12/2013).*

However, two participants from different universities responded differently from the other participants to the question on experience in teaching and learning in first year at university. Although these participants also shared the same sentiments with other participants, that is, hard [TLH], a lot of self-work [TLWS] and self-study [TLSS] and a heavy workload [TLMWL], they nevertheless differed in other respects.

This is how Participant 9 argued his points:

*For me it took some adaptation but I got to a point where I actually started enjoying that also, because sometimes in school I was a bit bored ... I got sometimes, a bit agitated ... While at university I sort of enjoy that when it sometimes get to a point where they give you the work, they explain it thoroughly and then they leave you to do the work. And I enjoyed that because then I will rather start doing the work on my own than sit in a classroom where I have to listen to somebody explaining something that I already know and it just sort of annoying ... I feel that wastes my time a bit, so ... My experience was a very positive one in the sense where it has a bit less teaching and a bit more learning, if I can say it in that way. For me that was a very positive ... (Interview with Participant 9, 11/12/2013).*

Nonetheless, the concept of experience does allow for the stating of individual thoughts, views and feelings about any aspect. Generally, there seemed to be some consensus on the transition from high school to university in as far as teaching and learning is concerned. Some of the participants, as illustrated by their narrations, argued that university teaching and learning especially in first-year was different from high school. For example, participants argued that at university the workload increased and they were expected to work. They voiced their concern as follows:

*Jo! It was hard ... the teaching was good, they're really good at teaching us and providing the necessary skills, it's just that switching from high school to varsity was jo! was just hard, because the workload just suddenly increased and they expect you to be up to scratch*

*with your work and it seems they expect us to work ... they think we have a lot of time and you still want to study the way you studied in high school, going over everything, taking the whole day but you should just do it fast, so that you get the overall concept, ja. It was very challenging but it was doable though (Interview with Participant 10, 12/12/2013).*

*I don't think you can make it compare because in school you don't have so much work. ... I think maybe the technology and that sort of part of teaching in university is much better because they've used projectors in everything you can get afterwards on website, so it makes it much more easy say so if you miss a lecture ... you don't need to go out and ask the teacher and then you don't have stress and all that stuff so that one is much better (Interview with Participant 6, 9/12/2013).*

Although the most participants found it really hard, others found the main challenge to be solely the workload [TLWL] that they had in the first year of study. In order to express her experience clearly, Participant 6 stated that one cannot compare first-year university with high school because at school the work was far less. According to these participants the issue of a heavy workload [TLMWL] made adjusting to the first year difficult for them. Another participant indicated that although difficult, teaching and learning at university is far better or more advanced [TLAV] than at school because they rely on technology to make their teaching activities easy.

#### 5.4.2.3 Students' adjustment from matric to first year university

This section also attempts to answer one of the research questions, namely, what are the perceptions and expectations of Grade 12 top achievers of first-year university teaching and learning? In other words, the question seeks to investigate the perceptions of the participants on first-year university. Again, part of the question is answered by the participants' responses to their adjustment from matric to first-year university. If, for instance, their adjustment to first year was a big challenge to them, their reaction or behaviour thereafter would provide enough information as to how they responded to those challenges.

Almost all the participants indicated that their adjustment from matric to first year was very difficult [FYAVD]. Although these participants all voiced difficulty in adjusting from matric to first year, but they all cited different factors that made it difficult for them to adjust. According to Participant 11, adjustment from high school to university took her quite some time. The reason that she gave for this was that at first she was homesick [FYAHS]. This is how she explained it:

*It took me quite a while to adjust and to find my feet. So I think that is a big adjustment because you have to start all over again. You have to make new friends again. But I think the first few months were quite hard because I was away from home so I was quite homesick (Interview with Participant 11, 13/01/2014).*

This is how another participant explained:

*Mm, ja, that was a very rather difficult transition because like I ... moving from high school to varsity it's just a challenge, it's a different environment like you meet different kinds of people you know, you try to fit in here and there, and you try to make friends because like, you just choose what you want to do and then that's where I think maybe most students sort of lose it because now they think that if you have the freedom then you can do all kinds of silly things (Interview with Participant 5, 7/12/2013).*

According to Participant 5, as a student you have freedom of choice [FYAFC] in what you want to do and it is up to the individual as to how one uses this freedom. In the same interview the participant further argued that though one cannot only focus on academic life only, as a student one does need to prioritise at all time. He (Participant 5) illustrated this by arguing that:

*So, but then in a way I would say, within a one dimensional life, where will you find that you are only focused on your academics. Well it's a good thing if you realise that your life should be around academics, but then I would say maybe you tend to be open to other things, well not everything because like there's everything. So you just choose what works for you and then you just chill and relax with that which works for you, then you just try not to waste your time, it's about that (Interview with Participant 5, 7/12/2013).*

What Participant 5 said is no different from the other participants' argument on the matter and they share the same sentiments. This is how Participant 10 expressed her emotions on the issue:

*That was hard, the adjustment was very hard. And I felt like it was just too sudden, ja I wasn't ready for that adjustment. I felt like I had to grow in terms of everything in my life, all spheres of my life, spiritually, physically, mentally, like I just had to grow so fast and I wasn't actually given an opportunity to actually grow on my own, at my own pace, I just had to grow very fast, everything just seemed very fast (Interview with Participant 10, 12/12/2013).*

A similar experience was shared by Participant 6 as she reported that:

*Sho! it was quite difficult I think, I mean ... alone there and you suddenly have freedom of choosing to go to class, choosing to do your work, choosing to buy a textbook and some stuff and sometimes it's difficult when people say to you okay right we going to be socialising for hours so you can't go, you don't have classes from 8 until 2 or something, you have a number of period or class and tutorials sometimes, that was also very difficult because when you get very busy with something and then say oh I never go to class and that's worse. But it's so much easier to go and have coffee between breaks so ja I think, and in school you have class from 8 to 2 and is non-negotiable. So that was an adjustment there (Interview with Participant 6, 9/12/2013).*

The issue on the freedom of choice [FYAFC], which was raised by Participant 5 earlier on in this section, is re-emphasised by Participant 6. According to Participant 6 the university presents students with the freedom to decide what is best for them. Without doubt, the different challenges participants encountered in adjusting from matric to first year did affect their academic performance in one way or another. This therefore could also account for the academic performance of participants especially in the first year.

Participants 1 and 7 also explained how difficult it was for them to adjust from matric to first year:

*It was difficult for me to adjust because of the environment itself. It is a very different environment from the high school environment. And the workload was one of the things that was difficult to adapt to. It was difficult to cope. It took me quite a long time to adapt. And adapting for me was more trying to create time and changing my patterns of life. For example; I ... maybe have less time chilling out with friends, maybe cutting out some more of my sleeping hours. That was how I had to adapt in order to cope, because maybe in high school, even if I sleep for 10 hours I could still maybe use 4 hours to study for that small amount of work we have in school when you compare it to varsity workload (Interview with Participant 1, 10/11/2013).*

*Er, it wasn't easy for me but I think it was ... because one of the things that is ... I think it plays a huge factor in terms of how do you adjust and how will your performance be, we are influenced at university (Interview with Participant 7, 11/12/2013).*

Participant 3 could not express himself the way he wanted to during the interview. This then demonstrated how this had been a challenge for him:

*The thing is like you don't specifically adjust because you don't have a strategy of adjusting. ... there's also seniors and the mentors, because there's a mentorship programme at residence, where like third years and fourth years they are assigned to sort of like mentees that they work on them ja* (Interview with Participant 3, 26/11/2013).

Again, another participant added that:

*Well I think the first month or two I worked very hard to be honest, like just to get used to everything* (Interview with Participant 9, 11/12/2013).

The narrations of the participants clearly illustrate that success or failure in terms of their academic performance was dependent on their actions or reaction regarding the challenges they encountered in their first year. In other words, if participants were willing or able to address those challenges and came up with the best mechanisms to address them, then they would have prepared themselves academically to sustain excellent performance. This then suggests that if students experience academic challenges and they are not attended to the chances of them performing as required become very slim. Both Participants 1 and 7 reported that their adjustment to first year at university was difficult for them (FYAD). Moreover, Participant 1 also argued that the workload [FYAWL] made it difficult to adapt.

Interestingly, when the participants responded to the issue of adjustment to first year, they not only cited the challenges or rather how challenging it was, but they also were able to indicate how they dealt with those challenges to ensure that their academic performance was not compromised. Therefore, Participant 8 stated that:

*... we had to study late into the night, I mean you have class from 7:30 to 5, so we had to really do much more planning, plan time much better otherwise you would end up with not enough time to study and complete your task and you had to work until 2 in the morning just in order to be successful ... I tried to sleep more when I had time off, how can I say during lunch, otherwise I can't concentrate in the afternoon classes. Usually we stayed until about 12, studying or whatever, and get up at 7, so the sleeping also changed, at school I got up at 5:30 and went to school and sleep around 10, I sleep about the same hours but just the times changed a bit* (Interview with Participant 8, 11/12/2013).

Participant 8 highlighted how important it was to manage time so as to be able to adjust to the demands of the university. Although the majority of the participants that I interviewed cited the issue of being overloaded in first year as their challenge, Participant 8 provided some

solutions to the problem as he had experienced it. According to Participant 8, time management [FYATM] is key to all student's activities. Besides the academic side that Participant 8 addressed in his story, other participants also gave their own interpretation of the situation as they had experienced it in their first year. Another participant stated that:

*I don't know, even in terms of my studies I had to make sure that I'm the one who becomes responsible, my mum doesn't check up on me every day, wake me up at night maybe sometimes, so I had to rely on my alarm and make sure that when it rings I wake up I do not snooze it. And in terms of maybe my social life, I had to make sure that I limit my friends, "no do not come to my room maybe at 10 because at 10 I'm studying". So ja I had to be very ... like I had to be independent which is something I was not used to. I was used to being told, do that do that, don't do it like this, ja. So it was very hard (Interview with Participant 10, 12/12/2013).*

This is similar to what Participant 7 reported:

*... is the fact that you have to choose good people to hang around with, people who are focused, people who are dedicated, people whom you have the common goal with and that is succeeding at university. So ja I made sure that I choose the right people which was a challenge but I chose the right people and ja making use of the services/resources that are available at university, ja the academic support that they offer ja, I think those things really made me to adapt (Interview with Participant 7, 11/12/2013).*

Choosing and also limiting friends [FYACF] so as to adjust to the demands of the first year at university is what the two participants clearly pointed out. Importantly, Participant 7 believed that choosing good people [FYACGP], who are dedicated [FYADP], have a common goal [FYACG] and who are succeeding at university helps to perform better. In his opinion one cannot just mix with all types of people and expect to succeed academically. This then addresses the theoretical framework of this study, that people can attribute performance to different variables. Thus, according to attribution theory, friends form part of the category of external factors that contribute to success.

Other things that proved to be working when adjusting to first year at university are those identified by Participant 9 in his experiences of first year. Like Participant 7, Participant 9 believed that at university there are people that one can rely on for support [FYAS] in trying to adjust to first year. According to Participant 9, these might include people in your class. I think from Participant 7's point of view the people he was referring to were those with

common goals. This suggests that, according to these two participants, it does not matter at which level the person might be, as long as she/he can be of assistance. In other words, that particular person is part of the university support system. The participant's argument in this regard clearly articulated the following:

*We had specific mentors assigned to us, like if I didn't understand something I struggled with, his door is always open so I could go to him. He helped me a lot with that. And also I think relationships with people in class with me that also helped me a lot to adapt because I mean we're all in the same position at that stage and well motivating each other and just going through the work with each other and explaining it with each other. So I think that relationship, hard work and just people around you that have been there that could be able to help you (Interview with Participant 9, 11/12/2013).*

Although almost all the participants indicated how difficult it was for them to adjust to first year, one participant stated that she did not find it difficult to adjust. This might be associated with a number of factors that the participant narrated during the conversation. In telling her story of how she adjusted from matric to first-year university, this is what Participant 4 had to say:

*For me it wasn't that difficult because I think having an older sibling that did all of that before you did it plays an immense role because they can prepare you for two years, my sister is two years older than I, she could prepare me for what was waiting for me. I mean she helped me learn to drive in the city, she helped me get to know this campus, she took me and we walked this campus. That was one of the most important things and then also ... I mean all first years are on the same boat, nobody knows what's going on, everybody is confused. So I got a good group of friends, right from the word go. So that in the first few weeks I had already established friendships and that helps a lot. If someone is new for everyone you tend to survive easier (Interview with Participant 4, 14/11/2013).*

It is clear that Participant 4 did not find it particularly difficult to adjust; she was supported by somebody in the form of her 'forerunner'. Participant 4 was exceptional in this case because her sister (sibling) [FYASS] helped her with all university-related issues. Accordingly, the next question that might crop is "what about those students who did not have older siblings to assist them?" The data presented by the participants provided evidence that suggests that in the first year at university, students really do need somebody to 'show them the ropes' so that they can adjust easily. Participant 4 also noticed that "everybody is



*confused*” in first year, though she had somebody by her side. Besides all the negative things that she observed, the participant had this to say about educational matters in general:

*And then on education based things, I personally think that the education that I got in matric was good enough to prepare me for university. I didn't ever feel that they didn't teach me enough in school and now I'm thrown in at the deep end. The only big thing is that it's a lot more work, but the content of the work is not that difficult is just higher ... and school prepares you for it* (Interview with Participant 4, 14/11/2013).

It is of interest to note that the Mpumalanga Department of Education's role in education is acknowledged. This is based on the idea that was expressed by Participant 4. According to Participant 4, her objectives of having attended school were realised at university. This then proves that the education that the top achievers got in Mpumalanga Province adequately prepared many students for their new roles and responsibilities at university. This is well illustrated by Participant 4's remark that, *“the education that I got in matric was good enough to prepare me for university”*. Consequently, the data obtained from this theme would also assist in answering the third research question, namely, how do Grade 12 top achievers develop and maintain academic excellence in their first year at university?

#### 5.4.2.4 Students' roles and responsibilities in the first year at university

This section provides data to answer the main research question: What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning? In other words, the perceptions that the participants have of the university would then influence their understanding of their roles and responsibilities. Similarly, if the participants had wrong perceptions about university teaching and learning, the chances are they would not be in a position to fulfil their own responsibilities.

In responding to the question, namely, what they thought were their roles and responsibilities as first-year university students, the participants listed different aspects. These aspects emanated from the participants' perceptions, experiences and understanding. However, some of the participants could not distinguish between roles and responsibilities and merely listed ideas as they came into their mind.

From the interview data collected, I then went through each participant's narration in order to pick up what they believed or knew to be their roles and responsibilities. For university students to know and understand their roles and responsibilities as first years is very

significant, and is critical in determining the factors for academic performance. It could be that knowing their roles and responsibilities might assist participants as students to a great extent in realising the actual expectations universities have of university students. In other words, participants would do as required or expected if they have individually identified and defined their roles and responsibilities.

What came to be most interesting about the issue of the roles and responsibilities of students are the beliefs stated by the participants during the conversations. Most participants, if not all, listed studying hard [SRRSH] as their most important responsibility at university. For example, some of the participants explained that:

*Responsibility is just to study, to study as well as you can and definitely to pass your degree or your first year, because it is a difficult year for everyone, because you are still finding your feet (Interview with Participant 11, 13/01/2014).*

*My responsibility is to study hard, that is my most important responsibility in my eyes, and in the hostel we have certain roles ... responsibilities but I think that's on second route to university. As a student you should just study and pass that is the most biggest responsibility (Interview with Participant 8, 11/12/2013).*

*... the responsibility to pass all the subjects and to do well because you have the opportunity above so many other students to study and graduate, if you don't use that opportunity it will be too late to realise ja. And you have the responsibility to make sure you can still enjoy life because it's one thing to have to walk out of a place with a degree and as a person that still happy (Interview with Participant 6, 9/12/2014).*

Still on the very same issue of students' roles and responsibilities, Participant 9 also attested to what Participants 6 and 8 had alluded to in their narration.

*I mean if you go out to university and you don't study hard enough, you don't work hard enough you just play all the time, I mean you can miss the opportunity of a lifetime to have ... you know to provide for your family one day, to be able to have a steady job, to have a steady life and future. So I think you have to realise that university can change your whole life if you take the right decisions, if you work hard enough, if you get a good qualification it can provide you with a stable life for the rest of your life. So I think as a first year, obviously your role is to realise that it's a huge opportunity and with that opportunity comes responsibility that you have to take and by that I don't think it's ... you don't have to enjoy yourself (Interview with Participant 9, 11/12/2013).*

In a more profound manner, Participant 3 alluded to taking active steps to studying [SRRIS] as a key responsibility. This is how Participant 3 elaborated:

*My responsibility is for me not to succumb to peer pressure and negative influences from friends and all my other colleagues in the class. And it's also to remember what my parents have always been telling me and also to take active steps into studying, there's much active learning rather than passive learning here at university. So I must take active steps to my studies, make sure I'm always on time, I prepare my study time-table and everything, I shouldn't wait for someone to tell me because actually there's no one to tell me. And I'm also responsible for not like putting negative influences on my other colleagues (Interview with Participant 3, 26/11/2013).*

It is of interest to note that Participant 3 was aware of the fact that peer pressure [SRRIPP] need not make students lose focus on their studies. Another version of the roles and responsibilities of first-year university students is given by Participant 5. Like Participant 9, Participant 5, also seemingly had the same understanding and belief on the issue of roles and responsibilities. This is based on his lengthy argument presented as follows:

*... your responsibility it would be to do your own part, do your work, never to rely on anyone. You can't rely on the lecturers because they only touch on certain parts of the work, so your responsibility is to dig deeper than they did because they know the work, so they try and explain it in their own understanding, so their understanding might be different to yours. So you ask if you don't understand because I believe that maybe they do realise that you pay to be there so they ought to give you all the support that you need. But then you do your part, that's what stands out. If you don't do your part then it's a problem because blaming it on others you will never find a solution to your own problem (Interview with Participant 5, 7/12/2013).*

It should be pointed out that almost all the participants realised that as students they had a responsibility to do their work and not to expect everything from their lecturers. This is based on what, for example, Participants 5, 8 and 9 have already illustrated above in their responses to the interview question. To supplement this position, Participant 4 stated that:

*... also because the lecturers aren't like teachers at school, you have to decide what work are you going to do today and when are you going to be studying, what they not gonna tell you exactly how, you have to do your own summaries and that way I became a lot more independent in my studying as well. And also you have to be responsible in coming,*

*attending classes, handing in your projects in on time, keeping quiet in class (Interview with Participant 4, 14/11/2013).*

Almost all the participants believed that as students they had the greatest responsibility in ensuring that their academic work was done as expected by the university. Worth mentioning here is the fact that participants are well aware that university is totally different from high school. Hence, in their narrations, they all attest to the fact that although as university students they sometimes expected lecturers to do everything for them, they instead need to be ‘self-reliant’ at all costs. According to the data obtained from the interviews, participants insisted that it was their responsibility to assist other people and other students [SRRAS]. This is how one participant reported it:

*Well it's mostly ... I went to my school, I had to talk with the Grade 12s, and then I also went to another school in the community, a high school to also talk to the Grade 12s. But then that was the first few weeks after I was recognised by the province. So it's just a responsibility, I think it's a responsibility for me to remain strong and just show that it's possible, show it to others that it's possible to do it even at varsity and all that (Interview with Participant 5, 7/12/2013).*

The above sentiments were supported by Participant 1, who alluded to the support that he is responsible for:

*So my role would be to be a student amongst students. And then another thing is that as a first year back in high school there are also Grade 12s who will next year get into this situation so how do I go back and see to it that we help them in a way that is necessary in a way to see to it that they also get a chance to come to university (Interview with Participant 1, 10/11/2013).*

Another participant who shared these sentiments is Participant 4. I found this to be very helpful as far as support systems were concerned. To me, this demonstrates maturity and the pastoral roles that the participants assumed. Participant 4 illustrated her responsibility when declaring that:

*... and then also for me it's important now that I'm a bit older, now that I am second year, that I thought that it was my responsibility as well to help and support the younger students. For example, first year students in Medicine, just helping them, assisting them if they have questions that they can come to me and then I help them a lot. So I think that's also one of the responsibilities that you have (Interview with Participant 4, 14/11/2013).*

I consider students in Participant 1's and Participant 5's respective communities and in Participant 4's university to be fortunate, because they were all of the opinion that assisting students [SRRAS] was their responsibility. In fact, having their own challenges at university, most students would not make themselves available to help other students, citing not enough time or a too heavy workload on their side. However, Participant 5 also shared with me how he succeeded in this commitment without any pressure being felt. This is how Participant 5 viewed the matter:

*Then I think the roles that you play, it depends maybe in which sense, well for me the roles that I think I had to play was to display a positive attitude towards everything that I did, to be positive that's my role. And then in my community, it was my role to also motivate other people to also not be discouraged ... (Interview with Participant 5, 7/12/2013).*

Besides studying hard, the participants also mentioned attending classes, seeking help from tutors or any available senior, being disciplined and offering your help or support to younger students as some of the crucial responsibilities they have as university students.

Generally, all the participants felt that their main responsibility was that of studying to ensure that they do obtain their degrees. Other participants also indicated that by virtue of being senior students they also had a serious responsibility to assist those who are still in Grade 12 in order for them to perform as required in matric. In other words, these participants believed that they also have a responsibility to their respective communities.

#### 5.4.2.5 The roles and responsibilities of the university

In response to the question on what participants believe are the roles and responsibilities of the university, participants cited a number of aspects. Participants stated that the universities owe students many services that can positively contribute to their academic achievement, especially in the first year of study. Some of the common roles and responsibilities mentioned included the following: provide support systems, provide good lecturers, provide sufficient necessary resources, and teach students in order for them to obtain a degree or succeed in their studies. Indeed, what the participants cited as the roles and responsibilities of universities emanated from their perceptions on university especially as first-year students.

Below is a list of the roles and responsibilities of the university provided by the participants during the interviews. For the purposes of this study, I felt that it was important to draw up

such a list so as to identify the similarities in the data presented by participants. This list appears in Table 5.3 below.

Table 5.3: Summary of the roles and responsibilities of the university

Participant	Roles and responsibilities of the university
Participant 1	The university should understand that people come from different walks of life and different environments. The university has a role to play in induction, orientating students, and providing facilities such as medical services, security services and psychological services. Should also make sure that its staff is highly competent.
Participant 2	To make sure that all the first-years pass their exams in time and for all the modules. To provide more psychologists on campus to help first-years in particular to conquer their negative influences.
Participant 3	The university should give access to internet to all people, provide access to libraries – books are few and there are too many students, provide support to first-year students, provide first-year experience programmes, advise first-year students on how to cope with university life.
Participant 4	Make first-year students feel at home, provide study guides, tell students what is expected of them, campus must safe when you walking around or parking your car.
Participant 5	Support students, give extra lessons, teach students, organise career exhibitions, provide different facilities.
Participant 6	Give students material, give feedback to students, lecturers to explain to students how marks were allocated in a test or essay.
Participant 7	Maintain students, create a welcoming environment for students, make students feel free, support students, ensure adaptation to learning and teaching at university, ensure safety, help students cooperate with the university
Participant 8	Provide guidance, experienced and motivated personnel who are able to teach, and extra activities, act like a teacher, and be of assistance in students' social life.
Participant 9	Provide students with opportunities, ensure students get their degrees, help students pass subjects, provide enough materials, give good lectures, provide a study-friendly environment, provide an adequate study environment, expose students to workplace-for practise, career exposure.
Participant 10	Ensure students acquire necessary skills, provide resources, monitor students' progress, provide support to students, make follow ups on students, maintain students, and have an interest on students' studies.
Participant 11	University has to provide the work in an accessible way, lectures should be interesting and challenging, provide good lecturers. Their role is to facilitate effective classes, effective learning mediums, make people feel comfortable to give their opinion.

What emanates from the list above is that each participant has given what he/she thought were the roles and responsibilities of the university according to his/her expectations of university. In terms of this study, this section also provides answers to the first main research question, namely, what are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?

Besides having cited the roles and responsibilities of universities, some of the participants were able to further elaborate on the aspects they mentioned. This then allowed them to openly reveal their different perceptions on the university, especially in the first year of study.

Participant 8 then elaborated on the roles and responsibilities of university according to his expectations as follows:

*I think the responsibilities like they should give you guidance, experienced, motivated personnel that are able to teach you what you need to know. Also like schools ... I think also they should provide extra activities outside of the studying environment, I think it's good for the brain, doing things other than studying and considering social life ... they must act like a teacher (Interview with Participant 8, 11/12/2013).*

In the same interview, Participant 8 further argued that:

*They know what is best for the students I believe, so they have to monitor the situation and ... there are activities that a university like, inter-varsity competing each other in rugby, or tennis, sports, I think it's good for them to monitor and support ja (Interview with Participant 8, 11/12/2013).*

The responses presented by Participant 8 show that the university that he came from was doing its part academically but what he wanted was for the university to also take responsibility for extracurricular activities [URRECA] (i.e. activities outside of the studying environment). In other words, the university needs to balance its responsibilities between academic and non-academic activities.

The issue of having to strive for the balanced development of students at university is expressed by those participants who I think had thought about it for a while but had never had a chance to speak about it. These participants believed in the holistic development of students at university. Participant 9 presented his argument in this regard as follows:

*You get a lot of theory from the university, and the theory and the practice sometimes differ a lot and I think another thing is the university needs to give you opportunities where you can learn and go places where you can practice the theory. ... and also I think another important role is to help the university students, to give them opportunities to go into the work, like just places where they can meet with future or maybe possible employers, just like open days where different companies can come and can like advertise themselves. I*

*think they should provide a platform for students to get into the workplace. I think that's also another important role for the university (Interview with Participant 9, 11/12/2013).*

The two participants admitted that although the universities are trying in other spheres (e.g. academic), they should also try to balance all spheres. Academically, students might be educated by the theory presented in class, but the challenge would be applying this theory in the workplace. Hence, according to Participant 9, the university should take responsibility for ensuring that students are exposed to the workplace [URRWPE] which is not only theory oriented.

Seemingly, the data also show that participants were satisfied with the responsibilities of the university academically. In other words, academically there were no serious gaps that participants noticed at their universities. Indeed, there were a number of participants who believed that their universities did carry out their responsibilities academically. In acknowledging the work that the university was doing, Participant 5 expressed his views on the issue as:

*... but then the university I think maybe it's doing its part, well maybe there's some things here and there ... I can't think of any because there's enough support, they just teach you what they can and then you have to do the work on your own to understand. That's it. I think it's doing its part (Interview with Participant 5, 7/12/2013).*

In acknowledging that things were running well academically, another participant painted a positive picture of his university. Like Participant 5, Participant 7 stated that his university was doing quite well academically. Participant 7's verbatim remarks below clearly explain his story:

*... also I think what I can mention from my university that they are doing good, they are also asking for feedback from the students themselves. We assess our lecturers, tutors, even the course itself, how is it presented, how do we relate to it and ja, they offer us that opportunity. Ja, I think that is something that is their responsibility to actually know how and what their students want from them (Interview with Participant 7, 11/12/2013).*

Interestingly, the data presented show how the university [Neptune University] at which Participant 7 studied did take responsibility. Having students assess lecturers [URRSAL] or tutors [URRSAT] and even the course [URRSAC] itself and providing the university with the feedback convinced me that the university knew what was expected of it and had the



students' interests at heart. Worthy of note is the finding that this critical aspect was only reported by one participant (i.e. Participant 7). I also believe that this data has offered helpful information to assist other universities in establishing their roles and responsibilities and putting them into practice. Most importantly, I think this might also assist in policy development and ownership of those policies. This (students' assessment of teaching) is an impressive practice especially thinking of how South Africa is rated among countries of the world in terms of the standard of education.

On the same note, Participant 6 provided her own interpretation of the situation at her university; the most critical aspect being that the university has a responsibility to provide students with the material they need for their studies [URRPM]. Participant 6 argued that:

*I think they have the responsibility to give you all the material that they promised because that is the information that you need to study and sometimes you can't remember all things they only told you. ... the university also the lecturers must give you feedback but they don't always do it. Again, I've got the responsibility to gain all the important subjects. The university and lecturers also has the responsibility to explain to you where marks come from and why they don't always give in exam papers (Interview with Participant 6, 9/12/2013).*

Based on the narrations above, the issue of giving feedback to students was emphasised by some of the participants. Participant 7 also highlighted this issue, though in his case the university was doing well in seeking feedback from students.

An important aspect stated by both Participant 6 and Participant 4 relates to universities and lecturers required to present students with documents that explain explicitly what is expected of students [URRCE]. In other words, all information that students might need should be clearly spelt out so that they can refer to it at any time. With regard to this issue, Participant 4 argued that:

*I think the most important thing that the university has to do is to make their first year students feel at home, but they do a good job with the orientation week and also in ... when you start classes the first time that they really tell you, give you a study guide which clearly states when your tests are, which components are and which tests and things like that. But that's very important because every student wants to know what's expected of him or her and then of course the campus has to be safe. You have to feel safe walking around. You have to feel safe parking your car (Interview with Participant 4, 14/11/2013).*

According to Participant 4, her university was doing a good job on the orientation week for first-year students. It is worth mentioning that she acknowledged that the study guide the students were provided with when they started attending classes really did assist them in knowing when the tests would be written and what aspects would be covered. Interestingly, the issue of students' safety [URRSS] around the university campus was also cited as one of the main responsibilities of the university.

In the same interview Participant 4 elaborated further on the issue of the roles and responsibilities of the university. Like other participants who had earlier on cited providing good [URRPGL], competent lecturers [URRPCL] who are able to teach as the responsibility of the university, Participant 4 also attested to this during the interview. As she pointed out:

*Well academic responsibilities I feel that they obviously have to have competent lecturers that know what they are talking about and they also know how to portray this information to the students and how to give a good lecture. That's one very important thing. And then also the lecturers have to be approachable so that if you have a problem, that you have a phone number or an email address or you know where to find them to ask a question (Interview with Participant 4, 14/11/2013).*

What is more important, according to Participant 4, is the university providing competent lecturers who can deliver good lectures to students. Again, Participant 4 felt that as students they need lecturers who are always available to their students.

In addition to all the important issues raised by the participants, Participant 11 saw it as critically important to ensure that the universities provide their students with opportunities [URRPSO] to raise serious university issues. In a more profound manner Participant 11 advised that:

*And also be institutions to make people feel comfortable enough to give their opinion to relevant parties so as to make a difference. And I think if they can facilitate that then they are a successful university. If they can make us challenge things that can make a difference (Interview with Participant 11, 13/01/2014).*

According to Participant 3, universities need to do more in ensuring that first-year students integrate into the universities. According to his verbatim remarks there is still a lot that should be done:

*But I think the university needs to incorporate, like needs to put more emphasis on advising like first year learners, like doing first year experience programmes, advising first year learners how to cope with university life. I think the university is not doing much of that. They need to do much of that* (Interview with Participant 3, 26/11/2013).

In the same interview Participant 3 elaborated further that:

*But besides giving all the resources that you need, all the catering and all the accommodation and stuff, no the university is performing it's role, but I think that they need to sort of like support the first year students even more than what they are doing because like most of the first years they are getting lost not because they are not intelligent in class, not because they don't know like their work, but is just because they are just naïve ., they don't know like how to live university life, managing yourself and your school work* (Interview with Participant 3, 26/11/2013).

What Participant 3 raised here is critically important. The first-year programmes that Participant 3 suggested above indicate that there is a dire need for support during the first year at university.

#### 5.4.2.6 Top achievers' adjustment from the first year to the second year of study.

It should be noted that this section only deals with the perceptions and experiences of participants who were already in their second year of study at the time of the interview. These are the students who matriculated in 2011 and had already completed their first year of study when the data collection process of the current study began. These participants were of particular benefit to the current study because, having already completed their first year of study, they had more experience of their universities and their studies, thus increasing the value and quality of information and knowledge they would share for the purposes of this study.

In exploring the perceptions of these Grade 12 top achievers, as per the first research question, participants were also asked how they adjusted from the first to the second year of study at university. Fortunately, participants were able to distinguish between their experiences in the first year and the second year of study. These participants regarded the unstructured curriculum in the first year as one of the main causes (or contributing factor) of first-year confusion, making adaptation even more difficult.

Most participants (7 out of 11 were second-year students at the time of data collection) experienced a shift in perspective from the first to the second year of study. Speaking enthusiastically, one participant reflected that “*second year was really nice*”. She (Participant 10) also indicated that she was getting used to the workload [SYAWLN]. To illustrate the point, she stated that:

*I love second year, jo! second year was really nice. I think I'm getting used to the workload, I'm becoming more strategic in terms of my studying, because there are some things that you don't actually have to spend so much time studying, and you can study them in other ways. So ja I can prioritise my courses because I have a lot, you know second year had a lot of small courses in one course. So ja, I actually balance out a lot of things now. I can actually afford myself good sleep after I have studied. So I think ja, second year was not as bad as first year. I think it was way better, I would actually have started with second year then went to first year (Interview with Participant 10, 12/12/2013).*

According to the narration above, Participant 10 really loved the second year of her studies and found her second year much better than her first year. One of the reasons that Participants 10 cited for her love of second year, among others, was that her second year was more meaningful [SYAMM]. In other words, unlike first year, second year was more focused on the degree that she was studying. Participant 10 further explained that:

*Eish! Second year is so meaningful. It's so meaningful. Everything just makes sense, everything starts to become Medicine, like you start to discover a lot of interesting things, and a lot of my medical questions I always had when I was growing up. I was starting to be answered and everything just clicks together like, it just clicks together like a puzzle, ja, second year is very interesting, very interesting. I feel like I just started studying Medicine this year. Last year was just play (Interview with Participant 10, 12/12/2013).*

One critical aspect that Participant 10 complained about is that of the unstructured curriculum [SYACUS] in the first year. In this regard, it should be stated that the way the curriculum is organised is critically related to students' academic performance. According to Participant 10, the course curriculum at first-year level was not well structured. According to her remarks, this created a challenge for her in terms of mastering concepts. Again, Participant 10's complaint was that teaching and learning [SYATLC] in the first year did not make any sense, especially for the degree that she was pursuing. Thus, Participant 10 was critical: “I

*felt like I was doing some degree in Chemistry or Physics of which I didn't see the significance of such ...”*

Worthy of note is the fact that, as a student, Participant 10 had noticed a serious shift in the curriculum from first to second year. According to Participant 10, second year was not only more meaningful [SYAMM] but the subject matter also started to make more sense, becoming ‘Medicine’, and it was also more interesting [SYAI]. This indicates that the participant as a student experienced the second year differently from the first year of university study. According to Participant 10, the second year started to answer to all the questions she had about her career when she was growing up. Furthermore, Participant 10 argued that to her “*Last year was just play*”. She was referring to first year and also added that “*... it was another year of matric but an extra hard one ja*”.

The adjustment from first year to second year was commonly felt by all the participants. Like Participant 10, Participants 1 and 9 also expressed how much easier it was for them to adjust to the second year of their studies. During the interview Participant 9 even reminded me that in the first year the senior students would always bother you by telling you what to do now. Importantly, according to Participant 9, second year is not hectic like first year because you now know the university better. Academically, Participant 9 also noticed that, in the subject that he did not do well in the first year, he adapted a lot better in the second year [SYAPI]. As he narrated:

*... it's a lot easier in a sense that you get there, you're used to how things work, you know how the academic set up works from the university, you have got your friends, there's nobody that's like ... I mean you're not fresh anymore, no more seniors that's telling you okay you have to do this and that. It wasn't difficult for me; I think I just basically carried on with where I left off in the first year. Sometimes I had to work a bit more harder, put in a bit more hours. My average was always the same but I think to put it in perspective is like in the subjects where I struggled in first year, I think I adapted a lot better and improved. I think when you're second year you realise quickly what your mistakes was in first year and I just corrected them (Interview with Participant 9, 11/12/2013).*

Similar sentiments on the issue were shared by Participant 1:

*When I became second year student at least I had one year experience and the subjects also some of them you no longer doing them and you are doing some one or two new*

*subjects. That in itself was an adaptation from first year. But with the experience I had from my first year it was easier to cope than in my first year (Interview with Participant 1, 10/11/2013).*

According to Participant 1 the experience he obtained in first year [SYAFE] assisted him in adjusting to second year. Another participant also cited the issue of knowing and being familiar with most of the things [SYAFT] at university to illustrate how much easier it was for her to adapt from the first year to the second year of study.

*Oh much better, because you know what role you play, what is expected of you and so you know what's coming, you need to work better, harder. You know the stuff so you can just go on like on your own so ja much better and nothing is confusing you know everything is familiar (Interview with Participant 6, 9/12/2013).*

In clarifying the issue further Participant 6 had this to say:

*Unlike first year, like the people around you were unfamiliar, the place was unfamiliar everything was unfamiliar (Interview with Participant 6, 9/12/2013).*

Based on the responses given in the interviews, most participants felt that it was easier to adjust to second year [SYAAE] than to adjust to first year at university after matric. The above sentiments presented by other participants were supported by Participant 4 who alluded to the fact that although the workload increased [SYAWLI] in the second year, the transition to second year was not as difficult:

*First year to second year, again the amount of work increased a lot but having ... because I got used to the whole set up of university, how tests worked, how classes worked, that transition wasn't as difficult as going from high school to first year. And also with relationships going on, friendships going on it was easier also to study so I think that's also why my marks increased from last year to this year. Just becoming used to everything and ja. I think that was important (Interview with Participant 4, 14/11/2013).*

The above sentiments were supported by Participant 11 who highlighted that adjustment to second year was much easier:

*That was quite an easy adjustment I think because I already knew what was expected of me and I knew what I had to do in my second year. I just had a lot of subjects also in my second year. And the difficulty of the work was growing. It was more difficult in my second*

*year. I had a lot of Law subjects as well which is a challenging part of the work for me. So that was an adjustment because in my first year I only had about three Law subjects and then in my second year I had about six. So that was a hard adjustment to have a lot of Law subjects. But it was not the same as from school to first year. It was not as big a gap. It was actually quite doable* (Interview with Participant 11, 13/01/2014).

What Participant 11 raised as an indication of the shift from first year to second year is that the number of subjects increased in second year [SYASI]. According to arguments presented by the participants it would seem that the most frustrating and challenging year of their studies was the first year. I would argue that this might emanate from the fact raised by the same participants during the interviews that adaptation to university in their first year was a serious challenge that affected their academic performance both directly and indirectly. A good example is that which was cited by Participant 7 that *“they kept on moving us from one res to another”*.

#### 5.4.2.7 Changes experienced by students in the second year of study

Since the present study deals with participants who were in their first and second year of university, it was imperative to collect data on their experiences in the second year of study. The participants who were expected to respond to the question of what might have changed in the second year of their studies were those who had matriculated in 2011 and were second-year students in 2013.

When asked what had changed when becoming a second-year student, Participant 10 indicated that there was more responsibility [SYCMR]. She (Participant 10) further explained that *“you now do your own research and have to find your own resources”*. This is how Participant 10 explained her experience:

*Jo! There's more responsibility, ja, a lot of studying. It's just about me now, it's not about lecturers taking care of us like babies, giving us lecture slides to actually rely on. It's about me doing the research, making sure that I find my own resources because they just give you a list of textbooks, I found those lectures in this and this textbook and then they would not even give you the lecture slides, like the power point presentation of what they actually lectured on. So you actually have to go and read for yourself, be more responsible, attend lectures because in first year you can easily get away without attending lectures* (Interview with Participant 10, 12/12/2013).

In clarifying her remarks, Participant 10 pointed out that:

*So but in second year ... they take a lot of resources, like a lot of sources, a lot of textbooks inside from maybe other learners and they put it together to make a lecture that who helped, facilitate, you like it's just a kick start in your learning and then you have to go and read, do the reading. So you don't actually have to rely on the materials that they give you, you read, if you don't understand a certain concept go and borrow a book from the library it will help you, and then read and read and read (Interview with Participant 10, 12/12/2013).*

The explanation given by Participant 10 suggests that in second year students are expected to accept more responsibility [SYCMR] than in first year. In other words, as a second-year student, one needs to do most of the work and accountability for it also lies with the student himself/herself. To clarify this issue further, Participant 10 explained that:

*... so second year was more like I had to do a lot of things on my own. 75% of the work, I had to do on my own, 25% I needed just guidance from lecturers in the lectures and the rest just ... that's it (Interview with Participant 10, 12/12/2013).*

The above sentiments were supported by another participant who also cited the issue of more responsibility [SYCMR] in the second year of study. This participant highlighted the fact that in the first year the lecturers seemed to be more caring in assisting students, but that was not the case in the second year. She then explained how things had changed:

*One thing that has changed is, as a first year student, often, and especially if the lecturers ... they more caring or they more helping and they will explain things two or three times just to make sure that you understand and by second year they will expect of you to know how the systems work. So I think you have a bit more responsibility of doing things on your own in second year they expect of you to be able to cope on your own a bit better and then also I immediately felt older (Interview with Participant 4, 14/11/2013).*

To illustrate some of the responsibilities Participant 4 referred to during the interview, she then elaborated:

*The first time I walked on to campus in second year, I just felt okay now I'm older, now I'm a senior, now these people are small. And that also again gave me a bit of a leadership brawl where I felt now I have to guide the younger ones especially in our youth group as well. Now we are the older ones, now the first years come in, now you're responsible for*



*making sure that they feel at home here. So that was a very important aspect for me in this year (Interview with Participant 4, 14/11/2013).*

It is pertinent to note that among the very same student-participants who cited second year as demanding much more responsibility on their side, there were still students who felt that assisting other students (their juniors) was part of their responsibilities. Perhaps one might also argue that these participants seem to understand their roles and responsibilities as university students as the question was asked during the interviews.

Unlike Participants 4 and 10, who saw and experienced second year as having more responsibilities [SYCMR], Participant 9 felt that second year meant fewer responsibilities [SYCLR] than in the first year of study. Basically, I think their different experiences might be attached to the fact that they are doing different degrees at different universities. Participant 10's argument was that in first year there was a lot of student engagement in terms of activities. In contrast, Participant 9 reported his experience as follows:

*So, obviously I think it's a lot easier to plan your life and another thing that also helps a lot in second year is you've got less responsibilities as in a sense like being first year. You know as a first year there's a lot more things that you have to attend, you have to be at that training thing, or you have to go to this, help out at that event that's happening at that stage. You know there's a lot less compulsory things that you have to attend. So you've got a lot more time to put in ja, just to manage your time a bit easier also because you're not forced to go to a lot of things (Interview with Participant 9, 11/12/2013).*

According to Participant 9, in the second year of study he knew how to manage his academic activities [SYCMA] and other social engagements. He (Participant 9) also believed that his life was a lot more balanced [SYCBL] at this time.

In addition to what the other participants alluded to, Participant 6 gave her views in this regard. The issue of "knowing everything" [SYCKE] in the second year is again emphasised in Participant 6's argument. In response to the question as to what might have changed in second year, Participant 6 indicated that:

*... a lot of change, ja and you learn to stand on your own and you don't need to be afraid you know everything it's quite better and interesting, and you know what to expect, it all comes easier you don't panic ... you can set your goals perfectly because you know from*

*where it comes and when you are first year you don't know where to set your goals because you don't know what to expect* (Interview with Participant 6, 9/12/2013).

Clearly, what Participant 6 highlighted in her narration is the issue of independence [SYCI] and goal setting [SYCGS]. According to Participant 6, unlike the first year, in the second year you already know what is expected of you and that puts you at an advantage in setting your own goals.

Generally, the participants viewed second year as having brought about a lot of changes. They (participants) saw the second year as totally different from the first year of study although they differed in this regard; some for instance perceiving second year as having fewer responsibilities while others saw it as more demanding of them.

Participant 11 raised more critical issues during the interviews. According to her, besides being more difficult [SYCWD], the course was also more specialised [SYCCS] in the second year. Hence, Participant 11 explained that:

*I was more comfortable in my environment and also the work becomes more difficult, more specialised. First year is sort of general and you get sort of a general overview of the work and it can be frustrating. But in second year you actually start to understand why you are studying certain things and how it is going to be applicable in your degree and the work you are going to do and all that* (Interview with Participant 11, 13/01/2014).

In the same interview Participant 11 further explained that:

*I think second year was easier for me than first year just because I knew what I had to do and I knew how to balance my social life and my academics and all the things I did in my residence and on campus. And I was not that homesick that often because I was used to my environment* (Interview with Participant 11, 13/01/2014).

#### 5.4.2.8 Summary

The analysis of the qualitative data pertaining to the perceptions and expectations of Grade 12 top achievers of first-year university teaching and learning revealed that most student-participants had a number of expectations of universities. In addition, they experienced teaching and learning in the first year at university as totally different from high school. Indeed, most participants felt that the change was too sudden and the workload was too much in a short space of time. This then confirms Tinto's (1993, in Bitzer & Troskie-De Bruin,

2004) model that students' perception of the workload influences the level of their effort. Furthermore, researchers like Petersen-Waughtal and Van Dyk (2011) warn that a lack of academic readiness constitutes a major risk to student success.

### **5.4.3 How do Grade 12 top achievers respond to the challenges of the first year at university?**

#### **5.4.3.1 Factors that impacted negatively on top achievers' academic performance**

Apart from the factors that positively influence academic performance, factors were identified that have a negative impact. The current study draws on the findings of other studies, as indicated in chapter 2, with regard to the factors that impact on the academic performance of first-year university students. Therefore, my discussion on such factors in chapter 2 has laid a solid foundation for discussing the empirical findings of the current study. It was therefore imperative to ask which factor(s) might have had a negative impact on the students' academic achievement.

With regard to the issue of factors that impacted negatively on the academic performance, nearly all the participants mostly put the blame on themselves. In the interviews they attached meaning to all factors that were mostly in their control, namely, those that they could handle themselves to allow for excellent academic performance.

Participant 1's view about factors that impacted negatively on his academic performance, for example, seemed to be more linked to his experience of schooling. Though Participant 1 acknowledged the change [NFC] he went through, his main concern was the time [NFT] he took to adapt. Critical to Participant 1's narration is the issue of his lack of computer skills [NFLCS]. This is how he explained this:

*I think the change itself. As you know the change is something that is imposed so adapting – it took a very long time for me to adapt to those systems. So, that itself left me confused for a very long time. Some of those things they require knowledge of computers and back in high school we were not exposed to these things. Maybe, the medium of communication – those kind of things and also the fact that you are away from home and you feel alone here (Interview with Participant 1, 10/11/2013).*

By contrast, Participant 7 stated in the interview that the university where he was studying had negatively contributed to his academic performance. This is how Participant 7 voiced his complaint:

*It was at university when we first came, we were given a, sort of a building as our residence and ja, we ... I think we stayed there for a couple of weeks, and then we were taken to another residence and we stayed there for a couple of weeks again. And we were like in the first semester they kept on moving us, so I didn't get time to settle enough so ja, I always blame that even though I believe that ... I'm the one who can shape whatever outcome, whatever thing I'm doing but I believe that it contributed negatively in my performance particularly first semester (Interview with Participant 7, 11/12/2013).*

In voicing his frustration and anger during this interview, Participant 7 added:

*I blame the university for not ... the issue of residence I think ja, I think I have to blame them, they deserve the blame (Interview with Participant 7, 11/12/2013).*

The reasons for Participant 7 blaming the university are clear. Unfortunately, the university did not give reasons for moving them from one residence to another [NFR]. It could be that their first-year student status was the reason for treating them this way. How do you adjust if the university is the one that is creating such tension for you as a first-year student? Some people would ask whether the same would have been done to senior students. And the answer would simply be 'no' because senior students might challenge the actions of the university because they know their rights, what is expected of them, and the rules and regulations of the university. From the data, it is evident that these students were victims of circumstance, where their academic success was compromised for the sake of other students' wellbeing.

Besides the issue of residence, Participant 7 also mentioned workload [NFWL] as another factor that contributed negatively to his academic performance. According to Participant 7, all six modules that he was doing were equally difficult [NFMD]. In other words, he had to allocate enough time to study them. This is what he said:

*Second semester it was ... okay and the workload, the workload at university is a bit tougher, so ja I found it hard to deal with, six modules, they are all sort of like having almost the same difficulty, so they required the same attention. Ja, it was quite tough (Interview with Participant 7, 11/12/2013).*

Again, Participant 7 not only blamed the university about the residence [NFR] but also for the lack of other resources [NFRS] that he believed should have been in place. This is how he highlighted it:

*Ja, I blame them and for the other resources that I believe they should have put at university that they have not put in, the personnel, people who can help first year students because it is difficult, it is very tough for first years and ja, I think that* (Interview with Participant 7, 11/12/2013).

While Participant 7 mentioned a lack of resources, Participant 3 referred to the fact that he could not afford all the textbooks [NFLT] he required for his first-year studies. As he put it:

*Ja, the fact that like I'm living alone, I would feel that ja here I'm prone to peer pressure and stuff ... And also the fact that some of the textbooks are like I couldn't buy them, so I had to have like online copies. So like you can imagine like reading from the screen, ja. So that also, I think that also contributed negatively* (Interview with Participant 3, 26/11/2013).

While Participant 7 put the blame for his academic performance on the university, other participants narrated how they personally [NFP] negatively contributed to their academic performance. These participants did not want to shift the blame for their academic performance, and each had a different story to tell. For instance, Participant 5 insisted that:

*Well negatively, I think maybe, because I don't have many friends to be honest, but then it is just maybe laziness, thinking maybe because you were one of the best in the province that you can always just ... you just think that ag I will make it. So it's issues of laziness, where you ... you just relax for some reason, you relax and you think that it's going to be easier but then that's not the case because it's different* (Interview with Participant 5, 7/12/2013).

The statement made by Participant 5 that he did not have many friends confirms Tinto's (2002) argument that what influences academic and social integration into the university environment are expectations, aspirations and pre-entry characteristics which interact over time with institutional experiences with which students arrive at university. This confirms that there is compelling evidence for universities to promote effective academic and social integration for students and greater integration among peers around common challenges.

Participant 5 also referred to the standard of education [NFES] as another significant factor according to his experience and observation. In that regard Participant 5 emphasised that:

*I think maybe what we did in high school was like 1% of what you do in varsity. So it's just new things, so you feel like ... it's difficult that's why maybe most people find it difficult*

*and then would somehow even blame the government to say that our standard of education is too low because now you would get an A and then you are convinced that you can make it at varsity but then you find that it's sort of ... it's a situation whereby you even feel that maybe you were a fool in thinking that you can make it at varsity because it's at international level in which we study at varsity ... it's just commitment because once you start blaming other people then you won't find a solution to your problem I think (Interview with Participant 5, 7/12/2013).*

Like Participant 5, during the interviews Participant 10 complained that:

*I don't know for some reason when I got to varsity, sleeping seemed to be a priority, I don't know why. Maybe it's because some days I overworked myself and then other days I don't and then I resort to sleeping. And besides doing everything else I don't do much with my life, the only thing that disturbs me is sleeping, I love sleeping a lot and ja it waste time because you keep on procrastinating and the work keeps on piling up and piling up ... It's the only thing that disturbed me (Interview with Participant 10, 12/12/2013).*

While Participant 5 blamed it on laziness [NFL], Participant 10 blamed it on sleeping [NFSP], a habit that she thought she had developed when she arrived at university. Suffice it to say that what these participants voiced here generally revealed the perceptions they had about studying at university. Surprisingly, Participant 10 referred to procrastination [NFPC] which was also mentioned by Participant 9. In narrating his experience, Participant 9 indicated that:

*So I procrastinated I think a bit too much, that's something when ... when I was still at home my parents there were days that they would say you know what ... do you think this is a good idea, you actually have to work now, then I would rather work and that would benefit me. With the new found freedom I think sometimes I procrastinated a bit and ... when I had a lot of time to study, I did other things and when I had to study I had too little time in the end. I think ja with, sometimes I didn't handle all the freedom like very well (Interview with Participant 9, 11/12/2013).*

Besides procrastination [NFPC], Participant 9 also believed that having complete freedom [NFFD], with no parents around him in his residence, also contributed negatively to his academic performance. This is how he explained it:

*... it's like obviously being in residence, not having my parents there looking over my shoulder the whole time, I think sometimes when I should have worked, you know if*

*somebody came to me and said you know what we're going out, we gonna do this and I sometimes said yes to things when I think I shouldn't have said yes because I wasn't ... I think I wasn't used to having complete freedom. ... I think generally I was able to adapt well and to know when I can play when I have to work (Interview with Participant 9, 11/12/2013).*

The different stories that the participants narrated individually indicated the different experiences they had in their first year of study at different universities. All participants were very open about sharing their experiences on all the factors that had impacted negatively on their academic performance. Every participant had a 'lesson learnt' in their first year. For example, one of the participants stated that:

*Well I'd say there's a lot of things that can cause that, a lot of friends mean you go and play rugby or whatever, when you supposed to study, when you should also be learning, staying up late, chatting until the next day. I think that was the most important factors (Interview with Participant 8, 11/12/2013).*

This participant argued that as a student one needs also to limit friends, otherwise they will control your academic life for the worse. However, Participant 6 also mentioned what Participant 8 had alluded to in his interview as follows:

*Social life, because you know you need to go to study like three or four hours and you have a coffee date with somebody then it gets a little longer than you thought it would be and then some of your study time is going down because ja, sometimes it happens when you're busy doing something nice to go and study and visitors come in that sort of thing it's so much disturbing and people will always arrange some nice things so that's quite difficult and destructive. In res it's quite difficult because you make a lot of friends then they come in your room and they sit and chat for hours they don't realise you need to study hard so you really, really need to just say so go please (Interview with Participant 6, 9/12/2013).*

According to Participant 6, social life [NFSL] was the main negative contributory factor to her academic performance. However, she also stated that it is important for students to take responsibility and make correct decisions about themselves and their education. Hence, she advised that as a student one needs to tell one's friends to leave when having to study.

Participant 11 also mentioned the issue alluded to by Participants 6 and 8 as definitely what she had experienced. Participant 11 clarified that:

*I wanted to get to know the environment instead of the subject matter. So I focused a lot on making new friends and I did not really put my time into studying as I ought to because there are so many new things to focus on. I actually put more effort into my residence and activities that they had, and also in my friends. And also there was this competition in first year that I did for singing and those things took up my time (Interview with Participant 11, 13/01/2014).*

In contrast to the other participants, Participant 2 mentioned the following during the interview:

*One thing that impacted negatively was ... It was movies and series because back at home I did watch TV but when we got here people use to relax and watch stuff and it use to take my time ... All the students had good stuff you want to watch ... My marks dropped and I realised ... but I was able to pick up (Interview with Participant 2, 10/11/2013).*

For Participant 2 the movies [NFMS] and series [NFSS] were factors that generally impacted negatively on his performance. Another participant also mentioned the issue of being far from home [NFHD] as having a negative impact to her academic performance. Accordingly, the participants' views varied whatever their university they are coming from. Participant 4 mentioned the following:

*... first of all is a big thing to adjust from high school to university, but then having to move 400 kilometres away from home, having always being at home, it does play a big role. Most of the times I was okay because I have a lot of cousins and also my aunt is here and things like that but then there comes a week where you just so homesick that all you want to do is cry and then you just want to go home and that ... I think that was one of the worst things like being homesick, some of it, and just getting used to being on your own (Interview with Participant 4, 14/11/2013).*

Earlier on Participant 6 complained that being far from home [NFHD] was another factor that contributed negatively to their academic performance in the first semester in the first year of their studies. It would seem that this issue of distance from home to university was a challenge although some of the participants who felt they needed some freedom might have seen this as an advantage.

In dealing with the question of factors that impacted negatively on the academic performance of top achievers, a number of sub-questions linked to the question were also asked during the



interviews. For example, participants were asked to say who they blamed for such factors and also indicate the reasons for doing so. Participants were also required to elaborate on the way they had reacted to those negative influences and how their actions had helped. Therefore, this section also discusses on whom or what the top achievers placed the blame for the factors that impacted negatively on their academic performance.

Almost all participants blamed themselves for the factors that had impacted negatively on their academic performance. Without doubt, the data collected from the participants revealed that more than 90% of the participants put the blame on themselves for the factors that impacted negatively on their academic performance. The participants believed that they were responsible for the factors that involved them and their academic performance. Below are some of the verbatim narrations of participants on how they accepted this blame.

One of the participants revealed that:

*No, when I mean sleep a lot I mean 8 hours, you can't afford to sleep for 8 hours when you're in varsity because it's a waste of time. You need to break up your hours maybe 2/3 and then study but then I end up maybe sleeping the whole day and having to wake up the whole night and study because I was sleeping the whole day which is bad (Interview with Participant 10, 12/12/2013).*

Generally, most of the participants seemed to put the blame on themselves for their academic performance, which although it was not bad they all believed could have been far better than they achieved in their first year of study. The participants also revealed the following:

*Myself, because I'm really, really a big soccer fan I think that's exciting and nice and refreshing and I really like to interact with people so ja, it's quite interesting but a problem when overdone (Interview with Participant 6, 9/12/2013).*

*Well negative, I think myself also play an important factor, they sometimes convince me that I don't need to study anymore I can go out now, that's the only reason that I know (Interview with Participant 8, 11/12/2013).*

*... obviously I think a lot of it I can blame myself for that, in a sense ... because the responsibility was mine, bad decisions. There were decisions that I wasn't forced to make I made it myself. So obviously, I think some friends maybe, sometimes who come when they know you actually have to work, they still sort of put this temptations out to you even though you tell them "you know what I really can't go with you" and then they nag you but*

*then you give in. Maybe, my parents as well in the sense that they sometimes pressured me a lot, to work hard when I was still at home. I mean ... if I had a bit more leverage at home and learnt for myself, when not to work and when to work then maybe I would have been able to identify a bit better* (Interview with Participant 9, 11/12/2013).

These participants clearly revealed how they personally had contributed negatively to their academic performance. It is therefore worth mentioning that this demonstrated the perceptions that these participants had of themselves and of studying at university. In other words, these participants had a clear understanding about their roles and responsibilities as university students. Hence, they did not shift the blame on someone or somewhere else.

Participant 5 also blamed himself [BSF] but put some blame on the government [BGV]; when addressing the issue of the standard of education [NFES] he claimed:

*... maybe the government but then also I blame myself because it's a situation whereby you get to make your own decisions whether you want to study or you don't want to study. No one is going to push you or ask you or want to see your book if you've done your homework and all that. It's a commitment, it comes from the passion, so if you lack passion then it's a problem because like I think maybe as one progresses through life, it's always a journey of discovery, because once you focus on what you did yesterday then you're going to find it difficult to face tomorrow. So you just have to adjust and work hard and try to excel, that's just it. So I blame myself* (Interview with Participant 5, 7/12/2013).

Similar comments were made by Participant 7. Although he did not complain about the government he mentioned the university [BUV] as having to be blamed in some cases. According to Participant 7 the university as an institution needs to be prepared in advance before the reception of students. In other words, systems should be put in place to address all challenges and crises that might crop up. This participant argued that:

*I blame the university for not ... the issue of residence I think ja, I have to blame them, they deserve the blame. They could have dealt with ... like now the university has closed so it's their responsibility to negotiate with land owners and you know which place they will place their students and make sure that it is in the right standard, it is conducive to learning and studying. Ja, I blame them and for the other resources that I believe they should have put at university that they have not put in, the personnel, people who can help first year students because it is difficult, it is very tough for first years* (Interview with Participant 7, 11/12/2013).

With regard to the factors that individual participants cited as having impacted negatively on their academic performance, they were able to take action to counteract those negative influences. As students, participants were willing to address their different situations so as to improve or excel in their academic performance. In other words, they all took responsibility for their own education.

One participant began by giving some background on how he dealt with those negative influences, mentioning taking responsibility, making decisions, making a mind shift and working hard as some of the actions he took to remedy his situation. This is how he explained his actions:

*Well, I had to learn to say no and I had to realise you know, the responsibility is on me, it's my life I have to decide what I have to do with this. And I think I had to make the mind shift and realise you know there's certain times when you can play there's certain times when you have to work. And I think one thing that I had to learn is just to make a decision and to stick with it. If anybody wants to do something else no I have to tell them I can't now, I have to work, maybe tomorrow, schedule another time when you can do it and stick with that and not change your mind when you start working (Interview with Participant 9, 11/12/2013).*

According to Participant 9, these actions improved his academic performance. His narration revealed that he dealt with himself personally and also with his friends, eventually learning to say no. In other words, he dealt with being controlled by friends or pleasing them [NFPP] knowing that he had work to do.

Accepting that he had to change and turn things around had assisted Participant 9 a lot and he was convinced that it had positive results. This is what he said:

*Well obviously I had more time to spend on my work, so obviously I, could learn my work more thoroughly and be able to ... ja just to work harder, to have more time to spend on my work, and I think also with that is ... I was a bit more relaxed because I knew okay I can do well because I have a lot of more time, so obviously if you're less stressed then you work better and you work more effectively and ja, you just perform better when you're not stressed, so I think with the fact of deciding you know, when I work I work, obviously made, then I realised that I am prepared for this (Interview with Participant 9, 11/12/2013).*

Similar sentiments were voiced by Participant 6.

*Ja, of course I prioritised things that I need to do and ... so, I'm sometimes ahead. I'm much task orientated and I won't miss a deadline and all that sort of thing and so I can study everyday and take advantage of the time slots and that helps but ja sometimes it's difficult (Interview with Participant 6, 9/12/2013).*

For Participant 6, prioritising [ATP] and being task oriented [ATTO] assisted her in becoming more focused on her studies. Another participant who took a step in the right direction is Participant 4. She reported what she had done in order to excel:

*And also I decided that if I want this to stop, I mean like being homesick and things like that, I had to establish good friendships here and really make myself at home here and that's what I did then. I really spent a lot of time and put in a lot of effort into my friendships and like now this entire year, like when I go home it's just because it's nice to go home every now and then but I don't feel this need to go home more, no homesick at all. I'm so at home here in ... at the moment, I have good friends and whenever I feel lonely or whatever I can just do anything with some of my friends and it's better so I did put in a lot of effort into my friendships (Interview with Participant 4, 14/11/2013).*

According to Participant 4, the actions that she had taken produced good results:

*I can say that, that really improved like, from last year to this year, my marks also improved a lot and I think that's because I really finally got to get the balance between social life and academics and I got to set myself goals and reward myself with something nice, like going out with friends, or going to the movies, or going to do something fun, so I worked hard but then I also enjoyed myself, and it made this year a lot more enjoyable than my first year (Interview with Participant 4, 14/11/2013).*

Another interesting story was narrated by Participant 8 during the interview. While it may sound very unusual for a student to celebrate the fact that he/she nearly failed, Participant 8 saw it as the wake-up call that he had to thank for his academic performance:

*Well those negative influences like going out caused me a lot of marks in some cases and I came close to failing the second test because of that, but I think that when I almost failed, that was a good thing that I almost failed, then I realised that it was important to study. In fact, I passed all the subjects, and I'm glad it happened because I learned relatively quiet, so that I can just ... study really hard (Interview with Participant 8, 11/12/2013).*

The latter participant further indicated how the study programme he had developed had assisted him in managing his study time more effectively. Again, Participant 8 highlighted some of the important issues that students need to consider when studying, for example taking designated breaks [ATDB] and creating time to relax [ATRT]. Taking designated breaks when studying has been reported by some researchers as one of the key factors that contribute to effective study. On that note, Participant 8 concluded his report:

*Well I have a set work, like roaster and I gave myself designated breaks of which I took like if you work too hard, after a while you can't concentrate anymore, to study for hours and hours on and so I gave myself time to relax, chat with people whatever so that when the time came to study I was not thinking of other things, I was just studying (Interview with Participant 8, 11/12/2013).*

Dealing with the issue of laziness [NFL] and too much sleep [NFSP], as mentioned earlier, the two participants highlighted the actions that assisted them to improve academically. Despite all the factors that impacted negatively on their performance, participants were able to take some action that would change the situations. Participant 5 then provided a practical example of how he had remedied his situation:

*Er I just learned hard, I worked harder than I did, I slept less than I was supposed to, I consulted more than required, I just did everything in my power to excel because I believe whatever you do it's best to give your best, or you don't do it all. That's one of those things. You just have to be the best in everything in order to be successful (Interview with Participant 5, 7/12/2013).*

According to Participant 5 his actions assisted in that:

*... well they did tremendously so because like I had a positive attitude towards my studies, because I think maybe the approach to certain things is what matters the most because there's even this quote "our attitude towards a difficult task, before we even start is what counts". Because now if you have this negative attitude that you've developed towards a certain module or certain thing then it's going to be difficult if you are going to attempt it and then think that you are going to be successful. So it's not about the attitude towards your work, you have to just find the fire, the burning fire to do it, you just have to ignite then, I think that it's going to be enough for you to make it ja (Interview with Participant 5, 7/12/2013).*

It is interesting to note that, having realised that certain factors were directly or indirectly impacting negatively on their academic performance; participants were more than willing to deal with those negative influences. Another participant reported how she then changed her way of doing things. Having seen that sleeping had become one of her priorities, Participant 10 decided to use the library [ATSL] for studying purposes. I think that she thought that she would not be tempted to sleep in the library. Again, studying in a library provides motivation of some kind as you see your fellow students studying around you. Participant 10 highlighted accordingly:

*Jo! I used to go to the library, I was so happy they opened a 24-hour library, so I used to take a bus, even if it was a dark, because you know when you see that everyone else is studying, it sort of like compels one to study so I use that as a strategy and it actually work. If I hadn't gone to the library hey! My first year would have been hell ... especially towards the end of the year because the work was becoming more and more and ja very related so I couldn't choose to study a portion and leave out the other and hope that it won't be there in the exam because everything was integrated yes. So like going to the library really really helped and it still does (Interview with Participant 10, 12/12/2013).*

The above sentiments were supported by Participant 11 who also highlighted the importance of studying in the library:

*Well I sometimes went to study in the Lab (library) so I could be alone and nobody can bother me. And I obviously also said no sometimes I have to study. And I also later on learned to have a good balance between all the other activities that I wanted to do and all the other aspects of university you know, social and cultural and academically (Interview with Participant 11, 13/01/2014).*

This participant felt that her actions had contributed significantly to an improvement in her academic performance. Like Participant 9, Participant 10 referred to this as constructive breaks [ATCB]. Below she also explained how her actions improved her academic performance:

*Ja, my marks actually improved in second semester for my major course which is more integrated, Health Sciences, that is Human Biology. They actually really did improve and my understanding in most concepts actually improved because in the library is very quiet no one disturbs you and you can actually concentrate on certain things and take breaks, very constructive breaks and come back and study instead of having my bed next to me,*

*when I'm studying, when I feel like taking a break it ends up being a nap, a three-hour nap, ja* (Interview with Participant 10, 12/12/2013).

The worst scenario relating to this issue is that which was presented by Participant 7 in his narration, the reason being that this negative factor was created by the university and it was not something that the participant as a student had the power to control. In relation to the second research question, which investigated the way the Grade 12 top achievers responded to the challenges of first-year university, the participant expressed his frustrations and how he dealt with them as follows:

*Er! I just focused on what I was there for because even some of the residences that we ended up staying in, were sort of like not conducive to studying, so sometimes I would spend most of the time at the library than at res, I made sure that I consult people and really focused on my work than thinking about the things that are not going right where I stay* (Interview with Participant 7, 11/12/2013).

Besides the challenges encountered, Participant 7 was very positive about the actions he took in order to maintain or improve his academic performance. According to Participant 7, the home background that he came from assisted him a lot in adjusting to the compelling university challenges.

*It did help me, it helped me a lot because there are some people I feel were sort of like more focusing on complaining than doing the work themselves, they ja, they did not perform well. So I feel like it helped me because as a person, as I stated earlier that I'm from a family that is not well off, so I'm used to working under pressure and conditions that are really not suitable, but ja I'm used to working under those conditions, so I just worked, I focused on my work and ja it helped me* (Interview with Participant 7, 11/12/2013).

Interestingly, Participant 2's actions to correct his behaviour so as to focus on his studies produced results:

*So, I decided to give someone my laptop so that they change my password. I would ask for the laptop back when I wanted to do an assignment or properly for academic purposes ... I couldn't open the laptop ... So I was forced to study my books* (Interview with Participant 2, 10/11/2013).

In same interview Participant 2 further elaborated on this:

*My academic performance improved afterwards because I would study more and not watch those series and I would, I win much competitions and my friends wouldn't study and when the tests comes I will A's them (Interview with Participant 2, 10/11/2013).*

In conclusion, the participants cited various factors that had impacted negatively on their academic performance. However, in response to the probing questions as to whom do they blamed for and how they reacted to those negative factors, participants shared their experiences on the issue and the way their actions had produced good results for them. In other words, in the interviews they shared that their academic performance had improved as well as their work or study focus. I also need to mention that this is one of the interesting parts of this study, since it is all about academic performance and the experiences of first-year university students.

#### 5.4.3.2 Challenges encountered by top achievers in first year university

When participants were asked to describe the challenges that they had encountered in their first year at university, the challenges mentioned differed, ranging from personal issues to those that were academically oriented. Challenges listed by participants included dealing with being an introvert, learning to become independent, time management, language background, the workload, choosing people to hang out with, and getting enough sleep. Other participants listed personal challenges that arose in their first year of study. For example, Participant 5 described his challenges in detail:

*... because I was more of an introvert person, I was not very conversant; I wouldn't make conversations so I wouldn't just make friends easily. So that was a challenge. It is something I'm working on. And then the challenges, maybe the one that stands out it would be just trying to keep your focus, especially during the first few weeks after the orientation and all that, that's just the challenge I had (Interview with Participant 5, 7/12/2013).*

Making friends in the first year was a big challenge for Participant 5 because of his personality. According to Participant 5 because he was in a new environment (i.e. university) he needed friends but found making them a serious challenge.

Participant 7 recounted a slightly different challenge when it came to making friends. According to Participant 7, some students were involved in substance abuse [FYCSA] so he



wanted to avoid them when it came to making friends at university. Participant 7 illustrated the issue as follows:

*Er! Some of the challenges that I encountered were first having to choose people whom I will hang out with, people who can help me in studying. Again it was the responsibility and being disciplined; a lot of people I think at university have gone out of hand, they end up doing bad things like some of them end up taking drugs and stuff. Be a person who can communicate with other people because that's how you find the way around university and how things are done (Interview with Participant 7, 11/12/2013).*

Interestingly enough, the issue of discipline seemed to be important to both Participant 7 and Participant 11. According to the data presented, they (Participants 7 and 11) seem to have relied on their being disciplined in order to be focused and do their work. This is how Participant 11 expressed herself in this regard:

*Well the fact that I was far away from home. That was a very big challenge. So I had to become independent. Also I did not have any friends at first. I did not know anyone. So I was afraid. That was also a challenge. Also I think the work – it was just different from school because no one told you must go to class. So I had to use my self-discipline to do the work and to do well (Interview with Participant 11, 13/01/2014).*

The information provided here assisted me to understand that not all students who are at university have the goal of obtaining a degree. Universities experience high drop-out rates every year, although there are support systems to assist students who are academically challenged.

Participant 7's concern was also raised by Participant 5 who felt that something needed to be done on the issue. They expressed the concern that the university environment posed serious challenges to the safety of first year students. As Participant 5 complained:

*And then like mostly at varsity like it's an environment where doing what is wrong is not a big issue, let me put it that way. ... everyone is focused on themselves, like they don't care if you ... even if you come to class without bathing, nobody cares, if you smell they don't care, it's just you. You just have to look after yourself, do what you think is best, that's what it is about, especially maybe at [Jupiter University], well maybe all universities. But then with Engineering at [Jupiter University], jo! It's a challenge because you can't do everything and still be an Engineer, it's a challenge (Interview with Participant 5, 7/12/2013).*

The responses given here revealed the fact that students as first years especially are assigned a great responsibility, i.e. that of taking care of themselves or looking after themselves. Unlike school, at university nobody takes care of you – you have to do it for yourself.

Another personal challenge that was revealed was that presented by Participant 8. He had trouble adapting [FYCA]. From his high school sleep routine to that of his first year at university. In discussing this challenge, Participant 8 stated:

*Getting enough sleep was actually a ... because I was used to going to sleep about 9:30/10:00 pm but as soon as I came to university it even go until 4 in the morning awake. So at 12 o'clock me and my roommate we sleep because otherwise really we would feel tired and that was a big challenge to concentrate, you know that time. Another challenge is finding enough time for doing your academic work. Actually, the subjects are not really that hard but you just have to make time to study them and that is the biggest challenge, having enough time to do everything you need to do (Interview with Participant 8, 11/12/2013).*

According to Participant 8, he did not find the course work difficult but the biggest challenge was making time to study. The issue of time, that is, time management as revealed by Participant 8 was also expressed by another participant:

*Then another big challenge was obviously time management. I mean you've got a lot more free time then another thing that was also a challenge was, I mean obviously is not like school where the teacher knows you and gonna check up on you if you attend a lecture or not. I mean it's obviously, it's up to you, if you don't attend classes it's your own decision. ... You get tempted and it's 8 o'clock in the morning, you're tired, it's raining outside, it's a boring lecture you don't want to go and with that it's ... I think to learn to handle your free time a lot easier, to take responsibility over just to handle that (Interview with Participant 9, 11/12/2013).*

The responses reveal that first-year students need to learn to adapt to a number of issues in order to fit into university. Besides having to adapt [FYCA] to the university environment, first-year students also need to master the principles of time management [FYCTM] before arriving at university. Succeeding academically also involves managing one's time well. Based on the evidence provided, I am therefore convinced that time management influences academic performance.

Another challenge which participants described and which is linked to time management [FYCTM] is the university workload [FYCWL]. Some of the participants raised serious concerns about the workload that they had at university in the first year compared to the one they had at school. For example, Participant 7 complained in this regard:

*Ja and the academic challenges like having to deal with you know the workload and for me you find that ...* (Interview with Participant 7, 11/12/2013).

Similar sentiments were shared by Participant 6 during the interview. Participant 6 summarised her experiences by pointing out that:

*I think the challenge of the workload are a great concern in my challenges ... other challenges, the challenges that you're staying far from the home I think it was challenging but I overcame it* (Interview with Participant 6, 9/12/2013).

The issue of workload [FYCWL] in the first year of study was also raised by Participant 10 who reported the issue in relations to her language background [FYCLB]. Participant 10 expressed her feelings as follows:

*It's ... like I said before it was about the workload. And I think it all amounts to my language background because sometimes I could tell myself that I actually understand a certain concept, without actually realising that I don't until I hear someone else explaining it and I'm like really, I didn't understand it in that way but it's just because I missed maybe a certain word, or concept, which I didn't understand maybe in that phrase which changes the whole meaning of everything* (Interview with Participant 10, 12/12/2013).

According to the data, the university workload [FYCWL] in first year was a serious challenge to student-participants and it therefore called for speedy adaptation on the part of students. As in some of their previous comments, participants stated that they did not enjoy their first year at university, despite the fact that their academic performance was good even in the first semester. Some of the participants were able to reveal that, had it not been for the support system around them (i.e. friends, parents, and teachers), they might have given up on their academic careers. The issue is presented succinctly by Participant 9:

*... just the academic ... it happened at the beginning and was also a big challenge, just to get used to the university set up and the way that they work and ja the more difficult work, bigger work, things like that, that was also a big adaptment for me. And then ja, another thing was also to make new friends. I mean most of my friends didn't go with me, you*

*arrive there, you know no one so you have to adapt, so that was also another big adaptation for me, a challenge that I had to go through (Interview with Participant 9, 11/12/2013).*

The participants admitted that workloads [FYCWL] at university were too heavy and required too much time. According to the participants, serious adaptation had to take place in order for them to cope with the demanding academic environment.

Another participant also expressed her concern about the challenge she had experienced with lecturers not keeping pace what was stipulated in the study guide [FYCLNC] concerning tests to be written. I would therefore argue that this is one of the important core aspects in this study because in one way or another it has an impact on the students' academic achievement. In fact, participants might attribute their academic performance to non-compliance by lecturers [FYCLNC] with the pace setter provided in the study guide. Participant 4 shared her experience as follows:

*In my first year, sometimes I found it difficult ... like I said I would email a lecturer if I had a question and then the reply would come 7 days later after I have already written the test. So that doesn't really help a lot ... but that was only one lecturer that I had that problem with. And then sometimes the study guides didn't tell you anything or the tests that the lecturer set didn't correspond to what was set out in this study guide, so they would say it's study component 2.1 to 5.8 then they would ask something that's not part of it (Interview with Participant 4, 14/11/2013).*

It is important to note that the latter participant was also concerned about the issue of feedback [FYCLF] that she did not receive on time from her lecturer. Worse, the participant indicated that she needed that feedback in order to prepare for the test.

Other challenges that were described by two participants respectively during the interviews include language background [FYCLB] and computer usage [FYCCL]. The fact that the participants came from different schooling backgrounds also contributed to some of the challenges they experienced. For instance, the participants from schools in a deep-rural environment had lacked computer skills when arriving at university because they had no computers at school. Participant 7 explained his situation in this regard as follows:

*I found that some of the things that were required from me at university I need to sort of like, know how to use a computer, something I didn't know, and I didn't do at school. So I*

*had to learn those things at university. It wasn't easy but it's something that you have to do*  
(Interview with Participant 7, 11/12/2013).

Basically, what the latter participant highlighted is one of the most critical themes of this study because it informs the theme of students'/participants' readiness for university. For Participant 7, university provided him with an opportunity to "learn the hard way". Not being computer literate [FYCCL] nearly cost him his career and education. This data offered helpful information which can assist in policy formulation. I think there is a serious need for the Grade 12 curriculum to be informed by what is expected in the first year at university. For instance, the Department of Basic Education should insist that all Grade 12 learners should acquire some basic computer skills prior their matriculation. This will help to reduce challenges that may lead to students dropping out. This will be discussed in more detail in the following chapter.

On the other hand, Participant 10 expressed her frustration with regard to the language background [FYCLB] (i.e. English). Her main concern regarding English was based on the fact that she had realised that it took her longer to read her textbooks than other students. In other words, her lack of language skills affected her understanding of a topic. Basically this is one of the most important educational aspects because experiencing a challenge with the language of learning and teaching might impact negatively on academic performance. However, the issue of English being the language of learning and teaching is a national issue that is constantly under discussion. Participant 10 concluded her complaint by illustrating that:

*So I think my language background wasn't really developed and it actually played a role. Like ... maybe I was given a chapter to read, it will take me 3 hours to read, the same chapter that another person reads for an hour. And for those two hours they are actually doing something else and I'm busy dwelling on the same thing, trying to understand because of my poor language background of which I do not have anyone to blame for though. So that was my major challenge and then everything else just packed on top of that. So the workload increased because I couldn't understand maybe certain things, do I have to dwell more on them for a very long time* (Interview with Participant 10, 12/12/2013).

It would seem that most of the participants experienced challenges during their first year of study, although these challenges ranged from the personal to the social and academic

domains. The participants told of their different challenges whatever the university they were studying at. As Participant 3 mentioned:

*Ja, as I said, the challenges are ... as I said it's peer pressure, lack of textbooks and also like the fact that I wouldn't understand like ... like at first I didn't understand like the diversity at the university. Academically ... there are not enough like books at the library because we are many here. You have to buy books on your own and sometimes if you get to the library and the books are finished, there are free copies, but you cannot study them on screen as I said, you get tired easy because it's strains your eyes and stuff. And also at the residence is not like a conducive environment to study because you know where people stay there's a lot of noise, there are people who are doing their music there ja (Interview with Participant 3, 26/11/2013).*

Apart from peer pressure [FYCPP], Participant 3 mentioned the shortage of textbooks [FYCRS] and the issue around the residence [FYCR], which rendered his environment not conducive to studying. A non-conducive environment was also mentioned by Participant 10, who dealt with it by studying in the library.

This study expected student-participants to describe the challenges they encountered in their first year. Moreover, having encountered those challenges, participants were asked to explain how they had dealt with those challenges. In this regard, participants' responses addressed the second major research question, namely, how do Grade 12 top achievers respond to the challenges experienced during their first year at university.

According to data presented, participants went the extra mile in addressing their challenges so as, in turn, to reduce their chances of academic failure. Participant 10 substantiated the way she had responded to the challenges she had mentioned earlier as follows:

*Ja, it's reading and reading when you know yourself that it actually takes me so long to read you must put extra effort when others are playing outside or when others are doing something. So when I study I always have maybe a dictionary and I always have my laptop and my textbook and a book to write so when I encounter something that I do not understand or maybe a disease that I've never heard of before. I type it on Google and actually read about it, the background information, signs, symptoms, causes and everything and then I look at the pictures of people who have that disease and I bet like I will never forget that so it really, really helps (Interview with Participant 10, 12/12/2013).*

Interestingly, participants did not sit back but were proactive in addressing their situation. Participant 7's response serves as an example in this regard:

*Ja, I, as I indicated I used to consult with other people, even my lecturers and they would tell me that I'm not the only one who is having the problem but they are expecting, I must somehow find a way to do it and ja I could ask people to help me in doing those things, and ja. Even though some of them I'm still not perfect in them, even now but ja I can do it*  
(Interview with Participant 7, 11/12/2013).

With regard to the challenges encountered during the first year, the participants suggested the following as being critical to academic performance: the university environment, students' readiness, the availability and usage of resources and academic workload versus the issue of time.

#### 5.4.3.3 Top achievers' worst experiences during their first year at university

To answer the research questions, participants were asked to describe the challenges they encountered in their first year of study. As the topic of this study is about investigating the academic experiences of Grade 12 top achievers in maintaining excellence in first-year university programmes, an in-depth investigation into the experiences of the top achievers is the focus here. For this reason, the concept of experience was discussed in chapter 2 of this study.

When asked about their worst experience(s), participants reported both similar and different ones. The effect these experiences had on the academic achievement of these students varied and accounted for differences in academic performance. During the interviews, participants responded to the question on the worst experiences they had at university as if they had long prepared themselves for such. I subsequently observed how the participants became emotional, struggled to talk and became quite angry. I believe this was because they had never had a chance to share these personal experiences. Anyway, I managed to handle it and won the confidence of the participants to carry on without me probing.

Two participants complained about the practical classes [WEPC] that they attended. It is important to note that these two participants were from different universities. They related their worse experiences as follows:

*My worst experience, maybe at workshop practice, because we had a practical workshop exposure, so it wasn't quite nice the first few days because just the instructors they are*

*quite harsh sometimes, so it's just that, maybe the treatment and all that. But then you get used to it and you just adjust. But ag, I think varsity is just about finding out what works for you and then sticking to that which works for you (Interview with Participant 5, 7/12/2013).*

*I think when we were doing practicals, I used to hate practicals because you know they were like, the people who were demonstrating they were sort of like expecting more from us as students than from them. They sort of like, they were thinking that maybe we did some of the things at school, so it was quite tough, I used to not perform well in most of the practicals but ja (Interview with Participant 7, 11/12/2013).*

Surprisingly, the two participants who gave the same account came from different universities but they were both doing Mechanical Engineering. The responses of these two participants on the worst experiences when studying at university revealed that there were serious problems with the instructors [WEPCI] used for practical classes [WEPC] in their respective universities. I think what I would question as a researcher is the issue of what this says about the university's norms and standards in this regard. Do these instructors work outside the stipulated professional ethics, norms and standards that govern all university employees?

In emphasising what he experienced, Participant 5 concluded his narration on the instructors for practical classes by highlighting that:

*They were quite harsh, like rude sometimes, that's the word (Interview with Participant 5, 7/12/2013).*

It is evident from the latter two responses that participants' academic performance was compromised by the practicals; although it could just have been a misunderstanding between the instructors and the participants.

Participant 7 further indicated that:

*Pertaining in particular to Chemistry, I used to find it hard and the fact that I had a negative attitude towards it; I actually didn't see or have the essence of studying Chemistry in Mechanical Engineering. I don't know how does it contribute in Mechanical Engineering but ja (Interview with Participant 7, 11/12/2013).*



Participant 7 also raised the issue of the relevance of the courses [WECR] he was doing in his field of study. He saw Chemistry as not being necessary if one is studying Mechanical Engineering.

Again, Participant 1 also revealed how a lack of study skills [WECSS] nearly affected his academic performance. In sharing his experiences, this is what Participant 1 had to say:

*It was when I had one night to prepare for an exam. Normally we would write an exam around five pm and finish around about half past seven or eight. So the worst experience is that at one time I was finishing at that time and the next morning at 8 o'clock I was writing another exam. I had from that time to the next morning to study. That was tough because at the same time I had to rest. Like I said the workload is too much (Interview with Participant 1, 10/11/2013).*

In the same interview Participant 1 further explained that:

*We had this subject called Financial Management. It is one subject, especially in our first year, even if you study and understand your work 100% there is no guarantee that you will even get a passing mark in the exam. That is one subject that you feel that this subject is not necessary to study. But again if you don't study you don't have the necessary back-up knowledge to enable you to fight for yourself in the exam (Interview with Participant 1, 10/11/2013).*

In this section, it is important to present the participants' narrations as is because I wanted their voices to be heard. I thought that I would rather have lengthy comments by participants than misrepresent their thoughts/perceptions and feelings and thus compromise the reliability of the findings.

Another participant considered himself to be lucky not to have fallen a victim to his worst experience. Though he was not alone, Participant 9, in a voice charged with anger, could not stop relating his experience during the interview:

*... my worst experience was probably like, while under orientation what happened was basically in our residence we had a ceremony and afterwards it was like the first time when we were allowed to go out to like town and like all the pubs and things like that. And basically the rest of the seniors, the second years that is and so on went with us. ... a lot of stuff to drink you were basically forced to drink, they would count down and say "okay down your drinks" things like that and for me I didn't enjoy that because obviously you*

*can't say no, but I mean when a full guy standing around you saying you know you have to drink you, which face here is gonna say no (Interview with Participant 9, 11/12/2013).*

According to Participant 9, the second-year and senior students acted very irresponsibly towards the first-year students. His main concern was that the behaviour of these senior students [WEBSS] caused one student's parents to remove him from the university residence. In other words, their behaviour resulted in one student being inconvenienced. Therefore, I would without doubt argue that this student was personally, academically and financially inconvenienced by the actions of these senior students.

It is important to note that the participants' worst experiences of studying at university range from those that were academically oriented to those that are socially oriented. The academic part involved, for example, the instructors of the practicals (i.e. mentioned by Participants 5 and 7), while the social part involved peers/fellow students.

Indeed, there were a number of participants who stated that they had a number of bad academic experiences when studying at university. Like Participants 5 and 7, Participant 4 had a lot to say, highlighting how the crashing of the computers [WECC] while writing a test affected their results. I would argue that Participant 4's experience was worse than those cited by other participants because it concerned the assessment that would determine her academic performance. In voicing the frustration, she then revealed that:

*We did our first block, everything all the tests we wrote on the computers. So we didn't write anything on actual paper, so we had to type out all our answers and thing. ... in the middle of block test, so that's like our exam at the end of the block now, in the middle the computers crashed. They managed to get all the information back again but that was just horrible, because we were sitting there for half an hour, in the middle of our test time and we couldn't write further because the computers had crashed and things like that. So, that was very bad (Interview with Participant 4, 14/11/2013).*

Still on the academic front, one participant told of her worst experience initially in a soft voice which differed from her voice at the beginning of the interview, Participant 6 explained her worst experience as follows:

*Last year I failed a test, in (Actuarial Science) that was worst, that was not nice, I only got 49 but I really really studied very hard but the other one, English subject and it's outside*

*my course, it was really hard ... it was difficult to tell my mom* (interview with Participant 6, 9/12/2013).

The fact that Participant 6 counted having failed a test [WEFT] in her first year as her worst experience suggests that she was experiencing failure for the first time. I therefore had to probe to find out how she dealt with it. In the same interview, Participant 6 explained that:

*I studied very hard again. Ja, ja, I was very good, no it was fine, I passed it. I'm no longer doing it ... No it was with the first course I studied* (Interview with Participant 6, 9/12/2013).

Participant 6's concluding remarks show that in the end she improved her academic performance in the course in which she had failed a test. Accordingly, Participant 6 responded in a very positive manner to this challenge (i.e. failing a test).

Another participant who narrated his worst experience at university regarded it as important for students to take responsibility while they are at university. Participant 8's response revealed that first-year students did not accept responsibility as one of their immediate duties. According to Participant 8, gone are the days that students should rely on parents like when they are in high school. Participant 8 therefore argued that:

*At first it was probably taking on that much responsibility upon yourself because as a student at school I was never used to having that much responsibility. At first it was difficult but after a while I learned to adapt. Instead of parents ensuring that I study, that was my responsibility* (Interview with Participant 8, 11/12/2013).

The issue of adjustment to first-year university kept cropping up during the interviews. Although participants' words differed, they all lamented this issue. Participant 3 believed that not knowing how to study [WEUS] was a serious issue for him:

*Ja, my worst experience is not knowing how to study, because there you would just like ... you just tell yourself okay let me put an effort ... Sometimes when you study Physics for example, Chemistry, Biology, it gets difficult and there's no one to consult like immediately* (Interview with Participant 3, 26/11/2013).

Another personal worst experience is that referred to by Participant 10. This is said to be personal because the participant raised her feelings in this regard. In other words, the participant was very open in sharing her personal feelings in this regard:

*You know, my friend used to say sometimes people become the best in the absence of the best. So when I got to varsity it's more like everyone must talk where they were, like [Mercury University] always takes the best, especially medical students you have to be the best. Because there's a lot of people who apply right and not everyone gets in. Imagine, they take the best from private schools, take the best from public schools, and ja, you can't compete with those people you always feel inferior. So I always ja, that's my worst experience, I always felt inferior (Interview with Participant 10, 12/12/2013).*

Clearly from what Participant 10 alluded to in her narration above, her high school and home background played a significant role in what she felt. In other words, her feelings of inferiority were as a result of where she came from. Therefore one could say that Participant 10 had a low self-esteem.

#### 5.4.3.4 Summary

From the data emanating from the interviews, it would seem that participants at the different universities had experienced different challenges during the first year. However, one could argue that despite those difficulties, participants nevertheless seem to have responded positively to the challenges. Perhaps the most critical finding with regard to challenges encountered by top achievers during their first year at university is the fact that some of the participants' worst experiences related directly to teaching and learning activities, which obviously has an impact on academic performance (e.g. computer crashing in the middle of a test, the attitude of practicals instructors towards students).

#### **5.4.4 How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?**

##### 5.4.4.1 How top achievers related to the university environment

Since the study focuses on higher education, it was proper to find out how the participants related to their university environment. In responding to this question, participants would assist the study to answer all four of the main research questions. The way in which one relates to the university environment can either create challenges or contribute positively to one's academic performance.

In addressing the issue of the university environment for the purposes of this study, it should be reiterated that the participants were studying at six different South African universities. In tracing the participants' experiences at their respective universities it was also important to

find out as to how they related to them. The mere fact that the participants came from different universities means that we also need to realise that they were all providing different experiences.

One participant revealed her frustrations when she entered the university for the first time. The participant indicated that the environment that she came from was totally different from that of the university thus making it difficult for her to adjust at first.

*Like I grew up on a farm and I was 30 km away from the nearest town, let alone city, it was something different to come here and be in the city. That was a bit difficult at the start, just getting used to all the cars, all the people, not being alone on the farm anymore. But other than that I got used to it quickly and now I really like it, the campuses, they are really nice and if I walk around here I feel at home. So I think I related to the environment quite quickly (Interview with Participant 4, 14/11/2013).*

Asked if it was easy for her to relate to the university environment, the participant also elaborated as follows:

*At the beginning no, not at all, especially driving in the city, I think that was one of the worst things that I had to learn because I was used to driving on the farm but then you don't have any other cars and you don't have traffic lights, and you don't have ja, taxis and things like that. So it was really something to get used to, but now I'm definitely used to it, so it's fine (Interview with Participant 4, 14/11/2013).*

The latter participant further explained her frustration about having to drive every day:

*Well I drive to university every morning because it's half a kilometre from campus and then I basically have to drive everywhere I go, so if I want to go to church I drive, if I want to go to the shopping centre, if I want to come to university I drive (Interview with Participant 4, 14/11/2013).*

Another participant indicated how difficult it was for him to fit in at first. This is how Participant 8 summarised his experiences:

*At first it was difficult to fit in, everything is new, you don't know this and that ... the students don't know where to go first few days but in the hostel situation we had lots of friends to relay on to try and find where to go and when (Interview with Participant 8, 11/12/2013).*

In general, it seems that these participants had commonly experienced the fact that in coming to university everything was new to them [RUEN]. For example, Participant 4 had to drive [RUD] to university every day to attend classes though at first she was not familiar with the city.

The fear of not knowing the kind of people or students [RUMSP] one was going to meet at university was registered by almost all participants. Importantly, what I personally observed during the interviews was that some of the participants had stories to tell around this issue and I just deliberately allowed them to voice whatever they had in mind and had not had an opportunity to say before.

Some participants in this study did not hide the fact that the university set up or environment came as a huge shock to them. For example, Participant 6 explained:

*It's big, it's so much bigger than, you feel like a small piece of a bigger picture and ja ... it was actually – you only a number and there are thousands of you and you begin to realise, you don't, you can't work to be the best because everyone wants to be the best because then you won't make it because you will work so hard on yourself and maybe that's what success is about while success is the realisation that life is about being positive and it was quite an adjustment to make (Interview with Participant 6, 9/12/2013).*

Generally, most participants indicated that they were exposed to the university environment for the first time in their first year. Accordingly, Participant 9's story could set a good example:

*Okay ja obviously for me that was something new, which I wasn't used to at all, but in the ... it's not something that I particularly really enjoyed. But the nice thing for me was what I also realised in university is there's so many people. So for me it was just a thing of going to places which I like and meeting people with a similar mind-set, I think that's the way. You know just meeting other people like meet your friends, meet new people and I think that helped me a lot to relate to that. Just searching for people with the same interests and things like that (Interview with Participant 9, 11/12/2013).*

Interestingly, what Participant 9 elaborated on is the fact that although the people one meets at university are strangers at first, one has a responsibility [RUPR] to find among them people with the same mind-set [RUPSM] and the same interests [RUSI] as you and then make friends with them. On that note, Participant 9 believed that as a first-year university student

one has a responsibility to ensure that students one associates with are people with common interests; thus he concluded, *“just searching for people with the same interests and things like that”*.

The above sentiments were supported by Participants 3 and 5, who also alluded to the fact that there might be different people at university [RUSP], but as a student you do have a responsibility [RUPR] and a choice with regard to whom you associate with:

Well since there’s a number of characters at varsity, you meet different people, different characters. So it’s ... I did relate to it because like there are people who sort of posed the same characters that I had and then we shared a common goal. It wasn’t quite easy for me to adjust but then I did and then finally I think maybe trying to impress or trying to fit in is not a very good way to start university ... it’s just a tricky environment somehow because like you meet people who don’t even include maybe studying in their daily routines, they just enjoy varsity. But then like how can you enjoy varsity if you are a failure, that’s a contradiction ... you try and seek help if you struggle (Interview with Participant 5, 7/12/2013).

Participant 3 highlighted that:

*Ja, it was welcoming I can say because like the environment was full of surprises, new people, different from what I’m used to ...* (Interview with Participant 3, 26/11/2013).

Participant 5 believed that even though the university environment might present different people with different characters, you as an individual need to connect with people with a similar character to yours. According to Participant 5, these should be people with whom you share a common goal [RUCG].

Furthermore, Participant 5 insisted that it can be very difficult for one to adjust to the university environment especially when trying to make friends at university. The criterion that Participant 5 preferred was that you have to choose students with the same goal as you. Secondly, Participant 5 advised that if one struggles, one needs to seek help. Asked if his plans did materialise, Participant 5 had this to say:

*I think maybe since the only family that you have at varsity is your friends, sort of, that’s the only family that you have, the support you get from them. So I think it does work, it works because like once you start isolating yourself, you going to have a problem, that’s a big problem because all your struggles you’re going to bottle them up until you can’t*

*anymore. There was an incident at varsity, where someone attempted to commit suicide. It's just that it's difficult, well it's not difficult it's a challenge, that's the word I want to use (Interview with Participant 5, 7/12/2013).*

Participant 5 was very open in sharing his ideas with me, because he believed that what he cited had actually worked for him and he thought it might assist other students. Another participant explained how he related to his university environment in a manner totally different from the other participants. What seems to be common to other participants is, as Participant 7 acknowledged, the fact that the university is full of different people, speaking different languages – this intimidated him. The attitude displayed by this participant in this regard clearly reveals the kind of environment he came from. I think Participant 7 was not used to an environment where he mixed with all sorts of people belonging to other racial groups. Thus, Participant 7 expressed his feelings as follows:

*... first I was intimidated by knowing ... like at university there are many people, different people who are ... maybe some of them different even to my skin colour, speaking different languages, er, ja, but I ended up getting used to it. ... other senior students would advise me to like get along with those people and just you know ignore the fact that we are racially different and just focus on studying because they are also there to study. And also there are a lot of things like temptations. I mean at university you are free, your parents are not around so there's no one who is around who is going to be like looking after you and forbidding you to do other things, you are just on your own. So I got used to that, I knew what I wanted and I kept being disciplined and ja (Interview with Participant 7, 11/12/2013).*

Interestingly, almost all participants clearly spelled out their different perceptions on the issue of there being many different people [RUDP] with different characters [RUDC] and goals [RUDG] at the university. In addition, these participants were all able to address this issue because they were also aware that it might contribute negatively to their academic performance if left unattended to. Again, other participants also indicated how the senior students came to their assistance [RUPA] in this regard.

Only two participants did not express experiencing some challenges in relating to the university environment, though Participant 10 focused only on the residence [RUSR] that the university provided her with. In other words, nothing in the environment outside her residence was mentioned. She expressed this as follows:



*Jo! It was very conducive for my study hey, because I stayed in a res where there were only Health Sciences students and they worked very hard ... and it's very intimidating because when you wanna sleep you firstly check who's sleeping like when you peep out of your window and you see the whole block the lights are still on and you say "oh my gosh! I can't afford to sleep" ja, so it was like that compelling environment, I had to study even if I didn't want to. .When someone in the morning says jo I saw the lights were still on at 3 and I'm like "yes I was studying and she was tired she slept" that kind of thing. Some people couldn't stand that they even moved out. But I think it's very good I enjoyed it, it wouldn't be nice being in another res where there are people who actually don't focus so much on their studying (Interview with Participant 10, 12/12/2013).*

Like Participant 10 who saw her university residence as an environment that was conducive to studying, Participant 1 also regarded his university environment as conducive. He stated that:

*It was an exciting environment, maybe a new better environment. So relating to it for me meant trying too. I was used to living in a different environment so I had to learn to live in this new environment. I related to it because it was more conducive and more sort of if it is appropriate to say it was better than the environment I was used to (Interview with Participant 1, 10/11/2013).*

Unlike Participant 7 who earlier complained about his accommodation arrangements being changed by the university, Participant 10 actually applauded her university for the accommodation arrangements [RUAG] which she regarded as effective for studying. In that regard, in response to being asked how she related to the university environment, she explained that the residence had created positive competition among the students.

However, there were a number of participants who indicated that it was difficult for them to relate to the university environment. While acknowledging the importance of the facts presented by the participants, it is also imperative to highlight that these participants spoke from a different point of view based on their perceptions of different universities. I would thus argue that some of the issues that participants mentioned are critical and require serious attention by the different universities.

#### 5.4.4.2 Top achievers' way of balancing academic commitment with social life

When asked how they balance academic commitments with their social life, participants cited a number of exciting practices. Many of the participants warned that the type of friends one

has could affect you negatively. Moreover, according to some of the participants it does not even matter how many friends you might have, what is important is that those friends are also academically committed.

Participant 11 illustrated during the interview how difficult it is for first-year students to find balance in their different university activities. However, based on her experiences Participant 11, argued that:

*Well, this is the most difficult aspect of university. But I think when you are in your first year you don't actually know how to do this because there are so many things to do. But all of the subjects are not actually the same. If you know this is a more difficult subject, I struggle more with this, or I struggle with this section of the work then you just set more time for that. And you must just tell your friends and have a good relationship with them so they can understand you have to study. Also if your friends have that same mind-set they also understand that academics is also important it becomes more easy to tell them that you need more time to study (Interview with Participant 11, 13/01/2014).*

To illustrate this further, Participant 10 commented:

*Jo! hey, I have a lot of friends, but they know me, like you have to make your friends know you, that [name of a participant] ... is studying from 11 onwards. My friends know they never come to my room, unless I will ask them please come wake me up, and that's it. But they know that we can only chew during lunch and at certain times, but besides that we cannot, because we will be wasting each other's time and that's bad. So that's how I balance my school life and my social life (Interview with Participant 10, 12/12/2013).*

An idea similar to the one raised by Participant 10 is that presented by Participant 9.

*Ja, that's something that's not always that easy but I think, which helps a lot is, my roommate is one of my best friends. I think and then ... which I found was balanced was effective time management. In that sense you ... just to plan your social calendar well. If you know like for instance this weekend coming up, somebody invited me to go with them, you gonna watch the rugby at ... or whatever, then just to plan effectively beforehand. Then you know if you gonna take time off at the weekend, then you know you gonna have to work extra study times (Interview with Participant 9, 11/12/2013).*

The data indicated that letting your friends know you might prevent you from being disturbed when studying. Participant 10 believed that when your friends know you [BASKF], they

would even assist you in managing yourself because they would never visit you knowing that you are probably studying at that time.

The notion presented by Participant 10 is supported by Participant 9, who believed that as a student effective planning [BASEP] is very important, because academic commitment varies from one course to another. This is how Participant 9 explained his argument further:

*... so I think effective planning is necessary there and just ... I just think the other important thing also is your friends have to realise the academic because sometimes I mean, some people, with people studying different courses, sometimes some people have to work harder at different times ... I think that's also important, to communicate effectively with your friends and make them realise, "you know what I'm going through the next two weeks, it's gonna be very busy I don't really have much time but you know what the week or two after that then I'm a bit more free", and just arrange around that ... I think effective time management is probably the most important factor around that (Interview with Participant 9, 11/12/2013).*

In addition, Participant 9 indicated how the issue of friends not studying the same course [BASFD] might have an impact on one's study schedule. Nonetheless, Participant 9 was also able to give some advice on the matter.

Surprisingly, the issue of 'effective time planning' [BASEP] was a serious concern for most of the participants. In fact, a number of participants seemed to understand their responsibilities in that they cited the fact that they tried to balance their academic commitment with their social life but that the academic sphere would always dominate their planning of time. Participant 4 highlighted in this regard:

*Generally in the week I don't go out a lot, or socialise a lot in the week, but every weekend we do something, we either go to the movies or we go watch the rugby or we ... I plan something social for every weekend, so that the weekends are really something to look forward to, after a rough week or ... But then of course ja ... in a week sometimes if it's not too hectic then I also go and grab a coffee with a friend or thing like that. So I manage to balance the two, the academics and social life. Although the academic work does take up a lot more of my time but it has to (Interview with Participant 4, 14/11/2013).*

On that note Participant 6 also attested to Participants 4's and 9's argument:

*Er, it will depend on how many classes you did ... in my case, I plan so I will see how many classes I have today and then it will show how many hours I will study in the evening ... if I didn't have so many classes then I will have more time to spend with friends, that's how time will split between my boyfriend and some of my friends in other reses and ja, and when having more time also visit my uncle (Interview with Participant 6, 9/12/2013).*

The reason why the participants felt it was important to have friends around them was that they felt that friends were part of the support system they needed at university. The participants (as mentioned earlier on) listed friends as being one of the factors that contributed to their academic performance in their first year of study. For example, some of the participants cited friends as being part of their study groups.

Although other participants indicated that having a lot of friends [BASFA] did not prevent them from balancing their academic commitments with their social life, one participant had something different to say. Participant 5 explained his situation at university as follows:

*As I've indicated I don't have many friends, but then I try and make friends so I try to meet new people. Well that's my New Year's resolution, to meet new people and try to work with different people, ja I think so. But then overall how I balance my social life, I try to make it a 80/20 situation, where 80% I will be doing my academic work, then 20% of the time I spent with friends, like maybe on Sundays, that's when maybe I just chill with friends, do this and that, chat, laugh and then that's it (Interview with Participant 5, 7/12/2013).*

The data then suggest that even if participants had friends [BASFA] they nevertheless prioritised their academic commitments over their social life. Striving for such a balance might lead to improved academic performance which might also result in academic success at university.

Interestingly, three participants who were studying Engineering course also discussed their experiences and good practices at the university. However, these participants were studying at three different universities although there were some common ideas in their narrations. Participant 7 highlighted the following based on his experiences:

*I, most of the friends that I have are also doing the same course as I'm doing so that helps me because they sort of understand when I'm busy they understand. Actually we are all busy and ja, we do study, very hard but we then arrange some dates in which we just hang*

*around, socialise and you know just do other things that are not academic* (Interview with Participant 7, 11/12/2013).

The notion that Participant 7 presented also suggested that students doing Engineering courses feel more comfortable making friends among themselves. In other words, they could relate to one another more than with students from other faculties. This participant believed that friends in the same course [BASFSC] are academically committed or engaged like himself and would therefore believe him when he made some excuses like that he was busy. In other words, there are no clashes of interests in their friendship.

However, another Mechanical Engineering student-participant reported that:

*Well, Mechanical Engineering is one of the demanding in the field of study I believe, but if you look at other courses they don't study that hard because they have a lot of free time so those don't have to worry about really balancing the social life. But as an engineer to be I can almost say it is very important to lead by example, it is not wise to go out while you have a test tomorrow. So, that is why planning is important. You give yourself a certain time for going with friends, or going to parties or whatever. But you won't have a lot of time to study, planning is the most important, that is how you decide if you can go out with friends or not* (Interview with Participant 8, 11/12/2013).

A similar view is presented by Participant 5. Like Participant 8, Participant 5 claimed that when doing engineering there is little time to engage in the other activities available at the university. According to Participant 5, there is too much work in their course of study [BASWL] but with little time [BASTL] in which to do it. Participant 5 thus argued:

*... like with Engineering, it's a challenge, if you were to say maybe you're going to engage in sports, which we are motivated to be engaged in and all that but then I think it's quite a problem, not unless maybe if you're doing Sports Science which has to do with such activities. But then with Engineering there's little time and so much work. So it's just ... it just has to do with your discipline and your commitment towards your studies, knowing what you want and then you going to have to try and balance* (Interview with Participant 5, 7/12/2013).

The data show that although participants were at different universities, their experiences and expectations were similar. The evidence above clearly indicates that participants who studied the same course even though at different universities might have experienced the same

challenges; for instance, the issue of workload [BASWL] and lack of time [BASTL] in engineering studies. My observation regarding this issue is that participants as students know and understand the demands of their field of study.

A number of the participants reported that most of their time was spent on academic activities [BASPA] resulting in less time being spent on a social life. This might emanate from the issue of a heavy workload that was mentioned earlier in this section. While acknowledging that there had been some difficulty in striving for a balance between academic commitment and social life, another participant revealed that:

*Yes. But then like at the end of the year you do feel like now I need a proper holiday, I need to rest now, but not that I feel I'm gonna burned out somewhere in the middle of the year, I haven't felt like that yet (Interview with Participant 4, 14/11/2013).*

While acknowledging the difficulty in balancing academic commitment and social life, Participant 4 also believed that there is a prize at the end of the day.

#### 5.4.4.3 Summary

This section was a continuation of the three preceding sections and addressed the fourth research question. Evidence from the data presented here reveals that most participants did use the learning support structures offered at first-year university level to improve and sustain excellent academic performance, in spite of the various challenges that participants experienced during this time.

## CHAPTER 6

### FINDINGS AND DISCUSSION OF THE QUALITATIVE STUDY

#### 6.1 INTRODUCTION

In this chapter the findings based on the participants' responses to different interview questions are reported as well as the themes that emerged from the interviews. This section also provides the findings pertaining to the research questions of this study. This chapter presents a summary of the main findings emanating from the analysis of the data and document analysis. The findings suggest, among other things, that student-participants attributed their academic performance to various factors. This calls for a thorough examination of the findings relating in terms of the theoretical framework for this study, which is dealt with in the final chapter.

#### 6.2 RESPONSES TO THE RESEARCH QUESTIONS

This section discusses the findings pertaining to the research questions as obtained from the qualitative data that were collected during the interviews. This discussion is based on the reviewed literature so as to determine whether the empirical findings of this current study do relate to other studies. Each section briefly discusses the findings of the empirical study as based on the research questions. The research questions are therefore re-stated below:

- What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?
- How do Grade 12 top achievers respond to the challenges of the first year at university?
- How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?
- How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?

##### 6.2.1 What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?

According to the current study, students' perceptions have an impact on their academic performance. The findings of the current study concur with those of previous studies. For example, a report by Kleemann (1994) found that the perceptions students have of their own abilities contribute more to their success than their previous academic performance.

Similarly, Munteanu et al. (2011) maintain that research has revealed that the confidence one has in one's capacity to perform contributes to good results.

In this regard, Fraser and Killen's (2005) study argued that students' motivational and personality factors and beliefs about what will enhance their chances of success or diminish their chances of failure influence their approach to study. In other words, students' perceptions about themselves and their studies account for the outcomes thereof. Many researchers support the notion that students' perceptions about their studies have an impact on them. Hence, Tait et al. (2002) further state that a strong influence on students' approaches to study is the students' perceptions about what will enhance their chances of success or diminish their chances of failure at university, even if those beliefs are misguided.

Furthermore, Modipane (2011) reports that first-year students enter the system with individual characteristics such as their self-concept, language proficiency, socio-cultural orientation, socio-economic background and attitude towards school work, among other things. Although participants of the current study were at different universities, the findings reveal some similarities in their perceptions of first-year university teaching and learning. The interviews that were conducted with university students in first and second year who were top achievers in Grade 12 reported findings which indicated that they perceived first-year university teaching and learning to be difficult, with a lot of work, impersonal relationships with lecturers, differences in teaching style, a teaching and learning pace that is too fast, advanced teaching technologies (see §§5.4.2.1, 5.4.2.2 and 5.4.3.2). The following are a list of some of the key factors that are perceived by top achievers to be important at university and also their expectations thereof:

- **Teaching and learning perceived to be difficult** – Participants saw teaching as being more difficult than and different from that of high school. For instance, what took them a month to learn at high school had to be completed within a day at university. The main argument here was on the heavy workload, teaching style and the pace thereof (see § 5.4.2.2). Hence, Participant 4 stated that there is no spoon-feeding at university (see § 5.4.2.4). Participant 5 also reported that *“I think maybe what we did in high school was like 1% of what you do in varsity”* (Interview with Participant 5, 7/12/2013). The issue of overcrowding in classes was also cited as making it difficult for students to ask questions during lectures (see § 5.4.2.2). According to the data, this was caused by the fact that universities have clustered



students doing similar courses in one class even though they are not all studying for the same degree. According to the participants who were already in their second year, teaching and learning in first year did not make sense, but they found the second year to be much easier and more meaningful.

- **Teaching personnel perceived as good** – Most of the participants perceived their lecturers to be very good, qualified and as having lots of skills, as well as offering study skills (see §5.4.2.1). Section 5.4.2.5 highlighted the kind of lecturers that students expect to find at university. This confirms the quantitative findings (see § 4.4.1) where the majority of respondents (i.e. 13 out of 14) were found to view their lecturers’ personality as having positively contributed to their understanding of the course. In addition, the quantitative findings revealed that the majority of respondents believed that the positive attitude of their lecturers directly influenced their academic performance (see § 4.4.1 and table 4.3). However, it should be noted that for the purposes of this study, lecturers were not interviewed (the lecturers’ perspectives were not sought in this study).
- **Teaching resources** – Most of the participants indicated that their universities were equipped with advanced technology that made teaching much easier for lecturers in comparison with teachers at schools. Participants also indicated that these resources made teaching more effective at university (see §5.4.2.2). Thus, one would argue that the kind of the academic environment that the universities create allow students to develop more interest in their studies and even the institutions themselves. Importantly, this confirms the positive picture painted by the quantitative findings (see §4.4.3) on how the availability of different teaching and learning resources at university has assisted participants to understand the courses better and thus to become more interested in the courses. For instance, the quantitative results (see table 4.5) revealed that all participants regarded access to the internet as having contributed positively to their interest in the coursework.
- **Relationship with lecturers** – Participants expected their relationships with lecturers to be impersonal or non-personal (i.e. not personal like high school). However, some of the participants (e.g. Participants 8 and 10) were surprised to find that their lecturers were also caring and concerned about them (see §5.4.2.2). The quantitative results (i.e. item 6 in table 4.3), for instance, reveal how the lecturers’ availability to

the students when they needed assistance was perceived by all the participants as having impacted positively on their academic achievement.

- **Expectations of the university** – Participants expected the universities to provide good, competent lecturers. They (participants) also expected the university to expose them to the workplace (see § 5.4.2.4). Participants also expected the university to provide study resources and materials, academic support (e.g. psychological part of students, by providing psychologists who will assist in addressing issues that might disturb them in their studies) and social support for students.

These findings also indicate how the perceptions of the student-participants influenced their expectations of university teaching and learning. In that regard, participants from different backgrounds constructed and gave meaning to first-year university teaching and learning based on their different experiences. Moreover, these participants expected, among other things, that the university would provide them with all the relevant resources required for their learning, especially having noticed that the university environment was totally different from that of school. However, recent studies have only investigated students' performance in particular courses or subjects, performance at particular universities, and the performance of students in general. Basically, this study reveals that students' academic performance is influenced by a number of factors and that the participants, as top achievers, were able to deal with those mentioned as they encountered them.

Furthermore, this study reveals that although the participants had come to university with a number of expectations, some of which were met by university and others not, but this did not discourage these students from striving for excellence academically. A full discussion on this issue is presented in section 5.4.2.2 of this thesis. In their narration many of the participants reported how they found teaching and learning in first year demanding compared to the high school set-up that they had come from and that they were used to. Participants also indicated that they had indeed expected the first year at university to be challenging or difficult and accompanied by a heavy workload. However, this did not prevent participants from believing in themselves and reassuring themselves that despite all the negative influences, they had a responsibility to ensure that they performed as expected. Importantly, this findings support the study conducted by Kleemann (1994) that revealed that what really makes a difference in the success or lack of success of students in the college is their belief in themselves.

The findings of this study also reveal that the perceptions that participants had of university teaching influenced a number of other factors that affect performance (see §5.4.2.2). Likewise, many researchers have concluded that no single intervention or attribute influences an outcome like performance in isolation; instead a combination of interacting forces is involved (Muller et al., 2010; Matoti, 2010; Mudhovozi et al., 2010). In relation to the research question under discussion here, it would seem that every participant had his or her own personal perceptions and expectations of first-year university teaching and learning. However, these perceptions and expectations may emanate from the different environments and school backgrounds that they came from. I based this interpretation on the data that I obtained from the interviews pertaining to students' expectations of university in the first year of study. In addition to the qualitative results, the quantitative results revealed that despite coming from different school backgrounds, eleven of the participants perceived their educators at school to be their best role models in motivating them to study (see §§ 4.3 and 4.2). This then suggests that the educators' attitude towards these students has in one way or another influenced their perceptions and expectations of first-year university teaching and learning.

### **6.2.2 How do Grade 12 top achievers respond to the challenges of the first year at university?**

Krause (2005) insists that, despite being criticised, Tinto's (1993) model of student departure provides a useful framework for identifying the factors which potentially contribute to student departure from higher education. According to Krause (2005), the main factors are students' pre-entry attributes, student intentions, goals and commitments, and academic and social experiences.

It is clear that having a particular challenge is a different thing all together to having to respond to that challenge. The findings in this section reflect on how participants as top achievers responded to challenges in the first year at university.

Being top achievers does not necessarily mean that one is without challenges. The findings of this study indicate how participants at different universities gave meaning to their learning irrespective of the challenges that they encountered in this first year of study. The findings here then reveal the experiences shared by the student-participants especially in relation to the challenges encountered in first year, the impact thereof on their academic performance and how they responded to such. Although the evidence obtained revealed how well the

participants were doing academically, there were nevertheless a number of challenges they had to overcome whether by compromising or making sacrifices. According to most of the participants, the biggest challenge was the adaptation from matric to first year university (see § 5.4.2.3).

Other major challenges that the participants referred to pertaining to the first year at university are the heavy workload and the lack of support from the universities (see §§ 5.4.2.3 and 5.4.2.1). Therefore, it is not surprising that Fraser and Killen (2005) note that attributes like the ability to cope with a heavy workload, the ability to keep up to date with work and to demonstrate persistence in the face of adversity have been identified as being significant for academic success. The findings of this study confirm those of Fraser and Killen (2005) that workload is one of the most serious challenges encountered in the first year of study. The qualitative results relating to heavy workloads are presented in detail in section 5.4.3.2 where among others the narrations of Participants 6, 7, 9 and 10 are presented. In relation to the challenge of a heavy workload, the quantitative results also revealed that all the participants acknowledged that the workload imposed on them by their lecturers forced them to engage with their work, (see item 17 in table 4.3). This quantitative finding is presented in section 4.4.1.

Having dealt with the question of the perceptions of the top achievers in their first year at university, I then inquired into how they responded to the challenges encountered in the first year. Not all of the participants in this study indicated that they experienced serious challenges in their first year; for instance, Participant 4 is an exception in this regard. In addition, not all the participants felt that the challenges they encountered directly affected their academic performance. For instance, Participant 6 felt that challenges that she encountered were not serious in that they did not have a direct impact on her academic achievement.

Some of the major common responses of participants to challenges they encountered included among others the ones that are listed below in point form:

- **A workload that is too heavy** – Participants indicated that they resorted to studying hard, changing their way of studying, doing much of the work on their own, consulting other students even their seniors, dedicating much of their time to their academic work, changing their sleeping patterns, doing self-research on the content,

being ahead of lecturers in courses, using notes available on YouTube, developing a positive attitude and having a balanced lifestyle. Section 5.4.3.2 presented a detailed discussion on this issue.

- **The teaching-pace challenge** – Participants indicated they had to learn to take notes while listening, learn to do self-study, make their own notes, study the work every day after attending lectures, visit different websites for extra notes prepared by lecturers, Google some important information, do research on certain concepts, seek help from counterparts and share knowledge among themselves. This challenge is directly linked to the students' proficiency in the language of teaching and learning. A detailed discussion on this topic is included in section 5.4.2.2 (see also § 5.4.3.2). My argument here is that having not thoroughly mastered the language of learning and teaching might be one of the factors that could be attributed to students' challenges regarding the teaching pace in the first year at university. In other words, participants affected by this language issue might not be able to comprehend the content of the lecture immediately while listening to the lecturer.
- **Inadequate support/inability to create opportunities to interact** – Most participants reported that they had to sort themselves out, seek help from senior students, consult lecturers, mentors and tutors, form study groups, share their challenges with high school teachers who were still in contact with them, and be motivated by parents who kept on checking up on them; others were motivated by their friends and some indicated they are also self-motivated people. Refer to section 5.4.1.9 for a discussion on how the participants dealt with this challenge. This confirms the quantitative findings of the study that reveal that because of not having enough support from the university, most participants relied on peer group support and the positive influence of friends which helped them to cope with the demands of their courses.
- **Time management** – Participants indicated that they had started planning their time carefully. Some resorted to sleeping fewer hours, developing a study timetable, prioritising academic work over social events, limiting friends, being honest with friends about having to study, learning to say no to friends seeking your company when you have work to do (see § 5.4.3.2).
- **Adaptation** – making friends with people in the university, consulting other people when things are difficult, taking responsibility, forgetting about being homesick and

visiting home less often, having to choose people with the same goal in mind, accepting university as their home by then (see § 5.4.2.3).

- **Unstructured curriculum** – (Participants complained that the curriculum was not coordinated – did not even make sense). Participants indicated that they just had to study, do lots of reading, make extra notes, adjust their study mechanisms, stop relying on lecturers, attend classes for some guidance, and contact second-year students or mentors for assistance (see §§ 5.4.2.3 and 5.4.2.6).

The second challenge mentioned above, namely, the teaching pace issue, also came into the picture as a result of other related issues. For instance, the language of learning and teaching (i.e. English) issue was raised by two participants (i.e. Participants 1 and 10) who stated that it contributed to the challenge encountered with the teaching pace in the first year at university. I would argue that this challenge emanates from the lack of proficiency in English as a medium of instruction or a language of learning and teaching. From my own experience I would conclude that this issue emanates from the fact that participants come to university from schools where their teachers sometimes switch to an African language (i.e. code switching) during the lesson in order to clarify concepts. Hence, they (participants) expect the same at university. When this does not happen they battle to keep up with the pace of teaching in first year (see § 5.4.3.2). It is important to note that this confirms Bradbury and Miller's (2011) argument that South Africa's unequal schooling system has created numerous layers of disadvantage that require redress. Bradbury and Miller (2011) state that, one of the factors that place learners at a disadvantage is learning through the medium of a second language.

In developing this study my main focus was on the academic performance and the experiences of Grade 12 top achievers in their first-year university programmes. The intention was that participants would share their experiences of their first year with me. There was no intention to focus on a particular field of study (degree), although two participants (Participant 5 and 7) voluntarily elaborated on their experiences of Chemistry practicals classes, indicating the fact that the instructors' attitude towards students was not good (see § 5.4.3.3). These practical classes were part of the courses that the participants were studying. This is one of the worst challenges encountered by participants because it had a direct impact on their academic performance. However, both participants were able to deal with this issue without any intervention or assistance on the part of the universities involved by, among

other things, doing self-study and research on the practical issues related to Chemistry and consulting other people. Fortunately, both participants subsequently indicated that they had passed the final examination for the course. This confirms the quantitative findings where many of the top achievers (students) indicated that their lecturers did not understand their (the students') background which had an effect on their first year of study (see § 4.4.1). Consequently, Howells (2003) stresses that students' involvement in the classroom and the learning communities of the university is one of the most important factors that influence their success.

In relation to the issue of support, participants expressed different feelings and observations at different universities. However, despite all the negative experiences participants still believed that their universities could change for the better. In section 5.4.2.2 Participant 7 attested to this challenge relating to support when reporting that:

*It was the things that I've just mentioned, the lack of academic support, you know some students they really failed to deal with the workload, as well as socially, you would find that some students were not staying at proper residence, so it was quite tough for them. Ja, another thing that I think as I said that we need people like who are experts in Psychology to sort of like address us as newcomers (Interview with Participant 7, 11/12/2013).*

I would argue that the above-mentioned is an important fact that needs to be presented to the Council on Higher Education (i.e. CHE) for the attention of officials responsible for university assessments. It is one of the critical issues that I could not ignore because it would directly determine the academic performance of participants. Indeed, this might even assist universities in setting correct standards for lecturers who could positively assist in presenting practical lessons for all the subjects or courses that have such demands. This could even mean outsourcing services of lecturers with expertise from other institutions of higher learning like Further Education and Training (FET) colleges. This recommendation is dealt with in more detail in the last chapter of this study.

Suffice it to say that for purposes of this study, the manner in which participants responded to the challenges they experienced at university in the first year did respond to the second research question. For that reason one of the critical aspects that emerged from the data obtained from the interviews with the second-year student-participants was the change that was experienced by participants in second year. Although the participants were impressed

about the change they experienced in the second year, this could not be investigated further because of the nature of this study.

Nonetheless, it was further found that most of the participants, knew how to respond to the challenges or barriers they experienced in their first year of university learning. It would seem that from the participants' narrations, they knew and understood what was expected of them as university students. It is therefore not surprising that participants ignored or overlooked some of the challenges to their learning process during their first year, because these were said to be out of their control. In that regard participants as students had to forget about those challenges and focus on their main responsibility, namely, studying to ensure that they achieve their objective for being at university (i.e. obtaining a qualification).

### **6.2.3 How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?**

Many researchers have acknowledged that the identification of the attributes that contribute most significantly to students' academic performance could assist in improving the intervention strategies and support rendered to students who perform poorly in their studies. With regard to participants of this study, my take would be that they demonstrated excellent academic performance in Grade 12; thus the issue in first year was merely to maintain that level and even do better. This affirms Tinto's (1975) position that performance in high school, as measured either by grade-point average or rank in class, has been shown to be an important predictor of future college performance although past educational experiences have not been explicitly referred to as being directly related to college dropout. Hence, Rankin Schoer, Sebastiao and Van Walbeek (2012) maintain that the literature still suggests that on average the NSC remains a reasonable predictor of university success.

Important findings on how student-participants developed and maintained academic excellence were obtained from the participants' views which were presented during the interviews. The empirical findings of this study reaffirm those of previous studies (Thatcher et al., 2007; Goodman et al., 2011; Sikhwari, 2007; Killen et al., 2003; Munteanu et al., 2011) that academic excellence can be developed and maintained through lecture attendance, studying hard (i.e. time spent on private study), the development of a positive self-concept, and self-discipline, interest in the course, effort, the development of a positive attitude, students' motivation and other related factors. This is elaborated on in sections 4.3 and 4.4.2 which discuss the quantitative results relating to students' perceptions on how they develop



and maintain academic excellence at university. In this regard, during the interviews the participants expressed their concerns relating to the importance of time management, a balanced lifestyle, healthy eating, enough sleep and prioritising things (see §§ 5.4.1.7 and 5.4.3.2). The extent to which the issues raised by the participants are related to those identified from recent studies will also be determined later on in the discussion in this study. The following are the major aspects that participants cited as having assisted them in developing and maintaining academic excellence in their first year at university:

- **Self-motivation** – The quantitative data shows that all fourteen respondents viewed self-motivation as an attribute that has helped them to persist despite the heavy academic workload (see item 8 in table 4.2). Detailed accounts of these findings are presented in section 4.3. Participants highlighted the fact that being personally motivated has positively contributed to maintaining their excellent academic performance. According to most participants, this motivation emanated from their excellent performance in matric (i.e. the distinctions they obtained) (see § 5.4.1.7). In other words, their matric results motivated them to strive for even more excellence.
- **Having an interest in the course** – According to the participants, the interest they had in the course of study made it more meaningful for them. It also left them with no choice but to work and study hard every day (see § 5.4.1.7 and item 11 in table 4.2 on the quantitative results). A key related aspect in this regard is that unlike at high school, at HEIs students are at liberty to choose the courses that they want to study. This, I believe, promotes increased interest in the course on the part of students.
- **Having a balance lifestyle** – This means looking after oneself. Participants believed that what also contributed to their maintaining excellent performance was, among other things, eating correctly (i.e. being selective about what one eats as a student), getting enough sleep, regular exercise, prayer, going to church and socialising and not partying a lot (see § 5.4.1.7).
- **Making use of the resources that are available** – Participants attributed their performance to the availability of certain resources at the university. Some of the participants indicated that after some lectures they were able to visit their faculty website for extra notes or materials placed there by lecturers. Participants reported how access to the internet had assisted them to use YouTube or Google for extra materials on their courses. Some of the participants also mentioned the availability of mentors at their universities as having played a significant role in their excellent

performance (see §§ 5.4.1.7 and 5.4.1.9). The quantitative survey yielded similar result in that all the participants attributed their academic achievement in first year to their access to various resources that are available at the university, for example access to the internet, access to libraries, and access to extra reference sources that lecturers make available on university websites. These quantitative results may be viewed in section 4.4.3 and table 4.5.

However, some of the participants also indicated that the workload in their faculty they did not allow them enough time to take good care of themselves or to have a balanced lifestyle, citing the fact that most of their time is taken up by their academic work. To benefit this study, I should mention that the participants who reported on this issue during the interviews were all doing Mechanical Engineering, namely, Participants 5, 7 and 8. One participant (Participant 5) stated however that one could take part in sport if by chance he/she was taking Sports Science. Apart from that in their faculty there was no time for such activities (see § 5.4.4.2).

With regard to the way participants performed in their first year at university, some were satisfied with their academic performance while a few of them were not happy. Those participants who performed well attributed this to their dedication to their studies, commitment, effort, hard work, having a balanced lifestyle and also keeping their goal in mind (see §§ 5.4.1.7 and 5.4.4.1). However some of the participants believed that having enough good resources, good lecturers and the support of the university contributed a lot to their excellent academic performance.

The participants who were not satisfied with their performance (e.g. Participants 5 and 10) revealed that although their +65% average did not necessarily mean a fail, it did mean that they could not settle for such but instead had to strive for excellence. Some of the participants believed that as top achievers in matric they had an obligation to finish what they had started. Therefore, they could not be satisfied with an average percentage. Generally, the findings reveal that participants did not rest, but kept their performance on or above the matric ceiling. Some of the participants even became competitive in terms of how long they could study at night.

The findings also revealed how participants' personal arrangements (i.e. commitment, studying hard, balanced lifestyle) contributed to their excellent academic performance.

According to the findings, a few participants indicated that they were not happy or satisfied with their academic performance (see § 5.4.1.8). Importantly, all these participants reported how the issue of having to adapt into university has negatively affected their academic performance. So, the ability and the speed at which to adapt remains critical. This concurs with the argument raised by Sommer and Dumont (2011), who noted that previous studies have revealed that a key determinant of academic performance is adjustment to the university. Moreover, Howells (2003) warns that the valuable resources that students have already accumulated in facing “the new” at various times of their lives might be overlooked by concerns for how they (students) are going to adjust to the new situation at university. Adaptation for first-year university students would include a number of factors that the participants as students had to deal with in order to fit into the university environment. Based on the findings of the interviews, the key trend that is noticed in their academic performance is an improvement in the second semester when participants had adapted positively to university life. This improvement could be linked to the fact that student-participants had been introduced to mentors or other support structures at the university (see to § 5.4.1.8).

From the empirical data obtained, I would therefore argue that top achievement is a good predictor of future academic success. Some of the participants even obtained a number of distinctions (i.e. some above three) in first year, which indicated that these participants wanted to remain top achievers at university (see § 5.4.1.8). For instance, during an informal telephone conversation with Participant 7, he shared with me how his performance at the end of the first year had led to him receiving a Dean’s commendation in the faculty. Indeed, Participant 7’s end-of-year results, which he sent to me, were endorsed with ‘Dean’s commendation’. This information is discussed in detail in the section on document analysis in this chapter.

#### **6.2.4 How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?**

A study conducted by Cross et al. (2009) revealed that the specific students’ needs and those difficulties they might be encountering because of their individual personalities, financial difficulties and academic, cultural, social and linguistic backgrounds have received wide attention in the literature. For instance, the literature reports complex combinations of variables that affect student academic achievement, consisting of gender differences, socio-

economic status and previous school performance, institutional cultural differences between the school and the university and student age, maturity and life experience.

Many researchers have found that social, financial and academic support are the three types of support that promote success. Accordingly, the empirical findings of this study will also assist in determining the validity of the statement made by Zewotir et al. (2011). These authors (Zewotir et al., 2011) reported in their study, which focused on academic support programmes, that those students who are not in academic support programmes were found to have a higher risk of failing during the first year.

In this study, the participants reported that support structures at universities play a significant role in students' academic performance and even in their education in general (see § 5.4.2). Similar results were observed during the quantitative data analysis process (see §§ 4.4.2, 4.4.3, 4.4.4 and 4.4.7). Therefore, this suggests that it is imperative that universities have such support structures in place to ensure that students receive the support they need, especially academically. According to a number of participants of this study (Participants 1, 5, 7 and 10), such support structures include the following but are not limited to them: tutorial classes, mentors and tutors, special intervention programmes, guidance classes for study skills and note writing. According to the data, top achievers used the following support structures at the different universities to accelerate and sustain excellent academic performance:

- **Library usage** – Most participants indicated how they used libraries for effective study in their first year at university. Participant 7 indicated in that regard how the accommodation problem he experienced at university had left him with no option but to use the library to study. Again, Participants 10 and 11 attested to the fact that studying at the library had contributed significantly to their improved performance (see § 5.4.3.1). Section 4.4.3 (including table 4.5), which relates to the quantitative results, also presented evidence for this finding.
- **Attending classes** – Class attendance was viewed by twelve out of the fourteen respondents as contributing positively to their learning and this detailed information is presented in section 4.4.2. Participants believed that attending classes provides guidance and also study skills (see § 5.4.1.7). Some of the participants even highlighted that attending classes assisted them in knowing what was really expected in the course. My argument here is that, in this study, students' positive attitudes

towards class/lecture attendance might have been influenced by the interest that they had in the courses they were studying. In line with this, various researchers have stated that student behaviour is often influenced by the perceptions they have of a particular object or act.

- **Special academic programmes** – The results presented in section 4.4.7 and item 11 in table 4.9 revealed that most respondents (i.e. 10) believed that the availability of academic support in the form of supplemental instruction was an important condition for their continuation at university. The most important special academic programme is the one mentioned by Participant 10. She indicated that at her university they have what they call intervention programmes, which are meant to assist students who do not perform well in courses like Chemistry and Physics. These programmes offer students a second chance to improve their academic performance instead of merely ‘failing’. Participant 10 confirmed that this programme was effective and she also benefitted from it (see § 5.4.2.2).
- **Consulting tutors** – Participants indicated that they had to consult tutors when experiencing problems with certain courses. Some of the participants indicated that they had tutors who were available 24 hours a day. They just had to check on their availability (see § 5.4.3.2).
- **Support networks** – Students’ beliefs in the positive influence of friends and peer group support came over very strongly in the quantitative results. Items 3 and 6 in table 4.6 and section 4.4.4 provide an account of the participants’ perceptions on the support structures that students need in the first year of university study. The participants believed that what worked for them was to connect with people with a common goal, with the same mind-set (see § 5.4.4.1). According to Participant 9 the best way is to search for people (friends) with the same interests. Some of the participants believed that for real support on the part of friends, you have to choose friends who are doing the same course (see § 5.4.4.2). Participant 9 also believed that chatting with other people about the work helps, and as you help others you are helping yourself as well.

In the interviews, seven participants acknowledged the support structures and services at their universities and they indicated that they were really happy with what the universities were doing for them. On the other hand, three participants believed that what the universities were

doing was really not enough; hence, a few participants reported serious concerns about the lack of support by universities (see §§ 5.4.2.1. and 5.4.3.1).

Some of the participants complained that they only obtained support (i.e. in the form of mentors) in the second term; thus it would seem that it is critical to provide support to first years from the start, because, the student-participants indicated, the second term was really too late to pick up and recover the first term's gap. The findings clearly show that most participants needed more support in the form of mentors in the first term. Regarding the non-availability of mentors in the first term, Participant 10 argued that if she had had such mentors in the first term she might have performed even better (see § 5.4.1.8). Consequently, a significant requirement for students to be provided with guidance, coaching and counselling of some kind emerged as, many of the participants indicated that they would have welcomed such support in the first term when they were struggling to adapt to the first year of study. This confirms Van Schalkwyk et al.'s (2010) argument that support structures should be given high priority. These authors stress that tutors and mentors who support students in the first-year of study must be chosen with care; they should receive training and be instructed to provide guidance pertaining to the importance of attending classes as a critical condition for performance.

Some of the participants were satisfied with the kind of support they received at their universities while others were not. However, the participants who regarded the support provided by the university as inadequate nevertheless acknowledged the existence of such support. In section 5.4.2.1, Participant 7 argues as follows: *"So I think in terms of the availability of the personnel who can help the students, particularly the first years, I think universities are not doing enough. My university is not doing enough"*. Participant 1 then provided some suggestions on how this could be done, as he puts it that: *"Sometimes the pressure is too much on the side of students and they can't study. So, the university can assist by providing people like Psychologists or counselling professionals"* (see § 5.4.2.1).

A number of the participants complained that they were not happy with their university environment. These participants (Participants 1 and 7) emphasised that universities need to establish centres for the support of students, where psychologists and psychiatrists in particular could offer professional services to students so that they are able to focus on their academic or educational life irrespective of what they might be going through (see § 5.4.2.1). Other participants also viewed this as important and essential because it would assist students

in dealing with their social life which they believed has an impact on academic performance. As Tinto (1975:92) notes, individuals' decisions to leave college and pursue alternative activities are presumably as a result of a lack of integration into the social system of the college, which will lead to low commitment to that social system. Therefore, according to Tinto (1975), it is important to distinguish social systems from academic systems, as colleges are made up of both domains. Furthermore, Tinto (1975) suggests that, in terms of the academic and social domains of the college, a person might achieve integration in one area but fail to do so in the other. Accordingly, Tinto (1975) argues that excessive emphasis on integration in one domain would at some point detract from one's integration into the other domain therefore a reciprocal functional relationship between the two modes of integration would be expected.

Interestingly, despite the shortage of support structures at universities, most of the participants expressed their excitement about the availability of mentors or senior students for assistance. The findings indicate how different participants made use of the opportunity to have mentors and tutors to address their academic challenges. Specifically, some of the participants reported during the interviews that they consulted more than was required. I would therefore argue that after having cited the issue of the challenges of big classes that they found themselves in and the fact that they (participants) could not ask questions in class as they wished (see § 5.4.2.2) they then resorted to asking mentors for assistance. In other words, the extent at which the mentors were utilised by the student-participants was directly influenced by the class size in a particular subject or course.

In utilising the learning support structures, participants were able to check on the availability of tutors when they experienced challenges when studying. Excellent academic performance is always associated with many sacrifices on the student's part. For instance, Participant 10 highlighted how she used a library that was open 24 hours a day so as not to have to study in her room, which she had found not to be at all effective (see § 5.4.3.1). Based on the findings of this study I, like Olani (2009), suggest that special educational support programmes, for instance tutorial classes, guidance on study skills, note taking and other basic academic skills, are essential for students who might need such support.

Given the evidence that was obtained by this study, I would argue that it has indeed added to the existing literature. Significantly, the study confirms Du Plessis et al.'s (2005) statement

that it seems likely that in determining performance there are more active and subjective forces at work that statistical studies do not capture.

### **6.3 DOCUMENT ANALYSIS: AN ANALYSIS OF ACADEMIC PERFORMANCE BASED ON STUDENTS' RECORDS**

For document analysis, I then focused on the NSC results and the students' first-year university examination results. These documents served as critical sources of data, providing supplementary information that was used to support the data obtained from the interviews, especially responses to the question that required participants to describe their academic performance both in matric and in the first year at university.

#### **6.3.1 An analysis of the top achievers' academic performance in the National Senior Certificate examination**

In analysing the top achievers' academic performance I paid attention to the following important aspects:

- the number of subjects that each participant studied in Grade 12
- the number of distinctions that each participant obtained in Grade 12
- the subjects with the highest and lowest percentages in terms of the students' performance
- similarities in top achievers' performance.

Of the top achievers who provided their academic records, two of the five students had done seven subjects in matric, one student had done eight, while the remaining two students had done nine subjects in matric. According to the data obtained from the interviews, some of these students had taken two or three extra subjects in matric even though they were doing very well in all their subjects. For instance, during the interviews Participant 4 indicated that she had done German and Mathematics Paper 3 as extra subjects. Accordingly, I believe that taking on extra matric subjects reflects the students' readiness to deal with additional academic workload as early as in matric. This is despite the fact that the heavy academic workload was generally cited as being a negative attribute in the top achievers' narrations.

What is of interest is that although top achievers (participants) had taken different subjects in matric (i.e. as per their academic stream of choice), they all obtained distinctions in all subjects. According to the data (i.e. results), the top achievers had obtained between seven and nine distinctions. Again, it should be mentioned here that according to the top achievers'



matric records all the sampled participants had obtained achievement level 7; that is, marks between 80 and 100% which denotes outstanding achievement.

Table 6.1: Subjects in which highest performance was achieved

Subject	Highest mark achieved (%)
Accounting	100
Mathematics	
Physical Sciences	99
Life Sciences	
Accounting	
Economics	98
Physical Sciences	
Mathematics	96
Physical Sciences	
Sepedi Home Language	95
Afrikaans Home Language	
Mathematics Paper 3	

Interestingly, in terms of subjects, top achievers had obtained the highest performance of 100% in the subjects of Accounting and Mathematics. Table 6.1 illustrates the subjects in which the highest performance was achieved irrespective of the year in which the student matriculated. However, the highest performance presented in this table ranges between 95 and 100% in all subjects with the highest performance being from different participants.

According to the data (students' results), the lowest performance – between 80 and 84% – was achieved in a few subjects. For instance, Participant 7 had 80% in both languages, namely, English First Additional Language and IsiZulu Home Language, whereas Participant 1's lowest performance was in Life Orientation with 84% which is the same as Participant 3's lowest performance in Sepedi Home Language. It should, however, be noted that Life Orientation as a subject has a different status in matric, as unlike other subjects, its marks are based only on the School Based Assessment conducted and no formal examinations are written as in other subjects.

From the interview data, it is clear that some of the participants experienced different challenges in their high school studies, despite the good performance that these participants demonstrated in the NSC examinations. The most significant findings from the top achievers' results is the fact that participants who experienced the most serious challenges at high school did outstandingly in their academic performance. For instance, Participants 1 and 7 indicated that at some point they had spent a very long time without an Accounting and Economics and Physical Sciences teacher respectively. Another significant scenario is that which was presented by Participant 3 who also reported that they had had no Accounting teacher in Grade 12 at his school and he was subsequently taught by his mother. Accordingly, the top achievers' academic results show their commitment to their studies irrespective of the conditions because they all performed excellently even in subjects where they did not have teachers.

### **8.1.1 An analysis of top achievers' academic performance in the first year at university**

Besides the data that was obtained from the interviews, the end-of-year examination results obtained from the sampled participants provided supportive data.

In analysing the performance of top achievers in their first-year university studies, I focused on the following important aspects:

- the number of courses that top achievers studied in their first year of study (i.e. in each semester)
- top achievers' academic achievement in the first and second semester
- courses where the highest and lowest percentage was achieved
- similarities in top achievers' academic performance
- 'unique footprints' in top achievers' academic performance.

One of the observations that I made with regard to the number of courses that top achievers took in their first year was that they all took six courses per semester. In other words, students took twelve courses in their first year of university studies. Despite this heavy workload, their academic performance in the first year was impressive because they all performed exceedingly well in almost all the courses.

According to the top achievers' end-of-year examination results, the highest performance was 100% in Statistics 161. This excellent performance was achieved by Participant 1; on the

other hand, Participant 9, who also studied Statistics at another university, obtained just 82% in his first-year studies. This confirms top achievers' conceptions of Mathematics; that is, they highlighted during the interviews that they enjoyed working with numbers and that subjects that required problem-solving skills were doable for them. The highest performance was also observed in the course, Medical Thought and Practice 1001, where the participant obtained 91%. Although Participant 4's highest achievement was 85% in Medical Terminology, she obtained distinctions in all her courses. As a result of her outstanding performance, this participant was exempted from writing examinations in two courses, namely, Academic Literacy 110 and Academic Literacy 120, one in the first semester and the other in the second semester. The lowest performance obtained by Participant 4 was 76% for Molecule to Organism, although it is also a distinction.

Generally, most top achievers (participants) obtained between 70 and 88% in the courses that they studied in their first year at university. On the other hand, they obtained the lowest percentage in three courses, namely, Academic Information Management 121 at 67%, Sociology 1016 with 67% and Introduction to Engineering Materials at 63%. With regard to this performance, the results for the course, Introduction to Engineering Materials are interesting because such performance confirmed what Participant 5 had indicated concerning this course during the interviews. What really surprised me on this finding was that the belief about this course being challenging was reported by Participant 5 during the interviews and he also elaborated on students' attitudes about this course. However, the evidence (academic results) that revealed and confirmed how demanding the course was, were obtained from Participant 7's first-year university results (see § 5.4.1.8 for Participant 5's narration about the course during the interviews).

It is evident from the marks that Participant 7 obtained (63%) in this course (Introduction to Engineering Materials) and the fact that it was the only course in which he obtained such low marks, that the demand and expectations that the course has of students are similar even though the participants were at different universities.

It is also important to note that concerning his performance in first year, Participant 7 outshone his counterparts. As already mentioned, Participant 7 was awarded the Deans Commendation.

Perhaps the most critical finding with regard to top achievers' academic performance at first year university is the fact that all the sampled participants performed outstandingly in the courses they studied. It is interesting to note that in the six semester courses that top achievers studied, they all performed very well except for three participants who had one course far below the rest on average although their achievement was above 60%. One of these courses was referred to earlier on, that is, Introduction to Engineering Materials. I would therefore argue that top achievers' academic achievement in their first year at university was similar to that in matric (NSC). In other words, top achievers continued to achieve distinctions in their first year at university.

In the first year of study, it would seem that there was generally a great improvement in the top achievers' performance in the second semester compared to the first semester. I would therefore argue that this may be because some of the courses were new for top achievers and, unlike the courses that had also been school subjects (e.g. Economics, Mathematics and Accounting), these required serious adjustment by the students. For instance, Participant 1 obtained 59% in Commercial Law 110 in the first semester and thereafter got 80% in Commercial Law 120 in the second semester.

However, top achievers' results also revealed that in some instances their performance dropped a little in the second semester. For instance, Participant 1 obtained 88% in Economics 110 in the first semester and 84% in Economics 120 in the second semester. This declining pattern of performance was also observed in Participant 9's performance in Economics, obtaining 88% in Economics 114 and 78% in Economics 144 in the first and second semester respectively. It is also important to note that these two participants were studying at different universities and doing different degrees. To me, this decline in performance might be because of the fact that after having adjusted well into university, these students might have then relaxed and forgot about the high demands of the course. Again, I think that where good results were obtained in the first semester this might have influenced students' perceptions about the course. In other words, top achievers might have then viewed the course as easy and have started to put less effort into it.

Nonetheless, top achievers' academic performance in first year at university revealed that they (top achievers) were more than determined to study irrespective of the university or faculty conditions.

### 8.1.2 Summary of the most significant findings

Although some literature (Petersen-Waughtal & van Dyk, 2011) has revealed that NSC results are not good predictors of students' performance and success at university, Rankin et al. (2012) in contrast maintain that the literature still suggests that on average the NSC remains a reasonable predictor of university success. This confirms the findings of the current study, since it focused on the students' performance in the first year at university following the good results achieved in the NSC examinations. Ultimately, my observation is that performance in matric to certain extent influenced the participants' academic achievement in their first year at university and even beyond. Accordingly, Viljoen and Deacon (2013) argue in this regard that previous studies have supplied evidence of the importance of matric aggregate or results.

The following are some of the most significant findings based on the top achievers' achievement in their first year at university:

- Based on the top achievers' academic results, the findings confirm the importance of previous academic performance (i.e. matric) as the most critical positive predictor of future academic achievement.
- Top achievers' (participants') academic achievement in the first year at university revealed that they were academically prepared or ready for university studies. In addition, besides academic preparedness, students' motivation to study at university might also have contributed to their achievement in the first year at university.
- More importantly, top achievers' academic achievement in the first year at university also revealed that students' high school experience has both a direct and an indirect impact on performance in the first year of study.
- Top achievers' academic achievement in the first year at university also showed that they had arrived at university with some pre-entry attributes (e. g. study skills, problem-solving skills).

Students' adjustment to the university also proved to be important for their academic performance, since some of the participants' academic performance in the second semester showed great improvement in some courses as compared to the first semester.

Generally, top achievers' academic performance in the first year denoted what Viljoen and Deacon (2013) called "academic fit". According to Viljoen and Deacon (2013), academic fit

is described as “the matching of or compatibility between the student’s personal characteristics and those of the course and institution”. This is not surprising because research on higher education has shown that good career choices are the best predictors of students’ success.

Finally, it is also evident that as a proxy for academic ability, first-year academic achievement played a strong role in explaining academic success in the second year.

## **8.2 DISCUSSION ON FINDINGS**

### **8.2.1 Findings that reveal direct links to the literature review**

The first finding which reveals links to the literature review is the indication of a strong association between the previous academic achievement of top achievers and university achievement. This finding agrees with McKenzie and Schweitzer (2001:22) who state that studies have shown support for the relationship between previous academic achievement and university achievement. However, it is important to note that the predictive capacity of grades achieved at secondary school differs between different individuals and groups. In this study, Participant 5, a first-year university student, said that his matric performance contributed a great deal to his admission and therefore he would not accept anything less at university than his level of academic achievement in Grade 12. Participant 5’s opinion is similar to that of other participants. All the participants in this study attributed their academic achievement in the first year at university to their academic achievement in Grade 12. A complete discussion on this subject is presented in section 5.4.1.6. One of the participants (Participant 4) even acknowledged that thanks to the kind of education that she got at her high school, she was not thrown in the deep end at university (see § 5.4.2.3).

The findings reveal a strong relationship between academic achievement in the first year at university and previous (i.e. Grade 12) academic performance. According to the participants, their performance in Grade 12 contributed a great deal to their dedication and motivation to study harder at university, hence their good results in the first year at university. The participants attributed this academic achievement in first year at university to, among other things, having skilled and effective lecturers and adequate, relevant resources and the advanced technology provided by the university (see in this regard §§ 5.4.1.9, 5.4.2.1 and 5.4.2.2). Some of the participants (i.e. Participants 1 and 7) mentioned that had there not been

a lack of good resources at high school they might have even performed better than they did in the matric exams.

In addition, many participants demonstrated how they applied the skills and strategies they had used in matric in their first year at university to ensure that they also performed excellently in that context (see § 5.4.1.9). These participants felt that whatever had worked for them in Grade 12 had to do so at university. However, some of the participants (i.e. Participants 1, 2, 4, 5, 9, 10 and 11) indicated that they had to do more or put in extra effort compared to Grade 12. Krause (2005) highlighted in this context that students are more likely to seriously consider dropping out of university if they are not equipped with strategies for self-managing their time, commitments and study behaviours. According to Krause (2005), these strategies should be developed before students enrol and should be honed during the early weeks of the first year and developing further over time.

Furthermore, participants believed that having passed Grade 12 with good marks and being admitted to a university is a life-time opportunity that one should not gamble with. Therefore, they viewed maintaining such results, even in the first year, as a responsibility that they should fulfil because it is accompanied by the issue of securing sponsorship and opening up opportunities for their future career (see § 5.4.2.4).

This finding thus indicates that the previous academic performance (i.e. Grade 12) of the top achievers, and not the rest of the freshman cohort, bred good academic performance in first year university. It is not surprising, therefore, to find that top achievers who obtained between seven and ten distinctions in matric also obtained a number of distinctions in their first year at university (see in this regard §§ 5.4.1.6 and 5.4.1.8). The above findings would therefore seem to concur with the study conducted by Horn et al. (2011), which found that although matriculation results as a proxy of academic ability was a more important predictor of performance in the first-year of study, it played a weaker role in explaining academic success in the second year.

As a researcher, I need to indicate that the fact that participants came from different social and educational systems places this study in an advantageous position for testing the reliability of the results. In addition, because participants were selected for this study on the basis of one common condition (i.e. being matric top achievers), the study is rendered free of bias. In other words, the study does not represent a particular racial group or gender. In

previous research on the issue of matric results as a predictor of performance in the first year at university, which was conducted at the University of Witwatersrand, Nunns and Ortlepp (1994) reported that for typically white students, matric results (especially in the higher range of faculty ratings) were an appropriate predictor of success at university. From the participant profiles in table 4.1, it can be seen that the sampled participants do not represent a particular ethnic group or educational system.

The findings of this study reveal multiple significant factors for academic performance. Among others, the findings of this study indicate that students' academic readiness plays a major role in their educational success. This finding concurs with what Petersen-Waughtal and Van Dyk (2011) have revealed in their study that "it is self-evident that the lack of academic readiness constitutes a major risk to student success". Participants in this study demonstrated how they were challenged by the university environment and the experiences that they went through just to meet the high academic demands of the universities. Academic readiness implies that students that come to university are of the calibre that would immediately adjust to the South African higher education landscape which is said to be extremely complex. Nonetheless, Participant 4's response during the interview does reveal academic readiness as she put it:

*... and then on education based things, I think I personally think that the education that I got in matric was good enough to prepare me for university. I didn't ever feel that they didn't teach me enough in school and now I'm thrown in at the deep end (Interview with Participant 4, 14/11/2013).*

Most participants had a great deal to say about the workload in the first year, the pace of teaching and learning, the language of learning and teaching, and their adaptation to university. Discussions on these subjects are presented in sections 5.4.2.2 and 5.4.3.2. Seemingly, all the factors that the participants complained about are directly linked to their academic readiness for university. This finding concurs with Robinson's (1996:1) identification of three domains of under-preparedness, namely, academic, cultural and emotional under-preparedness. Robinson (1996) further explains that academic under-preparedness entails a lack of proficiency in English, a lack of mathematical ability and ineffective study skills. In this study, two participants (i.e. Participants 1 and 10) reported how their language of instruction (i.e. English) impacted negatively on their learning and thus nearly pulled down their academic results. Participant 10 further stated that her reading pace



was much slower than that of her counterparts. In this vein, Participant 1 reported on how the language used in first year was totally different from that used in the high school (i.e. Grade 12), where teachers tend to use an African language (e.g. Sepedi/IsiNdebele) to explain some of the more complex concepts. At university it is totally different because only English is used in lectures. Nevertheless, these issues did not discourage the participants from always striving for better results. According to the findings, the participants were just worried about how they would manage in such a challenging environment because they were used to being on top as far as academic achievement was concerned.

These findings strongly concur with Cross et al.'s (2009) argument that to become a student requires “a progressive mastery of [the] common institutional language” of the learning space through which a student emerges as a person endowed with a pool of procedures, methods, activities and know-how, which make him/her able to invent mechanisms of adaptation to give a meaningful sense to the world which surrounds him/her. In other words, continuous mastering of the language of learning and teaching assists students to adapt to the demands of university teaching and learning. The finding of this study strongly reveal the concerns and challenges student-participants encountered as a result of their academic development in terms of the language of teaching and learning.

Again, this finding concurs with the findings of Van Eeden et al. (2001), who argue (i.e. in chapter 2) that according to their findings the language of learning and teaching seems to be a useful predictor of academic performance. In other words, as also revealed by the current study, mastery of the language of learning and teaching has a direct impact on the students' academic achievement (see § 5.4.3.2).

The importance of academic skills, including study skills, academic competency, strategic studying and time management in performance in first year also came over strongly as one of the findings that reveal direct links to the literature review (see §§5.4.1.9 and 5.4.3.2). Moreover, many researchers have argued (see chapter 2) how different domains of academic skills are associated with effective performance. This finding supports the arguments put forward by McKenzie and Schweitzer (2001), Sansgiry et al. (2006) and Abbot-Chapman et al. (1992) that many domains of academic skills contribute to students' academic performance.

In addition to academic skills, the findings also revealed that the students experienced challenges relating to a lack of certain skills in their first-year of study. For instance, one participant reported how being computer illiterate frustrated him during the first term of the first-year of his study (see § 5.4.3.2). The lack of computer skills would seem to be as a result of the schooling environment that this student was exposed to, as this was not reported by the other participants.

With regard to academic competency as one of the domains of academic skills, most participants complained about the heavy workload in the first year at university. They (participants) said that they were expected to study and understand a great deal of content for all courses while still trying to adjust to their first year of study (see § 5.4.3.2). Although they managed to work through this frustration these participants indicated that to them the content was not necessarily difficult but the workload was just too much to handle in a short space of time. All participants in this study stated that the workload was just too much for them in the first year. Consequently, the findings of this study concur with those of Petersen et al. (2009), who found that academic overload has a negative impact on both adjustment and academic achievement. In other words, as Bitzer and Troskie-De Bruin (2004) put it, several students experienced difficulty in managing the academic workload at university as they make the transition from high school to university. Linked to the issue of workload was the issue of time. Some of the participants of this study felt that time management was directly associated with academic performance (see § 5.4.3.2).

As part of the study it is worth focusing on one of the most frequently recurring themes that emanated from the interview data, namely, the key strategies that the participants adopted in dealing with the challenge of a heavy workload. I present these strategies in point form:

- **Developed support networks** – In dealing with the heavy academic workload, most participants resorted to support networks such as study groups to assist one another in defining or explaining certain problematic concepts. Participant 8 indicated that they had between 10 and 12 students in their group. An example to illustrate this point is provided by Participant 8:

*... the kind of support network, like 10/12 guys studying Mechanical Engineering first year and if you had a problem, not everyone also had the same problem, so someone could help you if you really had a problem (Interview with Participant 8, 11/12/2013).*

- **Time management** – Most participants felt that they had to start planning their time in order to cover the entire workload. This also means studying every day and not allowing work to pile up unnecessarily. Participants also indicated that they used much of their time for their studies. Participant 5 highlighted that it had to be 90% of your time devoted to studies and only 10% to social aspects.
- **Participants developed study habits** – Most participants reported that they had decided to make their own notes on or summaries of each lecture, tried to keep ahead of lecturers in different courses, and studied every day. Some of the participants (Participants 7 and 10) also sought a convenient place to study where their studying could be more effective (i.e. library) instead of studying in their rooms.

Another finding which also reveals links to the literature review is that motivation increases students' interest in their studies. This finding confirms Goodman et al.'s (2011) statement that, in order to be intrinsically motivated, a person must experience interest and enjoyment in his/her task, along with feelings of competency and self-determination. Interestingly, this statement is supported by Elliot and Harackiewicz (1996) who stress the point that "people with a high achievement motivation explore their environment; take calculated risks and look for concrete measures of their progress". All the participants in this study showed great interest in their studies. The narrations of the participants revealed how dedicated, committed and confident they were in their studies irrespective of the challenges they encountered. Above all, student-participants' motivation emanated from their academic performance in Grade 12 (see § 5.4.1.6). In other words, their performance in Grade 12 served as intrinsic motivation to strive for more at university. Therefore, this study confirms the theory of achievement motivation cited by Goodman et al. (2011:374), which postulates that people who are intrinsically motivated are generally more effective and perform better.

According to the participants, one cannot accept any performance (i.e. marks) just because it is good, and because they are good and not a fail you just have to be satisfied; instead as top achievers they always had to strive for the best. Participant 5 stated for example that when one obtains 90% it is not enough because it is possible to strive for 100% and get it (see § 5.4.1.8). Regarding performance, as students the participants had different views about their average pass percentages. According to the data some people welcome any pass mark (e.g. Participant 8) whereas others believed that even if the achievement is good one should always strive to do better.

Another important finding which reveals links to the literature review is that support centres (i.e. with mentors) that provide students with guidance and counselling play a significant role in motivating students to study hard, and thus performing well in their studies. For instance, Participants 1, 7 and 10, who maintained that such support centres were helpful to students, also raised concerns about the level at which such centres should operate. These participants (1, 7 and 10) also believed that such support centres should, for example, not only provide counselling on academic issues but should also assist students with social, emotional and psychological matters. In other words, the services that such support centres provide should have a holistic approach to students' problems. Participant 10 accordingly highlighted that the support that the university offers

*should not be more of like a business of like giving people things and just telling them whatever you want and you will see whatever you gonna attain from that but they have to follow up, support us, maintain and actually be interested in what we are doing.*

Participant 7 also highlighted that although the university provides some support it is not enough. Like the other participants, this participant believed that academically the support is sufficient or satisfactory but the university is still lacking in the provision of psychological and social support. According to the interviews conducted in this study, most participants indicated that they really do need support from the university, be it academic or social. The participants suggested that such support structures could include the formation of groups in which students could be taught about university life and its challenges, as well as being advised where to go when experiencing problems.

Most participants in this study claimed that support structures played an important role in their academic performance. Therefore, this study would seem to confirm the argument made by Zewotir et al. (2011) that although there are some common trends, factors affecting success in first year differ greatly from faculty to faculty, so that it is impossible to find “a one size fits all” solution to increasing the level of student throughput rates at university. I should mention that there is also consistent evidence that concurs with Sommer and Dumont (2011), who emphasised that to achieve the desired effects of any form of support or assistance for students to ease their adjustment to university life, that support should be provided during the first year of study. Hence, there are participants in this study (e.g. Participant 10) who reported that, had they had mentors in the first term, the chances are they

would have performed far better than they did. Unfortunately, mentors were only introduced in the second term.

Though some participants were not fully satisfied with the university support centres they at least acknowledged their existence and their positive contribution to their academic performance. Some of the participants felt that it was high time that those universities that do not have student support centres start putting such centres in place because this would benefit both the students and the institution.

Seemingly, there is consistent evidence that universities do have structures to support students, although according to some of the participants the support that is offered is not enough as it is focused more on academic issues.

### **8.2.2 Findings that are not directly linked to the literature review**

The first academically important finding that was not indicated in the literature was that of the unstructured curriculum in the first year that made it difficult for first-year students to adapt to the content workload and demands (see §§5.4.3.2 and 5.4.3.3). Some participants doing the same degree though at different universities narrated during the interviews how the unstructured first-year curriculum had made it difficult for them to follow the content and generate a good understanding that would positively influence their academic performance. These participants (Participants 4 and 10) claimed that the unstructured curriculum negatively impacted on their performance because they just could not make sense of the content of what was taught as everything was just scattered around the curriculum. Although I did not specifically ask the participants about the curriculum, some participants felt it was very important to report on the issue when responding to the question on their experiences of learning and teaching in first year at university. Participant 11 also claimed that it was only in second year that one was able to understand why it was necessary to study certain things and how were they applicable to one's degree and future career. Some of these participants felt that if the curriculum in the first year was as well structured as it was in the second year (Participants 4 and 10), they might also have performed better than they did. Again, they (the participants) believed that if the curriculum had been better structured in the first year they might also have adapted more easily to first year. They therefore believed that unfortunately the curriculum disadvantaged them.

On that account, one participant also narrated how one of his counterparts from another province with distinctions in Grade 12 failed dismally in the first semester because the curriculum did not make sense to them. According to this participant if they were introduced to well-structured curricula like those of the second year, students would not have found it difficult to deal with first-year content and workload.

The participants who mentioned that an unstructured curriculum has impacted negatively on their academic performance were in their second year of study at the time of this research. In other words, what they highlighted was specifically based on their experiences in first year. I therefore assume that those participants who were still in their first year of study during the interviews would not have mentioned this fact because they had not yet experienced the second year of study. In other words, the participants who did mention it were then quite aware of the differences between first year and second year. Subsequent to that, some of the participants did complain about certain courses that they had to do in their first year that were not related to their field of study (see § 5.4.3.3). Participant 7 highlighted how he felt about one course that he was doing that did not make any sense as it was not part of his field of study. By using the term ‘unstructured curriculum’, it seems that these participants were complaining about the generic, less specific nature of the freshman year.

The student-participants in their second year who complained about the unstructured curriculum also reported the reasons they were given for such practices, including that the unstructured curriculum was used as a strategy to eliminate some of the students in the different courses. According to these participants, some of the course content was set loosely or was not connected for a better understanding so that some of the students would drop out of the course thus making a particular class smaller (see § 5.4.2.2). Participant 10 stated profoundly, “*so like really so they’re using it to eliminate us*”.

Accordingly, participants in their second year felt that the second year at university was better than the first year which, they felt, had been hectic. One participant (Participant 10) even indicated how she wished she could have started with second year and thereafter proceeded to first year. Although they (participants) generally performed very well, participants believed that apart from being a challenge, an unstructured curriculum also influenced their academic performance because it challenged their grasp and understanding of the content (see § 5.4.2.2). In my view, the unstructured curriculum could also account for

a change in course or drop out from university as a result of students' loss of interest in the course.

On another level, the findings in this study also reveal that affording top achievers a platform as motivational speakers or mentors for matric learners motivated them and it also encouraged them to be positive and persist in pursuing their goals. In other words, this assisted in building positive self-esteem among the students.

### **8.3 CONCLUSION**

The analysis of the qualitative data relating to academic achievement and the experiences of first-year university students (i.e. high school top achievers) revealed that most participants had strived for and maintained good academic results despite the challenges they encountered in the first-year university; challenges that included the teaching and learning process at university, including the teaching style, teaching pace and instructional language usage. These factors were all mentioned by the participants during the interviews.

It is worthy of note that few participants complained about a lack of support (i.e. both academic and non-academic) from the university and few participants placed the blame for any fair academic performance on the university. On the contrary, most of the participants regarded their academic achievement in all semesters as being their own responsibility. However, that did not stop the student-participants from suggesting that the universities need to put in place more support structures to cater for the different academic and non-academic needs of students. The facts raised by the participants are acknowledged to be genuine concerns. However, one participant presented a model that was used by her university in supporting students' academic needs. This participant reported how the Intervention Programme as it is called assisted students who did not perform well in certain courses and instead of labelling as 'having failed', they were identified and placed in the programme. According to this participant, this programme benefitted many students herself included.

## CHAPTER 7

### FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS OF THE STUDY

#### 9.1 INTRODUCTION

In this chapter I focus on restating the problem that led to this investigation, as well as the main research questions, the aims and the objectives. A summary of the main findings of the literature review is also presented. For the purposes of finalising this study, the main findings of the empirical investigation are presented and discussed. This chapter also covers the significance of the study, the limitations and shortcomings and the recommendations and implications of the study. The chapter concludes with a discussion on the importance of this study to the existing body of knowledge as well as implications for future research.

#### 9.2 SUMMARY OF THE PROBLEM THAT LED TO THE INVESTIGATION

This study was initiated to investigate how Mpumalanga Grade 12 (matric) top achievers performed in their first year at university after having performed excellently in Grade 12. Accordingly, the empirical findings revealed that these top achievers/students were also doing well academically in their first year of study at university. It should be noted that some of these participants were already in their second year of study at the time of the study and were thus able to share many experiences about their first year at university. This really benefited the study because students who were already in their second year of study could make a more significant contribution to this study because of their knowledge and experience of first year. The findings revealed that although enrolled at different universities across South Africa and in different programmes/fields/degrees, these top achievers were able to adjust to the first year despite the challenges they encountered in the teaching and learning (see § 6.2.2).

This study also focused on students' experiences of the course or programme they were studying and the reasons they attached to their success and/or failure. Specifically, empirical findings were obtained on students' experiences of the courses or programmes they were studying. One of the critical findings of this study is that top achievers have different perceptions of the teaching and learning activities and experienced them differently (see §§ 4.5 and 6.2). This is despite the fact that the top achievers attributed their academic performance in the first year to similar factors. The possible reason why participants



perceived the teaching and learning activities differently was because they all studied at different schools and that suggests that they might have learnt differently despite following the same curriculum. I would also argue that, that a possible reason for these participants experiencing teaching and learning differently could be linked to the different teaching environments that they were exposed to (i.e. different classrooms), some having all the necessary teaching resources and some being inadequately resourced.

Regarding the ‘support structures’ at universities, the findings obtained are worthy of acknowledgement and consideration although presented by top achievers who had experienced different challenges at different universities. The top achievers expressed how the lack of support in other domains (i.e. social support) had had a negative impact on their academic performance. There are no consistent findings regarding the claim that the lack of support by universities might have a negative impact on students’ academic performance. Although some of the top achievers in the current study did indicate that their university gave them all the support they needed, it was nevertheless found that social support was a challenge for most students. Although I agree with the literature that too much social interaction might lead to poor academic achievement, this would seem to depend on the type of person that a student interacts with (Tinto, 1975).

I would however like to emphasise that top achievers were able to maintain momentum in their studies by being innovative, by improvising and by being self-sufficient. In other words, top achievers were able to use the available learning support structures in first year in order to excel in their studies.

### **9.3 SUMMARY OF THE MAIN RESEARCH QUESTION, AIMS AND OBJECTIVE**

Since the study was aimed at investigating the academic experiences of first-year students and their performance and how their perceptions influenced their academic performance, a number of empirical findings relating to this investigation were made. The findings of both the quantitative and qualitative parts of this thesis revealed empirical evidence to show that the positive perceptions of top achievers to a certain extent contributed to their excellent academic achievement in their first year of study. This was demonstrated by the findings on top achievers/students’ perceptions that self-motivation, self-discipline, effort, self-concept, having an interest in the course, self-confidence (see §§ 4.5 and 6.3.1) positively contributed to their academic performance.

As part of the study aimed to show how top achievers/students responded to the challenges inherent in the first year at university, there is consistent evidence from the findings to show that first-year university students encounter different challenges, especially regarding adjustment, heavy workloads, unique university teaching style and the teaching pace thereof (see § 6.2.2). This was despite the fact that top achievers studied at different universities. One significant finding was that despite the challenges they encountered in their first year, top achievers were able to meet the academic expectations of the university.

Empirical findings also revealed how top achievers developed and maintained academic excellence in their first year at university despite the challenges they encountered. It should be emphasised here that the participants of this study regarded self-motivation, time management, having a balanced lifestyle, having an interest in the course, and making effective use of the available resources at university (see § 6.2.3) as critical to their academic performance.

#### **9.4 SUMMARY OF THE MAIN FINDINGS OF THE LITERATURE REVIEW**

According to Krause (2005), “it is a truism worth reiterating that the diverse student cohort in the first undergraduate year, experiences the university in vastly different ways”. This would then also include the different parts of the cohort as this study has done. This could mean that obtaining information (data) from students who are studying at different institutions (universities) could benefit the quality of knowledge and understanding that would be generated from students’ experiences of first-year.

##### **9.4.1 First-year university and academic performance**

According to the literature review, previous academic performance (i.e. matric in this case) is important and contributes directly to academic performance in the first year at university (Shalem et al., 2013; Rankin et al., 2012; Rowley et al., 2008; Tinto, 1975). Similarly, previous academic performance is seen to be related to academic preparedness for study. According to Rowley et al. (2008), students’ views about their pre-university experience and how well it had prepared them for studying at university is what this academic preparedness for study has focused on. Consequently, Shalem et al. (2013) argue that it would be logical to expect that the mastery that learners have achieved at school should enable them to take on the demands of the semiotic domains they will encounter as students at university. In the same vein, Tinto (1975) indicated that from the suggested perspective, the individual’s

aspirations, expectations and motivations for college education are both directly and indirectly affected by the characteristics of high school, which are also important.

According to the literature, academic performance is determined by a number of different factors; some being internally located whereas others are external to the students (see § 1.7 on the theoretical framework). According to the literature reviewed, retention, persistence and academic success are all dependent on the proper transition and adjustment to the university (Howells, 2003). However, according to Ramrathan (2013), rates of progression and retention at South African HEIs currently rank amongst the lowest in the world.

More knowledge and understanding of academic performance, as obtained from the literature review, can be gained from Tinto's longitudinal model of dropout. The point of departure of this model is that students enter institutions of higher learning with different attributes (e.g. sex, race, ability), family backgrounds e.g. social status attributes, value climates, expectational climates) and pre-college experiences (e.g. grade-point averages, academic and social attainments) wherein each attribute impacts directly and indirectly on performance in college (Tinto, 1975). As highlighted by Weiner's (1985) attribution theory, Tinto (1975) also maintains that the development of the educational expectations and commitments the individual brings with him into the college environment are influenced by these background characteristics and individual attributes.

A great deal of research suggests that rather than social integration or institutional commitment, academic integration and goal commitment are more important to persistence in college (Tinto, 1975). The literature reviewed also revealed that an important predictor of persistence, retention, completion and achievement is the first-year experience at university and therefore also academic performance at first-year level (Viljoen & Deacon, 2013; Krause, 2005; Crosling et al., 2009). According to Viljoen and Deacon (2013), engagement, which is a broad phenomenon that includes academic as well as certain non-academic and social aspects of the student experience, is one of the most important factors influencing the first-year experience. Furthermore, Viljoen and Deacon (2013) noted that it is important that students feel accepted and affirmed. In other words, they need to have a sense of belonging in order for them to be engaged. It is believed that students who are engaged are more likely to persist, achieve academic success and complete their qualifications, (Viljoen & Deacon, 2013).

Tinto identified a number of important phases that every student has to undergo in order to perform academically and achieve first-year success (Tinto, 1975; Krause, 2005; Van Zyl et al., 2012; Viljoen & Deacon, 2013). According to Van Zyl et al. (2012), these phases are, firstly, a separation phase, during which the student loosens bonds with the originating environment (home) and starts the move towards the new environment (university). Van Zyl et al. (2012) also maintain that during this phase individual student characteristics are the strongest and most direct influences on their success and persistence.

The second identifiable phase according to Van Zyl et al. (2012) is called the transition phase, during which the student starts becoming part of the new environment (i.e. university). Finally, there is the integration phase, during which the student becomes fully integrated into the university by meeting its explicit standards. Van Zyl et al. (2012) consequently argue that the contributing factors that inform each of these phases differ too widely for one study to investigate them all.

## **9.5 FINDINGS OF THE EMPIRICAL INVESTIGATION**

This section discusses the findings that were obtained from both the quantitative and qualitative data collection strategies. Indeed, the quantitative survey, which preceded the qualitative study, provided the basis for this research. I should also mention that the qualitative study provide qualitative data to supplement or support the quantitative findings.

### **9.5.1 Main findings of the quantitative study**

#### **Biographical information on respondents**

The research was conducted on the Mpumalanga 2011 and 2012 matric top achievers. Fourteen university students in their first and second year of study responded to the questionnaire, which comprised of 128 Likert-type scale variables. In terms of gender, nine male and five female students aged 19 to 20 participated, although three respondents did not indicate their age. Respondents who were 20 years of age were in their second year of university study. Four of the respondents were enrolled for Medicine, four for Mechanical Engineering, three for BCom Accounting, one for BEngineering Mining, one for BAccounting LLB, one for Financial Accounting and Law and one for Engineering and Built Environment (see table 4.1).

A summary of the results for each research question is presented below:

- **Research question:** What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?

Students' perceptions and expectations of first-year university learning and teaching indicate the relevance of the study to the recent studies on first-year university students. The findings suggest that the main positive contributory factor to student academic success is the individual's personal beliefs and perceptions about him/herself and his/her studies. This confirms Modipane's (2011) argument that students with a poor self-concept are likely to find it more challenging to adapt to new environments. Modipane (2011) further warns that a poor self-concept is also related to poor academic achievement and is one of the challenges faced by first-year university students.

The following are the perceptions students had about university teaching and learning in their first year of study:

#### **Availability of qualified lecturers**

The perceptions of the top achievers of their lecturers indicated the trust they had in them. These respondents perceived their lecturers to be committed to their studies as they (lecturers) made themselves available to the students when they needed assistance, were approachable, and provided students with assistance in the first year (see § 4.4.1). This implies that the attitude and performance of lecturers impacted positively on students' learning.

#### **Students perceived class attendance as important**

Top achievers perceived class attendance as contributing positively to their learning (see § 4.4.2). Thus, top achievers associated better or good results with class attendance. None of the participants of this study demonstrated a negative attitude towards lecture attendance.

#### **The workload that engaged students**

The top achievers (respondents) believed that the workloads that the lecturers imposed on them kept them academically engaged (see § 4.4.1). These top achievers demonstrated a positive attitude towards their heavy workloads. Thus they could relate to Krause's (2005) use of the term "persisters". According to Krause (2005:60), "persisters tend to be those who

regularly seek advice and help from staff, ask questions in class and have a strong self-belief that they are strategic about managing their workloads”.

### **The language of learning and teaching**

Respondents believed that knowledge and understanding of the language of learning and teaching had contributed significantly to their performance in their courses (see § 4.4.5). Modipane’s (2011) study also revealed that many first-entering students are unable to access information or learn effectively because of their lack of English language proficiency.

### **Group work in class**

Top achievers’ perceptions of group work in class indicated their rejection of or discomfort with this practice (see § 4.4.6). However, Krause (2005) insists that group work is required both in and out of the classroom in order for students to connect with their peers in meaningful ways. According to Krause (2005), group work activities, group assignments and peer support programmes are some of the practices that are widely accepted.

- **Research question:** How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?

The fact that the respondents of this study were matric top achievers does not necessarily guarantee that they would do well in their first year at university. From the data obtained in this study, the following aspects were listed as the most important regarding maintaining academic excellence in the first year: self-discipline, self-motivation, interest in the course, self-confidence, academic preparedness, effort and the belief students had about themselves (see § 4.3). All these aspects confirm Tinto’s (1975) intellectual development ideology. According to Tinto (1975:104), intellectual development represents an integral part of the person’s personal and academic development, which can be viewed as a more intrinsic form of reward. Tinto (1975) further elaborates that intellectual development has also been found to be related to persistence in college, as it is an integral part of the person’s personality development and is a reflection of his intellectual integration into the academic system of the college. Furthermore, Tinto (1975) points out that those who are likely to value their college education as a process of gaining knowledge and of appreciating ideas rather than as a process of vocational development are persisters rather than dropouts.

The theoretical framework adopted and modified for this study stipulates that people attribute their performance to forces that are either internal or external to themselves. Accordingly, the respondents of this study provided data that confirms Weiner's (1985) attribution theory. Rather than attributing academic performance to externally located forces, respondents placed much of the responsibility for their academic success on themselves.

- **Research question:** How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?

It is the characteristics of the institution, its resources, facilities, structural arrangements and composition of its members that place limits upon the development and integration of individuals within the institution and that lead to the development of academic and social climates or “presses” with which the individual must come to grips (Tinto, 1975:111).

The data obtained shows how the Grade 12 top achievers utilised the learning support structures in their first year at university (refer to § 4.4.3).

### **Regular use of the library**

It was found that top achievers (students) used the library on a regular basis and this had positive benefits for their studies (see § 4.4.3). Having access to a library could mean both the availability of study space and access to study material.

### **Access to resources or study material**

From the data collected during this study, respondents indicated how access to the Internet has increased their interest in the coursework.

### **The availability of university bursaries**

The respondents also indicated that the availability of university bursaries had motivated them to put more effort into their studies. It should be borne in mind that most of the respondents were offered bursaries to study further by various government departments in Mpumalanga province based on their areas of specialisation.

### 9.5.2 Main findings of the qualitative study

This section provides a summary of the qualitative findings of the empirical study based on the principles of attribution theory, which was adopted as the theoretical framework for this study.

It should be noted that all eleven participants (students), after having passed their Grade 12 with flying colours, were studying at different universities across South Africa. All these participants entered university with some expectations, which, although they were in different universities and in different faculties were influenced by their varying perceptions of university. This is well presented by Schunk and Meece (2008), who (as discussed in chapter 1) elaborated that attribution or a causal explanation is what a person believes the cause of an outcome is, although it may not necessarily be the case.

The eleven participants in the study were enrolled at different universities across South Africa and came from different schooling backgrounds, although they all matriculated in Mpumalanga. However, the common element among the participants is that they were all matric top achievers in Mpumalanga province in 2011 and 2012.

Notwithstanding the findings of studies conducted previously on academic performance in the first year, the fact that participants were at different universities and faculties should be taken into consideration when discussing students' academic performance and experiences of first-year university. The results obtained from the quantitative study were supplemented and confirmed by the results of the qualitative study.

- **Research question:** What are the perceptions and expectations of Grade 12 top achievers of first year university teaching and learning?

Interviews conducted with the participants of this study found that they perceived university teaching and learning to be difficult or hard, different from high school in terms of the teaching style, characterised by an impersonal relationship with lecturers and good teaching personnel, and that their universities were fully resourced with advanced teaching resources. Based on the findings it would therefore be unrealistic for the top achievers not to have performed academically as required, given the positive perceptions they had about learning and teaching in first year. In other words, the fact that prevailing conditions were conducive for learning and teaching in a way left them (students) with no choice but to put more effort



personally into their studies. Seemingly, the university created what I would call “compelling forces” for students. Weiner’s (1985) attribution theory, which was adopted as the theoretical framework for this study, posits that besides internal factors, people attribute their performance to factors externally located from them. For instance, people might attribute an action or event to themselves or to factors outside themselves.

Similar results were obtained from the quantitative study, where top achievers’ perceptions revealed their satisfaction with their lecturers, resources and tutorial material and the presentation of lectures (see § 4.5). This means that what was found by the quantitative study is supplemented or supported by the findings of the qualitative inquiry.

Regarding the question of students’ expectations of the university, top achievers expected universities to provide competent lecturers (see § 6.2.1). Furthermore, participants expected universities to provide all the necessary human resources (i.e. for support) and also academic materials. This finding is significant because Tinto (1975) argues that college persistence is not just the consequence of prior commitments, individual characteristics or prior experiences. As he puts it:

One must view dropout from college as the outcome of a longitudinal process of interactions between the individual and the institution (peers, faculty, administration, etc.) in which he is registered (Tinto, 1975:103).

This finding also affirms the results of the quantitative study where top achievers (students) demonstrated positive perceptions of their lecturers in terms of their attitude, commitment, help and mastery of the course. Hence, Rowley et al. (2008) argue that disengagement with the academic process might be influenced by mismatches between expectations and actual experience.

In relation to the expectations of student-participants of universities, the findings indicate that:

- Universities did meet the expectations of most of the student-participants.
- Universities did provide student-participants with the relevant resources that they needed for their learning.
- Universities did provide students with some support structures to meet their teaching and learning expectations. Although participants indicated that the

universities were trying to provide some support to students, some of the participants indicated that the support that was available was not sufficient.

- **Research question:** How do Grade 12 top achievers respond to the challenges of the first year at university?

Researchers writing about the transition and retention of students in tertiary education have emphasised the importance of proper adjustment or adaptation to university so as to allow the students the opportunity to integrate into the institution (Krause, 2005; Rowley et al., 2008; Crosling et al., 2009; Van Zyl et al., 2012) and also to engage. This student engagement is said to be core to improving student retention, success and outcome (Crosling et al., 2009).

Crosling et al. (2009) contend that the retention of students and success in their studies is an issue of concern in HEIs across the world. Important findings on how top achievers responded to the challenges of the first year at university were obtained from their views on their experiences of first-year university. What seems to be the overarching issue in the interviews with top achievers regarding how they responded to the challenges they experienced is the heavy workloads and adaptation to the university (see § 6.2.2). This confirms Rowley et al.'s (2008) study that revealed that the responses of students to the question asking them to indicate challenges they had about the course, revealed that they were continuously concerned about the workload throughout their first year. I therefore believe the most critical elements of student engagement in ensuring student retention, to be good performance and success. Crosling et al. (2009) contend that it is crucial to encourage and assist student engagement in first-year studies as it is the foundation for successful study in later years.

Critical to the issue of adaptation, is the fact that it seems to play an influential role in other factors as well. This means that students are required to adapt correctly to institutions so that they are able to deal with other elements that might challenge them. For instance, challenges experienced with heavy workloads might also be a result of failure to adapt to the university.

Although the challenges that top achievers experienced were explored and the mechanisms they applied to overcome these were discussed, challenges such as an unstructured curriculum were factors beyond the top achievers' control. Crosling et al. (2009) argue in this regard that all students experience the curriculum, albeit in different forms. It is therefore up to the institutions (i.e. universities in this case) to ensure that high-level debates are carried

out to look into the aspects that might be directly or indirectly associated with curriculum being rated as more relevant and appropriate for different fields of study. According to Weiner's (1985) model, this then denotes the external, stable and uncontrollable attributions. However, it should be mentioned that this only confirms part of the theoretical framework's taxonomy (see §1.7).

- **Research question:** How do Grade 12 top achievers develop and maintain academic excellence in their first year at university?

During the qualitative study, aspects relating to students developing and maintaining academic excellence were explored in terms of how they contributed to students' academic performance. In this instance, top achievers highlighted self-motivation, having an interest in the course, having a balance lifestyle and making use of the resources available at university as the most important aspects of developing and maintaining academic excellence in the first-year at university (see § 6.2.3). Most importantly, according to Rowley et al. (2008), many researchers have postulated that the primary factor is whether or not students find that, for one reason or another, their course fails to live up to their expectations.

What emanates from the findings of this study is that participants, having realised that the key issue on their performance is adjustment to the university, then struggled to adjust in their first term of study. Ultimately, I maintain that two important elements of adjustment were identified by the findings of this study. First, that adjustment to university is a crucial determinant of academic performance. Second, a key trend that was noted was that top achievers' academic performance improved in the second term or semester after they had adapted effectively (see § 6.2.3). Consequently, Morosanu et al. (2010) argue that coping at university ultimately depends on students' own initiatives if seeking or using support from the pool of available choices despite all efforts on the part of staff. Ultimately, based on the attribution theory, this explains Weiner's locus of causality, which is the performance outcome influenced by internal factors of which the performer has control (see § 1.7).

Regarding the issue of seeking support to maintain academic excellence, the results revealed that students can be loosely divided into two groups, namely, those who choose and are able to rely on themselves and those who normally resort to seeking help elsewhere. This finding confirms the statement noted in a recent study conducted by Morosanu et al. (2010) that while some students might choose to manage alone, others resort to supportive "ties" in

coping with their first-year problems. Weiner (1985) argued in this regard that perceived causality differs from one person to the next and within an individual on occasion.

- **Research question:** How do Grade 12 top achievers utilise the support structures in learning at first-year university level to accelerate and sustain excellent academic performance?

The findings of this study clearly reveal that students' academic achievement is not solely determined by the teaching and learning activities of the university, but also by factors that lie outside or are external to the university. Weiner's (1985) attribution theory is pertinent in this regard and was adopted for this study. It postulates that the results of an action are believed to depend on two sets of conditions, namely, factors within an individual and factors within the environment. Subsequently, Viljoen and Deacon (2013) highlighted that the persistence of first-year students is positively influenced by family and community support and students with high family interactions are also more likely to complete their studies as they also reported higher performance.

The findings of this study confirm the significance of tutorial classes, intervention programmes, guidance on study skills and note taking, as well as mentors and tutors, in accelerating and sustaining excellent academic performance. It seems that the top achievers in this study made use of all the support structures that were available at their universities to ensure their academic success. Tinto (1975) contends that, as suggested by several researchers, it is the individual's commitment to the goal of college completion that is most influential in determining college persistence once the individual's ability is taken into account.

Having utilised the support structures available at their universities, students noted with concern some areas that needed the universities' attention (see § 6.2.4). Key major aspects that emanated from the findings of the study are the following:

- There is a high demand for universities to provide support in all spheres so that through balanced support, students will be able to integrate fully into the university.
- Universities should ensure that such support structures are accessible to all students. As the study conducted by Rowley et al. (2008) revealed in their research study, although support was available many students never accessed it.

- The support structures provided by universities should always be relevant to students' needs.

## 9.6 THE THEORETICAL SIGNIFICANCE OF THE FINDINGS

This section presents an in-depth discussion on the theoretical significance of both the quantitative and the qualitative findings. I critically analyse the key findings against theoretical postulations outlined in the research literature to provide a clear picture of the meaning students attached to their academic experiences in their first year at university.

The study is located within the higher education field, which put the research at the centre of first-year students' transition into university and students' academic success. I drew on a publication by Pascarella and Terenzini (2005) who worked on the effects of college on students. They (Pascarella and Terenzini, 2005:635) argued that much of the research on college impacts concentrates on changes between the first and second years or between enrolment and graduation.

Ngidi (2007) has rightly argued that the long-term goal to increase participation rates in higher education in South Africa while the graduation rate is low highlights the need for universities to take a fresh look at all the factors that determine whether or not students are successful. However, one cannot deny the fact that several studies have been conducted on academic performance of students in HEIs. Therefore, it is against this background that there are suggestions that although there is a need to have appropriate entry requirements for higher education, there is also a need to pay more careful attention to other pre-enrolment factors such as cognitive ability and personality traits, as well as post-enrolment factors that influence students' academic success (Ngidi, 2007:718). Ngidi (2007) stressed further that post-enrolment factors are more crucial because most of them cannot be predicted directly from matriculation results. What this implies is that while students might have performed well in matric, some 'new factors' in the HEIs (i.e. universities) might also influence their academic success.

Importantly, Pascarella and Terenzini (2005:60) argue that the theoretical and conceptual foundations for the study of college's effects on students vary and judgements about what factors are significant and what dynamics underlie the process depend in large part on the theoretical perspective one takes. Chapters 4 and 5 of this study focused on the students' academic experiences of first-year university and their perceptions of teaching and learning.

Chapter 5 in particular also revealed how students adapted to university to become successful academically and how they dealt with the challenges they encountered. In this section I critically analyse the findings against the theoretical postulations elaborated in the research literature with the intention of presenting possible explanations for students' academic experiences of first-year university.

In explaining first-year students' academic experiences at university, I used Weiner's (1985) attribution theory. Generally, attribution theories can help us understand the attributions we make regarding our own behaviours and the behaviour of others. However, for the purposes of this study Weiner's model was appropriate because it has most often been applied to self-attributions (Petri & Govern, 2004). It is for this reason that this study focused on the attributions that students made concerning their own individual academic experiences.

To generate discussion on the theoretical significance of the findings, Weiner's relevant causal ascriptions (of ability, task difficulty, effort and luck), as related to the dimensions of internality–externality, stability–instability and controllability–uncontrollability were applied where appropriate. In fact, Weiner argued that the four elements, namely, ability, effort, task difficulty and luck, are important in interpretations of achievement-related events (Petri & Govern, 2004). I also present the three basic assumptions that underlie the study of attribution as emanating from the theoretical postulations. I will then focus on the three corollaries that follow from the expectancy principle as proposed by Weiner (Weiner, 1985; Petri & Govern, 2004) later on in this discussion.

Weiner's (1985) attribution theory which is used in critically analysing the findings of this study is based on three basic assumptions that underlie the study of attribution. These three basic assumptions are the following:

- First, it assumes that we attempt to determine the cause of both our own behaviour and that of others.
- The second assumption underlying attribution theory is that the assignment of causes to behaviour is not done randomly; that is, rules exist that can explain how we come to the conclusions we do about the cause of behaviour.
- The final assumption that attribution theories rest upon is that the cause attributed to particular behaviour will influence subsequent emotional and non-emotional behaviours (Petri & Govern, 2004; Weiner, 1985).

The first assumption does not require that we assign causes to all our behaviours or to all the behaviours of others (Petri & Govern, 2004). According to these researchers, there is simply too much behaviour for which we can make attributions; however, the practicality is that we seem most likely to attribute behaviours that have some importance to us. This is the case especially in academic achievement where students attribute their failure or success to certain factors. As Petri and Govern (2004) argue, behaviours that are highly unusual or distressing are likely to trigger attributional processes. For instance, participants of this study listed overcrowded classes, teaching styles and teaching pace as some of the factors that contributed to the difficulties they faced in first-year teaching and learning.

Generally, the findings of this study reveal that participants attributed their performance or behaviour in first-year university either to forces within themselves or to forces external to them. This is reinforced by Heider (1958, in Petri & Govern, 2004:318), who points out that, logically, one could attribute behaviour either to forces within the individual (dispositions) or to forces external to the individual (situational factors). For example, dispositions include factors such as needs, wishes, emotions, abilities, intentions and one's willingness to work. The findings of this study also revealed that participants attributed their academic experiences or performance to both dispositional (internal) attribution and situational (external) attribution. For instance, participants cited self-discipline, self-motivation, interest in the course, self-confidence, effort, academic preparedness and their beliefs about themselves (see § 4.3) as the most important aspects in maintaining academic excellence.

The most prominent finding regarding individual characteristics (dispositional factors) that were cited as having contributed to students' performance and persistence in first-year university studies is self-motivation and course interest. However, the reality here is that theoretically these attributes (i.e. self-motivation and interest in the course) may be both stable and unstable depending on other factors that might also contribute to the behaviour or action, for example the environment. In other words, these attributes are controllable because they are within the power of the individual to control. They also differ over time. My argument is that although not clearly stipulated in the theory, positive emotions in an individual might produce or promote internal, stable attributions, whereas negative emotions could result in unstable attributions, as it is the case with motivation or interest. Stated more practically, excellent academic achievement in a certain task might promote student interest

in the course or motivate a student to study harder, thus encouraging students to put more effort into their studies.

More pertinent to the theoretical model used here is the direct relationship indicated by several studies between self-motivation and persistence in higher education, leading to academic success (Deci & Ryan, 2002; Killen et al., 2003; Fraser & Killen, 2005; Sikhwari, 2007; Schreiner & Hulme, 2009). Furthermore, Tinto (1975) indicated that discussions of motivation suggest that when an individual identifies himself as a future college graduate, he will in fact be more motivated to complete the college degree programme. Undoubtedly, one can say that motivation on the part of students does influence goal commitment. Hence, Tinto (1975) reported that, as suggested by a number of researchers, once the individual's ability is taken into account, it is his commitment to the goal of college completion that is most influential in determining college persistence. It would therefore seem logical that given the importance of motivation in students' academic success, such attributions also be prioritised by HEIs in their programmes for first-year students. Indeed, according to findings of this study, motivation is one of the most common attributes and is evident in the academic achievement of participants in their first year at university. As a result, Zulu (2008:33) reported that motivation has been cited in many studies as a potential factor in students' academic success. In line with this, Zulu (2008) found that students in different faculties attributed their academic success to hard work, commitment (by both lecturers and students) and motivation.

An interesting observation of this study was that irrespective of all other variables, students' perceptions of themselves and the university environment both directly and indirectly influenced their motivation to study and to persist towards their goal accomplishment. The key finding in relation to the perceptions and expectations of students in first-year university is that students come to university with many expectations. However, the programmes developed and implemented in HEIs (i.e. universities) do not address the issue, leading to students not integrating easily into universities. Theoretically, these perceptions are said to be dispositional in character (internal) although they are unstable. This implies that although perceptions remain an individual's opinion, they can nevertheless also change. These changes are based on various contributory factors within the individual or in his/her environment.

The seemingly common perceptions about first-year university teaching should be no surprise if one takes into account Tinto's (1975) argument:



... in both integration into the academic and social systems of the college and in the evaluation of the costs and benefits of that and alternative forms of activity, it is the perceptions of the individual that are important. Since perceptions are in turn influenced by both the characteristics of the individual and of his college environment.

Similarly, Vincent and Idahosa (2007:1437) argue that students' perceptions of their learning environment are a stronger predictor of academic performance than prior performance. Presumably, students' perceptions of their first year of study was also influenced by the university environment in which they found themselves and also their own personal beliefs, feelings, attitudes and ideas about higher education, all of which are the pre-enrolment attributes that most of scholars have alluded to (Pascarella & Terenzini, 2005; Ngidi, 2007). Vincent and Idahosa (2014) support these notions by claiming that the learning environment and students' perceptions of it play a major role in academic performance outcomes.

Generally, perception is theoretically located within an individual's disposition (internal), but the findings of this study as well as those of other researchers reveal that the environment in which an individual finds himself/herself contributes to a great extent to the manner in which one perceives things. In this case, the university environment would in a way influence students' perceptions of learning in the first year of study. Regarding the perceptions and expectations first-year students have of teaching and learning at university, participants in this study stated that they perceived university teaching and learning to be difficult, as well as being different from that of high school in terms of teaching style. They also perceived university teaching as being characterised by impersonal relationships with lecturers and good teaching personnel, as well as finding universities to be fully resourced with advanced teaching resources. In other words, these would theoretically lead participants to situational attributions, since all their perceptions were based on factors externally located. For instance, having perceived university teaching and learning to be difficult would to a certain extent motivate participants to put more effort into their studies, although on the other hand if they were to fail they might then attribute failure to externally located factors, for example task difficulty, in line with Weiner's theory as applied in this study.

According to Weiner's (1985) theory postulations, task difficulty as causal ascription falls within the external, stable and uncontrollable dimension. For academic performance in particular, this means that when students or participants attribute their achievement to task difficulty, they are seemingly shifting the blame to certain external factors that are outside

their control. However, this does not mean that the participants could not do anything about the prevalent conditions. On the contrary, even though the participants perceived teaching and learning to be difficult, according to the findings these perceptions positively influenced their academic behaviour. In fact one can say participants were able to come up with strategies to ensure that they did not become victims of their circumstance (i.e. by failing). This view is well explained by Astin (1970, in Pascarella & Terenzini, 2005:53) who proposed that the input–environment–outcome (I-E-O) model, wherein according to this model college outcomes are viewed as functions of three sets of elements; inputs (I) – the demographic characteristics, family background and academic and social experiences that students bring to college; environment (E) – the full range of people, programmes, policies, culture and experiences that students encounter in college whether on or off campus; and outcomes (O) – students’ characteristics, knowledge, skills, attitudes, values, beliefs and behaviours as they exist after college.

Nevertheless, the findings of this study also reveal that the first-year students encountered serious challenges at university. The most common challenges raised by participants were related to the heavy academic workload, adaptation and the unstructured curricula. Likewise, Pascarella and Terenzini (2005) revealed that for researchers, the transition to college provides a form of culture shock requiring significant social and psychological relearning in the face of encounters with new ideas, new teachers and friends with different values and beliefs; new freedoms and opportunities; and new academic, personal and social demands. In the same way, Feldman and Newcomb (1969, in Pascarella & Terenzini, 2005:61) characterised the freshman year as a combination of desocialisation pressures to unlearn certain attitudes, values, beliefs and behaviours. Students also have to learn new attitudes, values and beliefs and participate in a new culture and social order (i.e. socialisation pressures). Adaptation in particular was repeatedly mentioned by participants as the major challenge they encountered in their first year of study, which suggests that it is imperative for students to adapt and integrate appropriately into the university or institution. In addition, the findings reveal that in terms of academic success, it is important for students to positively integrate into the university (institution). Pascarella and Terenzini (2005:54) accordingly define integration as the extent to which the individual shares the normative attitudes and values of peers and faculty in the institution and abides by the formal and informal structural requirements for membership in that community or in subgroups of it.

Based on the discussion above, my position is that both heavy academic workloads and unstructured curricula as challenges might be linked to the problem of adaptation or adjustment experienced by first-year students at the universities. Following the findings of this study, my argument is confirmed by Zulu (2008), who argues that during the first year the nature of academic and social adjustment experienced by a student can determine whether he or she persists or drops out of university. Zulu (2008) further suggests that it is crucial for any institution to focus attention on providing the kinds of academic experiences that would ensure that the first-year students succeed and persist in their academic careers. Theoretically, care should be taken that the external factors (i.e. the university environment and experiences) do not negatively impact on the students' adaptation and integration into the university because that would then determine students' commitment to the university and their individual goal of succeeding academically.

Adaptation as a variable is located within the individual's disposition. In other words, the individual's attitudes to or perceptions of the university environment determine whether or not the student will positively adapt. However, the very same environment might also dictate to an individual, such that it becomes difficult if not impossible for one to adapt easily to the university environment. Hence, Pascarella and Terenzini (2005:54) warn that negative interactions and experiences tend to impede integration and distance the individual from the academic and social communities of the institution, thereby reducing commitment to both goals and institution and promoting the individual's ultimate withdrawal. Pascarella and Terenzini (2005) also reported that as integration increases, it strengthens students' commitment to both their personal goals and to the institution through which these goals may be achieved.

Despite the challenges encountered by participants in adjusting to university like, the findings of this study reveal that participants were nevertheless able to adapt to university, irrespective of the negative factors that hinder integration, adaptation and living up to the demands of the university environment. In their study on retention and predicting first-year success, Lourens and Smit (2003:169) pointed out that commonality between integration and satisfaction is crucial to academic performance and persistence and that student satisfaction is closely related to student retention and is key to academic withdrawal. According to these researchers, this means that students' satisfaction with all aspects of the university is significantly related to their perceptions of things and even the outcome (i.e. their behaviour).

As a result, the quality of student experience within the university in both academic and social systems is very important in determining academic performance and success. Consequently, Holmberg (2001, in Fraser & Killen, 2005) suggests that students who feel a strong personal connection with their learning institution are likely to be more motivated and to study more effectively.

The findings further confirm the importance of students' previous academic performance and high school experiences. This is also highlighted by Killen et al. (2003), who state that the tendency of students to approach university study in a particular way may be attributed to their past educational experiences. Petri and Govern (2004) maintain that Weiner's approach assumes that the inferences we make about our abilities result primarily from earlier experiences. In addition, past successes will lead us to conclude that we have certain abilities in certain areas while past failures will reduce our belief in those abilities. In this case, by virtue of their being top achievers in matric, the participants of this study seemed to have attributed most of their achievement to their own ability and the effort they put into tasks. Weiner (1985) argues in this regard that we tend to perceive ourselves as having expended more effort when we are successful at a task.

Indeed, the students' academic performance records in their first-year of university studies revealed that they were seemingly able to integrate effectively into university as far as the academic aspect was concerned (see § 6.3). What seemed to be an overarching concern in interviews with the participants in this study was that excellent academic achievement was the most critical element for participants' success and completion of their degrees. On that note, Tinto (1975) revealed that academic integration, in its varying forms with respect to the academic system of the college, it is argued that an individual's integration can be measured in terms of both his grade performance and his intellectual development during the college years. However, we should take into consideration the fact that the two are distinct in that the former relates more directly to meeting the explicit standards of the academic system and the latter pertains more to the individual's identification with the norms of the academic system (Tinto, 1975). Theoretically, this then highlights the significance of the external factors in contributing to the attributions that students make as a result of the perceptions they have about the university environment based on their individual integration into the university.

The findings of this study therefore confirm the argument raised by Mischel (1973, in Killen et al., 2003:156) that successful students tend to be those who are able to operate with what is

referred to as effective “self-regulatory systems and plans”. It is also indicated that such students are able to balance their needs for socialisation and affiliation with their needs for achievement; again, they have a strong feeling of self-efficacy and they are able to appreciate the complexity of the situations they encounter. In addition, this type of student has a strong sense of purpose and derives some enjoyment from academic activities. The argument made here is not a surprise, since the participants (i.e. students) of this present study have demonstrated that they have this effective self-regulatory system. For instance, participants strongly attributed their academic success (i.e. good performance) to self-discipline, self-motivation, interest in the course, self-confidence, effort, academic preparedness, their abilities, their beliefs about themselves, regular use of the library and regular class attendance. On the other hand, the participants of this study were aware of issues like time management and balanced lifestyle and how these could negatively affect their academic performance if not properly managed.

At this point the findings also reveal that some of the participants did not consider group-work to be important and of assistance in their studies. These participants believed that their own efforts and willingness to adapt to the academic expectations of the university were all they needed. This therefore means that by having an effective “self-regulatory system”, the participants were able to strike a balance in their activities within the university so as to satisfy the academic needs. This is important because whether internal or external, stable or unstable, controllable or uncontrollable according to Weiner’s model, the attributions accorded to a particular event determine its influence on subsequent academic outcomes including expectations, affect, perceived control and behaviour (Killen et al., 2003). Consequently, Killen et al. (2003) argue that from this point of view, students’ perceived reasons for success or failure may have a stronger influence on their persistence or withdrawal than the actual reasons. As a result, I can proudly say that based on the findings, participants were doing well academically because they mainly attributed any unsatisfactory academic achievement on their part to personal, unstable and controllable causes such as lack of effort, laziness and lack of time management, which they could personally rectify and improve. Shermer (1997, in Petri & Govern, 2004: 317) thus postulates that causal reasoning is evolutionarily adaptive; it helps us to understand and consequently control our environment. In addition to the position above, it is important to note that these attributions of human behaviour also stem from a need to control our environment.

Different researchers writing about attribution theory have emphasised the importance of expectancy in making attributions. Thus, Weiner (1985:556) contends that the attributional position is that the stability of a cause rather than its locus determines expectancy shift.

In this regard, Weiner (1985) posits:

If conditions (the presence or absence of causes) are expected to remain the same, then the outcome(s) experienced in the past will be expected to recur. A success under these circumstances would produce relatively large increments in the anticipation of future success and a failure would strengthen the belief that there will be subsequent failure. On the other hand, if the causal conditions are perceived as likely to change, then the present outcome may not be expected to repeat itself and there is likely to be uncertainty about subsequent outcomes or belief that something different will result. A success therefore would yield no increments in subsequent expectancy and could give rise to decrements in the subjective probability of future success. Similarly, a failure will not augment the belief that there will be future failures (Weiner, 1985:556–557).

Similarly, Mudhovozi et al. (2010) state that causal stability influences expectancy of success, whereas all the three dimensions of causality affect a variety of achievement-related emotions including pride, anger, pity, gratitude, guilt, shame and hopelessness. On the other hand, Petri and Govern (2004) state that in an attempt to relate the causal ascriptions that people make to their expectancies of future success or failure, Weiner proposed an expectancy principle which states that “changes in expectancy of success following an outcome are influenced by the perceived stability of the cause of the event”. The three corollaries that follow the expectancy principle (Petri & Govern, 2004; Weiner, 1985) are explained and their significance to the study is outlined:

- Corollary 1: If the outcome of an event is ascribed to a stable cause, then that outcome will be anticipated with increased certainty or with an increased expectancy in the future.
- Corollary 2: If an outcome is ascribed to an unstable cause, then the certainty or expectancy of that outcome may be unchanged or the future may be anticipated to be different from the past.
- Corollary 3: Outcomes ascribed to stable causes will be anticipated to be repeated in the future with a greater degree of certainty than are outcomes ascribed to unstable causes (Petri & Govern, 2004; Weiner, 1985).

I need to mention that these corollaries are some of the key elements of attribution theory that makes the theory appropriate and important in explaining different attributions of performance especially in higher education. According to Weiner's expectancy principle, the stability dimension plays a major influential role in determining the future expectancy (e.g. of performance) that would or might be achieved in future. In other words, it does not matter whether it is a stable or an unstable cause, but the expectancy thereof will be clearly determined by this dimension and not the other two dimensions (locus and controllability). However, according to the importance of the model to this study, I should mention here that this overemphasis on the stability dimension does not necessarily mean that other dimensions (i.e. locus and controllability) are worthless.

Based on the several assumptions underlying the theory, Petri and Govern (2004) argue that expectancy results in attribution and thus expectancies and attributions are generally the same. For instance, in this study participants also attributed their good performance in first-year university to, among other things, their excellent performance in matric and stated that they always expected the same (i.e. good or excellent) results in first-year university. Thus, most participants were not satisfied with performance that was not up to their expectations even if it was good. To be more specific, since the participants obtained several distinctions in matric, they expected similar achievements in their first year of study, thus also making attributions based on their expectations. As Petri and Govern (2004) posit, "thus when the cause has occurred, I expect the effect, after observing the effect I attribute the cause". Notwithstanding the position of the expectancy principles, I then briefly outlined the implications of the three corollaries to this study. However, each corollary is dealt with separately in the discussion to explain its implication to the findings of this study.

- **Corollary 1:** If the outcome of an event is ascribed to a stable cause, then that outcome will be anticipated with increased certainty or with an increased expectancy in the future.

According to the model applied in this study, this corollary means that the stable cause (factor) participants attributed to their academic achievement will in a way determine the participants' anticipation or expectations of future performance. Specifically, with regard to the findings of this study, this corollary implies that as participants ascribed their good academic performance or success in the first-year university to their ability (i.e. stable cause) such good academic performance or success will be expected in the subsequent academic

years (i.e. second or third year) of their studies. According to this corollary the same applies if failure or below average achievement were attributed to stable cause (e.g. unstructured curriculum, course difficulty or lack of textbooks), as indicated during interviews, the chances are the same performance would be expected in future. A good practical example in this study is that which Participant 5 reported during the interviews. Participant 5 highlighted how the different perceptions held by other students in other courses generally made students conclude that “there are certain courses that it is a norm that one has to repeat before one can really pass them”. These are courses that are declared to be difficult by senior students and it has become that norm that every new student will repeat them. Theoretically, this means that even failure that is attributed to a stable cause will be anticipated with increased certainty. My argument here is that students’ perceptions are critically important because they influence their attributions which in turn determine their future expectations. Consequently, this expectancy principle simply means that how you attribute your achievement will make a difference in your future expectations (Petri & Govern, 2004).

This corollary confirms the findings of this study that the first-year top achievers attributed their excellent performance or achievement at university to their “ability”, as was the case with their matric achievement. What this corollary denotes is that first-year students were motivated to expect the same good results or achievements at university because they perceived themselves as having the ability; that is, theoretically an internal (stable/uncontrollable) element. To me, this means that since the participants demonstrated excellent achievement in matric which they then attributed to their “ability”, in their first year of study at university they then expected even more than they had achieved previously (i.e. in matric). One would say in this case more success was expected in the first year of study.

- **Corollary 2:** If an outcome is ascribed to an unstable cause, then the certainty or expectancy of that outcome may be unchanged, or the future may be anticipated to be different from the past.

Conversely, corollary 2 stipulates that any performance or behaviour attributed to unstable causes might be expected to remain the same or to be different in future. For example, this corollary means that if you attribute your achievement to an unstable cause, like luck, you will either not change your future expectations about your achievement (i.e. you will still expect the present outcome or achievements on subsequent test/tasks or you may expect the future to be different from the past) or you will never expect to get something above what



you got initially. In addition, participants of this study for instance attributed their academic success in the first year at university to “effort”; as it is an internal, unstable and controllable cause, chances are their academic success could be anticipated in future as it is or as having changed (i.e. with much improvement). Thus Petri and Govern (2004) reported that, according to Weiner, causal ascriptions can lead to changes in expectancies which in turn influence future behaviour.

First-year academic achievement or success and even academic underachievement in the participants of this study were also attributed mainly to unstable causes (i.e. corollary 2). For instance, participants cited self-discipline, effort, studying hard, commitment, class attendance and regular use of the library as some of the significant factors contributing to their excellent achievement. On the other hand, participants also attributed their academic frustrations or under-achievement to factors such as heavy workloads, unstructured curriculum and lack of time management. According to Weiner’s model, these are some of the attributions that can be categorised as unstable. For example studying hard as an attribute would keep on changing with time; students might be disciplined and study hard in the first term and not in the second or third term. This therefore means that if a student was disciplined and did study hard, he/she would then achieve good marks; by contrast, if he/she is no longer disciplined in studying hard, then we could expect a different achievement in future or the same previous level of achievement with no positive improvement.

An interesting observation was that even though participants did not fail their first year, those who did not do well academically in some modules or courses in a particular term attributed their performance (or lack of) to themselves. In most instances participants attributed their academic success and failure mainly to internal factors and only partly to external factors, which Weiner (1985) refers to as internal locus of control and external locus of control respectively.

- **Corollary 3:** Outcomes ascribed to stable causes will be anticipated to be repeated in the future with a greater degree of certainty than are outcomes ascribed to unstable causes.

This corollary stipulates that if an outcome is attributed to stable causes, it could be anticipated that such an outcome is more likely to be repeated in the future than outcomes that are attributed to unstable causes. Generally, corollary 3 is just an extension of corollary 1

because its emphasis is on the outcomes being attributed to stable causes. In addition, it is certainly expected to be repeatable in future. For instance, as the participants attributed their academic success in the first year to their “abilities”, the chances of these participants performing exactly as they did in the first year are extremely high. In other words, we are reasonably sure that the participants could produce similar results in the future. Moreover, one might also argue that since the first-year students have attributed their academic success to their own abilities, it is theoretically proper that we could expect the same good performance in the subsequent academic years (i.e. second, third and fourth year of study).

To summarise, Wolleat et al. (1980, in Polaki & Nenty, 2001:42) maintain that causal attribution theory predicts, in terms of these three corollaries, that whereas achievement that is consistent with expectations will be attributed to a stable cause, achievement that is contrary to expectations will be attributed to less stable cause. Furthermore, Polaki and Nenty (2001) made it clear that internal attributions are believed to increase self-esteem after success and to decrease it after failure. For instance, they (Polaki & Nenty, 2001) emphasised that in particular a student who attributes failure to lack of ability is more likely to develop a low self-image. It is therefore not surprising that the participants of this study displayed high self-esteem because of the internal attributes (e.g. self-discipline, self-motivation, effort, interest in the course, ability) that they ascribed to their academic success in first-year university. Undoubtedly, this might also be one reason for them having self-motivation as the main contributory factor to their persistence, integration into the university and academic success in the first year of their studies. Although the findings of this study reveal that participants attributed any unsatisfactory achievement to both stable and unstable external causes, this should be viewed with caution in that Polaki and Nenty (2001) assert that an ascription of failure to more stable and internal sources such as ability constitutes a strong motivation inhibitor since it generates low expectations for future success.

Generally, attribution theory also implies that any attempt to change one’s achievement depends upon how much ‘power’ one has over an attribute. In other words, if students do not have much power to change an attribute that promotes failure, hopes for improved performance in the future remains dim (Polaki & Nenty, 2001). Hence, Polaki and Nenty (2001) advise that it is important that students are trained by parents early on in the acculturation process to make effort-related attributions for performance and to see their success as depending more on effort than on ability. According to Polaki and Nenty (2001),

this means that students should use the “try” component of action, which includes effort and luck in Weiner’s model, rather than the “can” component of action which is constituted by ability and task difficulty. Notwithstanding this assumption made by these researchers, based on the findings of this study this is one pronouncement that I would not support. For me both the “try” and the “can” components of action are critically important for students’ academic performance or success. For instance, a student with the ability to study and master the coursework also needs to put some effort in revising his/her work, which then constitutes the “try” component of action. Again, effort which is seen as internal and unstable may vary depending on the extent to which the individual is motivated. Therefore, the “try” component alone would not assist in academic achievement.

On that note, Asmus (1986, in Mudhovozi et al., 2010:591) notes that “students shift their attributions as they get older. When young, students tend to use effort related attributions while as they get older, their attributions change toward ability related attributions”. The contribution made here by this scholar is very important in that it calls for further research on the attributions students/participants make in their final year of study because they will by then have matured. This means that their perceptions and thinking might differ from that of their first year of study. Thus, Mudhovozi et al. (2010) argue that older students have a relatively stable self-concept; hence they have a stable understanding of the reasons for their success or failure in their academic work.

All in all the findings suggest that people such as the participants of this study attribute their success (e.g. academic success) or failure to different causes or factors based on their perceptions of causal dimensions. Likewise, at another level, the findings of this study revealed that the perceptions that participants hold explain the assumptions and expectations students had about teaching and learning at university.

Theoretically, the overall findings of the study reveal that students’ academic performance in the first year is critical for their persistence, future academic success and realisation of their careers, despite their category of influence; that is, internal or external forces as outlined by Weiner (1985). Zulu (2008) therefore posits that the performance of a student during the first year may determine his/her persistence with university study or withdrawal from university.

The findings of this present study have important implications for attribution theory and further research. I believe that future research is required to expand Weiner’s three-

dimensional (orthogonal) taxonomy to include other causal attributions that have been identified by other researchers. Although the findings of this study support the taxonomy, my argument is that the element of ‘time’ would seem to have been omitted from Weiner’s taxonomy. Nevertheless, apart from the locus of control, both the stability and control dimensions are sometimes influenced by time. For instance, for academic achievement some participants might list task difficulty as the major cause of their failure in a particular semester; later on because of the new course content the same participants might attribute their failure to a different cause(s). Therefore, this simply means that the element of ‘time’ in stable/unstable and controllable/uncontrollable causes also contributed to the different attributions people make.

It is also important to note that the results of this study have important implications for an interesting attributional phenomenon called the self-serving bias or hedonic (Vallerand & Richer, 1988; Petri & Govern, 2004). According to Petri and Govern (2004), research has revealed that self-serving bias may be influenced by both motivational and cognitive factors. According to Vallerand and Richer (1988:711), this phenomenon (that is self-serving bias) is said to operate when subjects or participants ascribe more internal attributions in success than in failure conditions but more external attributions in failure than in success conditions. In other words, the people take credit for success but deny responsibility for failure. Hence, Petri and Govern (2004) suggest that our expectations may play a role in our attributions in the sense that we often engage in behaviours at which we expect to succeed. They (Petri & Govern, 2004) also note that events that we anticipate have been found to produce internal attributions. Thus, if we anticipate that we will succeed and then achieve success, an internal attribution is logical. Specifically, the findings of this study seem to demonstrate that a bias exists at the dimensional level. For instance, participants of this study in particular attributed their academic success in first-year to, for example, self-motivation, self-discipline, interest, ability and effort. According to the findings of this study, attributions for success are perceived as being more stable, controllable and more internal than are attributions for under-achievement or failure conditions. Therefore, the results of this present study replicate the findings of Fraser and Killen (2003), where senior students in particular attributed success to their own efforts and failure to their lecturers.

Theoretically, the findings of this study also confirm the argument made by Pascarella and Terenzini (2005) on the work of Tinto (1975) that students enter a college or university with a

variety of patterns of personal, family and academic characteristics and skills. These include initial dispositions and intentions with respect to college attendance and personal goals. According to Pascarella and Terenzini (2005), these intentions and commitments are subsequently modified and reformulated on a continuing basis through a longitudinal series of interactions between the individual, the structures and members of the academic as well as social systems of the institution. Based on the findings, my argument remains that the different dispositions held by participants contributed to their attributions of academic success.

Generally, the fact that participants attributed negative influences such as external and stable factors like the teaching pace and the unstructured curriculum to their academic achievement suggests that universities need to do something to help students adapt easily to the university environment and to be able to live up to its demands. Thus, Pascarella and Terenzini (2005) argue that from the perspective of the theories and models of institutional impact, the potency of colleges and universities for influencing student change and growth appears to lie in their ability to expose students to diversity, opportunities to explore, peer and adult models to emulate or reject and experiences that challenge currently held values, attitudes and beliefs.

Finally, the findings of this study also revealed that the attributions that participants or students make are important and should not be overlooked. Nokelainen et al. (2007) advise in this regard that knowledge of how learners and trainees use attributions to account for success and failure can help teachers or trainers predict their expectancies and plan intervention strategies when needed. In the case of the current study, these attributions that participants made could assist lecturers and universities in providing students with support where necessary. For instance, in this study participants argued that having not been allocated tutors at an early stage or in the first term contributed to their unsatisfactory achievement in certain courses or modules, which it wouldn't have been the case had they been introduced to tutors early in the first term.

To sum up, against the background of Weiner's (1985) attribution theory, the findings of this study are crucial for institutional planning in higher education. As Lourens and Smit (2003) reported, the National Plan for Higher Education shows that the reasons for the decline in retention rates in South Africa are not clear and require investigation.

## 9.7 THE SIGNIFICANCE OF THE STUDY IN TERMS OF NEW KNOWLEDGE GENERATED

This study has made a valuable contribution to the existing literature that may be explained as follows:

- Researchers have found that most students are ill-prepared for university or are unable to cope with the university demands. Worse still, a significant number of students never graduate. Some researchers, in investigating this situation, argue that such failure and dropout should not simply be blamed on students. This study does not reject the findings of these researchers because their results emanated from studies that were generally focused on Grade 12 learners and not the Grade 12 top achievers that this study concentrates on. This study therefore provides evidence to show that matric top achievers were able to further develop and maintain excellent academic performance at first-year university level even though some indicated negative university experiences that might have resulted in a drop in their academic performance.
- This study also presented findings on how top achievers developed or put in place strategies that were effective in ensuring that they excelled in their academic performance. That being the case, this study elaborated on the factors that contributed to students or top achievers succeeding academically at university. Significantly, those factors that were attributed to the academic performance of top achievers form the basis for top achievers' performance and could assist other matriculants in Mpumalanga province and the other provinces of South Africa to ensure excellent academic achievement in their first year at university.
- First-year university students are encouraged not to sit back and put the blame for their academic performance on universities. They need to adapt effectively to university. This notion is well phrased by Matoti (2010), who argues that research has shown that any transition from one level to another has its own challenges. Based on the findings of this study it would seem that students' transition from high school to university is a serious challenge, but generally students' perceptions of university play an important role in influencing the way they adapt. Adaptation to university not only affected students emotionally but also put their academic performance at risk, especially with regard to a drop in the percentages they used to achieving. Moreover, adaptation also made them to perceive university differently from what they thought;

as it also brought them negative experiences (i.e. workload, pace of teaching and learning).

- Top achievers expressed both their concern and appreciation for their parents who had supported them in their education. The efforts of these parents are appreciated irrespective of their education level. The concern raised by some of the top achievers revealed that they did not undermine the important role their parents played as part of their educational support system irrespective of their education. This suggests that further research on students in institutions of higher learning should look at the issue of parental involvement in or support in children's education.
- Interestingly, most top achievers (student-participants) were very confident, optimistic and self-motivated with regard to their education and their ability to achieve. The top achievers were willing to work hard and showed great interest in their academic work. The positive attitude displayed by these top achievers influenced their academic performance irrespective of any negative influences that they experienced at their different universities.

The findings of this study show that the establishment of support structures, both academic and non-academic, especially for first-year university students, is essential and a significant factor that contributes to academic performance. These support structures are deemed to be essential because they not only address students' academic issues but also assist in addressing any psychological, emotional and even social problems that students might have that impact negatively on their academic performance. Such support structures should include professional counsellors who provide relevant services for students; as the saying goes, 'prevention is better than cure'.

In reflecting on the findings of the study; I found that almost all participants did not have personal academic challenges (e.g. not coping with work, difficulty in grasping the work, inability to prepare for examinations). Instead most participants knew that succeeding starts with the individual. Hence, most participants indicated that they managed to cope with the academic demands of university because they were self-motivated and had a good attitude towards their studies irrespective of the negative influences they experienced at university. This confirms the findings of other researchers that a student who is intrinsically motivated is likely to display autonomy and employ self-initiated exploratory strategies. The study conducted by Sikhwari (2007) attests to this by reporting that what influences students'

motivation to achieve includes confidence and a positive self-concept. It would perhaps be more accurate to refer to these student/top achievers using Krause's (2005) terminology of "persistent students" because they were self-focused on their studies despite the negative forces that prevailed at their different universities. In addition, as the appellation of 'top achiever' conveyed on them in this study is confirmed by the efforts and strategies they applied to their learning and the momentum they maintained with regard to their academic achievement in their first-year of study at university.

## **9.8 LIMITATIONS AND SHORTCOMINGS OF THE STUDY**

### **Limitations linked to standardised research instruments**

Developing the questionnaire and the interview schedule were challenging tasks because they both had to cater for all the participants even though they were studying at different universities and came from different school environments. In addition, it could be that I, as the researcher, did not include all or most appropriate elements bearing in mind their data collection purpose. Moreover, the fact that I did not pilot the questionnaire also adds to the limitations.

### **Limitations linked to generalisation**

Many researchers maintain that there is no research design or method that is free from the critique of a lack of generalisation. The data was collected from only fourteen Mpumalanga matric top achievers and not all Mpumalanga matriculants and that on its own rendered the generalisation of the results not possible. However, the mixed methods research design used in this study is well known to increase external and internal validity because earlier on in chapter 3, DeCuir-Gunby (2008) argued that validity and trustworthiness in mixed methods research concerns examining aspects of applicability, the truth value, neutrality and consistency.

In addition, the study used purposive sampling (also known as judgemental sampling) in which I specifically concentrated on one characteristic of my population of interest. The study focused on Mpumalanga Grade 12 top achievers of 2011 and 2012. This means that the focus was on twenty Mpumalanga province matriculants. Therefore, the ability to generalise the results to the entire Mpumalanga province or South Africa in general is limited. Another critical element limiting the study is the sample size. Since the study targeted a small sample



of 20 students, in fact only fourteen students participated in the first phase of data collection and only eleven participated in the interviews, this then made it impossible to generalise the results to the entire student population.

The data collection process of the current study excluded lecturers' opinions and perceptions about their students. To me, this might serve as a limitation to the study because valuable data might have been obtained from the teaching personnel (i.e. lecturers) as they are the ones who are in direct contact with the students. In other words, the study also missed an opportunity to compare lecturers' perceptions of students with students' perceptions of their lecturers, as presented in the quantitative study. Again, data obtained from the lecturers would have also assisted in explaining attributions made by students on teaching and learning.

## **9.9 RECOMMENDATIONS AND IMPLICATIONS**

Being top achievers in education is associated with students' hard work, efforts put in for achievement and being committed to one's education. Therefore, investigating the academic performance and the experiences of first-year university students should assist in exploring and understanding the influences of academic performance at first-year level.

The recommendations that emanate from this study are based on the literature that was reviewed, the empirical data analysis and interpretations of the narrations obtained during the interviews and also the emergent themes in chapter 5 of this thesis. The recommendations made by this study are classified under the following four headings: recommendations to the Mpumalanga Department of Education, recommendations to the Department of Basic Education, recommendations to the Council on Higher Education, and recommendations to the Department of Higher Education, universities and parents.

### **Recommendations to the Mpumalanga Department of Education**

Given the importance of teaching and learning activities in students' education and their contribution to academic performance, it is important for the Mpumalanga Department of Education (MDE) to play its role as required by the Department of Basic Education. The greatest primary responsibility of the MDE is to ensure that there are teachers in all schools. Based on the findings of this study I therefore recommend that the MDE should ensure that there are qualified relevant subject teachers in all schools for all subjects especially in Grade

12. In other words, there should be no Grade 12 class without a subject teacher right from the beginning of each and every academic year.

In addressing the above-mentioned recommendation I think it is proper for the MDE to obtain information from its district offices about the shortages or lack of teachers in certain subjects in Grade 12. This would then assist the MDE in monitoring the process of checking teacher availability and providing urgent solutions to the affected schools. There should be no tolerance for certain subjects not being taught in Grade 12.

It is also important that the MDE provides all schools, especially those with Grade 12, with all the required resources that would assist in facilitating teaching and learning. This recommendation is based on the fact that most participants complained about the lack of study equipment required to, for example, conduct experiments in laboratories. Worse, some of the participants even indicated that they had no laboratories in their schools.

I believe that it is good practice for the matric top achievers to become motivational speakers or mentors to other matric learners, as some of the participants indicated during the interviews. It is recommended that the MDE create a database of such students so that they can also network among themselves and support one another, especially at first-year university level. In other words, third or second year top achievers could become mentors for first-year students who are top achievers from Mpumalanga province and even students from other provinces. This could even assist students who were top achievers in keeping up momentum at universities.

### **Recommendations to the Department of Basic Education**

The challenge of being computer illiterate was reported by one participant in this study who complained about having to use a computer for the first time at university to do his work. This participant reported that he had to do some work on the computer as instructed by the lecturer and he could not even switch on the computer because he had never learnt to use a computer at school. There is therefore the possibility that other students might experience the same challenge of being computer illiterate when entering university.

I therefore recommend that the Department of Basic Education make it policy that Grade 12 learners should at least acquire some basic computer skills before they matriculate. For instance, this could be infused in the FET (Grade 10–12) curriculum. In other words, learners

could start attending computer lessons as early as Grade 10, depending on the school. This could seriously assist those “previously disadvantaged” schools to attain the same level as other schools in South Africa. Although this policy would sound like unpleasant but it would help to eliminate school dropout and raise an interest in learners to study other subjects or follow other careers.

Given the importance of the language of instruction as highlighted by various researchers in chapter 2, the empirical study also revealed the need for the issue of language to receive attention at school in preparation for university. In this study, the issue of the language of learning and teaching (LoLT) came up as one of the factors that contribute to students’ academic performance. According to the experiences of the participants, the usage of the LoLT at university differs from that of high school, frustrating them because they had to immediately adjust to the university environment where only English was spoken in class. Based on this finding, I support Parker’s (2006) suggestion that “as long as English remains the chief medium of instruction and assessment, attention must be given to proper development of language skills at primary and secondary school”. In the South African context I would therefore argue that since the language issue has often been a national debate, there is a serious need for tight language policies to be put in place to address this shortfall. In other words, the Department of Basic Education needs to act as a matter of urgency to prevent this situation from worsening.

There were a number of issues pertaining to teaching and learning that the participants reported during the interviews, which I suggest call for serious positive engagement between the Department of Basic Education, the Department of Higher Education and Training and all policy makers. Among other things, policy makers on curriculum matters need to ensure that the curriculum taught in the FET band, especially in Grade 12, does at least link with that taught in first-year university.

Again, the Department of Basic Education has a responsibility also ensure that previously disadvantaged schools are adequately resourced and are able to implement the curriculum. This is based on the empirical findings of this study which showed that some of the participants complained that the schools at which they matriculated did not have all equipment the curriculum required for effective teaching and learning (e.g. no laboratories, no computers). Worse, some participants indicated that they spend months without key subject teachers (e.g. Physical Sciences) (see § 5.4.1.2 for a detailed discussion).

## **Recommendations to the Council on Higher Education (CHE)**

The Council on Higher Education (CHE) serves as the mother body for all HEIs in South Africa. Therefore, its mandate cannot be questioned in putting in place standards that would govern all HEIs.

Four participants from different universities complained that their curriculum was not well structured in the first year and they were also studying other courses that were totally divorced from their field of study. These participants also reported that first year did not make any sense in terms of their degree; it was only in second year that the work became relevant to them. However, it should be noted that only those participants who were then in their second year of study were able to argue their point comparatively because they had already completed first year. Based on this finding, I therefore recommend that the CHE ensure that curricula in all fields or faculties and across all universities are well-structured. This could be done by engaging with university programme or curriculum managers. In addition, it would be proper for the CHE to propose an annual curriculum review in all tertiary institutions.

The CHE also has a responsibility to ensure that HEIs have special units in place to deal with students' affairs relating to social well-being. In other words, specialists like psychologists and psychiatrists should be appointed so that students can be referred to them for help to avoid unwanted behaviour or even poor academic performance or dropout. I would argue that this should be a major requirement because even universities that have such support systems in place were, according to the participants, not doing enough.

Furthermore, two participants in this study complained about “ill-treatment” on the part of instructors during practical lessons. They (these participants) revealed that instead of teaching them, these instructors expected them to know everything and their attitude was unacceptable. Having obtained such information for this study, it would seem that there may be many things that are not reported but that are known to be taking place in HEIs. Based on this, I therefore recommend that the CHE should set common standards that would apply to teaching personnel at all HEIs whether appointed on a full-time or a part-time basis. This is important because it would assist HEIs in setting their own operational standards, thereby ensuring that memoranda of understanding are signed each time an external service provider/lecturer/instructor is used at an institution.

## **Recommendations for universities**

The major finding, which universities should consider as a matter of urgency, is that almost all participants complained about large classes of between 200 and 800 students in the first year. To make matters worse, the participants stated they were crammed into one class with other students who were not doing the same course or degree. This then suggests the possibility of challenges in ensuring effective teaching and learning. Given this fact, I therefore recommend that universities should at least cluster students according to their field of specialisation (degree) so as to reduce abnormal numbers in classes.

Again, I would argue that this is the result of the lack of a framework on teaching standards. I therefore recommend that universities should come up with a framework that will set standards pertaining to, for instance, the maximum acceptable student–lecturer ratio across all courses or fields.

From the interviews with different students, one of the most significant issues raised was that participants indicated dissatisfaction with their instructors for the practical classes. I then propose that monitoring and evaluation of learning and teaching be conducted based on the university’s standards framework.

Participants also indicated some dissatisfaction with the availability of support structures, specifically for social support. This is important because, as Tinto (1975) warns, for integration students should have equal access to both the academic and social support domains. Given the problem of the lack of social support in universities, I would recommend that universities that are lacking in social support structures should ensure that they prioritise the establishment and implementation of social support structures in various spheres (be it student centres or counselling).

## **Recommendations for parents**

The empirical findings of this study revealed that not all parents are involved in the education of their children. Most of the participants revealed that their parents were not supportive of them, especially when they needed them the most in the first year at university. For instance, Participant 1 complained that *“at some stage I felt that it was just me and this degree”*. Parents – especially African parents – should refrain from leaving everything pertaining to education on the shoulders of their children. Parents should see themselves as co-partners

with their children in education. This would serve to boost students' morale and they would then enjoy the privilege of parental support. One participant noted that supporting children at university financially was not an issue but that parents should just show that they are there, they are with them in whatever they are doing as that counts a lot.

I therefore propose that a framework of some kind needs to be put in place so as to reinforce parental support to students at university. As in schools where the school governing bodies and the school ensure that parents are part of their children's learning, so too should such an arrangement be instituted in HEIs. This might assist in eliminating some of the challenges that university students encounter. However, this might not mean parents coming to the university like in schools but instead an institution might have a pool of parents performing a pastoral role in the community around the university that they (universities) can link up with or refer their students to for assistance with various problems.

#### **9.10 SUGGESTIONS FOR FUTURE RESEARCH**

This study focused mainly on the way first-year university students performed academically and their experiences. There is a need for a national study that would investigate the academic experiences of all Grade 12 top achievers in South Africa at university in order to obtain more generalisable findings and thereafter come up with a framework for generating standards for first-year university students.

Further studies which focus on support structures at university, teaching and learning in the first year, students' individual attitude and curriculum layout serve as important factors for excellent academic performance and will add more knowledge to the present existing knowledge base.

There is also a need for research that is focused on students' adjustment to university as it serves as a key determinant for students' academic success or failure in the first year at university. I would argue that this is important because, as indicated by many researchers, adjustment to university especially in first year strongly influences academic performance. Further research is also needed on how to deal with the university academic workload.

Future research should also look into the question of factors which contribute positively to academic achievement in the first year at university. This research is important for

formulating guidelines for first-year students that could be presented during orientation and at support centres.

As a researcher I think there might be some attributes that other top achievers might attribute to their academic performance that the participants of this study might have omitted or overlooked. Based on this, I therefore recommend that future researchers should consider conducting similar research in other provinces of South Africa.

Obtaining quality information about what contributes positively to academic performance in the first year at university requires further investigation. Considerations of more than one province would therefore provide more valuable information to the literature on academic achievement in first-year university. In addition, comparative studies where researchers look at top achievers of maybe two or three provinces need to be conducted to assist in the identification of factors that lead to the students' success in their first year at university and even beyond that. I believe that this might be a step in the right direction, as Paras (2001) argues that reasons for failure can also be explained by examining reasons for success.

This study has reflected on top achievers at universities, which are just one type of HEI. Therefore similar studies could be conducted with students who are also top achievers in Grade 12 who attended technikons or universities of technology and FET colleges. Hence this study was delimited to universities.

Finally, a study in the form of ethnographic research could be conducted to observe students and obtain valuable information on their attitude to and behaviour in learning. The findings of such a study might produce better and more reliable mechanisms for developing and sustaining academic performance in first year because it would be based on students' natural and undisturbed behaviour.

## **9.11 CONCLUSION**

Regarding the academic performance of top achievers in their first-year university programmes, it is important to report that both the top achievers (students) and the universities did put in some efforts to ensure good results and even the completion of degrees. This study thus confirms the validity of Tinto's (1993) conception of the importance of pre-entry attributes in highly heterogeneous contexts such as are found in South Africa. However, according to the findings of this study the three important distinct but overlapping phases that

together constitute the integration process as highlighted by Tinto (1993) and Van Zyl et al. (2012) are crucial to student retention and academic success. Ultimately, it is right to say that all these three phases in one way or another determine student retention.

Most importantly, however, is that the study also confirmed that for students to completely integrate into the university they need to undergo a separation phase during which they loosen the bonds with the originating environment (home) and start the move towards the new environment (university) as indicated by Van Zyl et al. (2012) and Tinto (1993). Again, these researchers further maintain that students need to undergo a transition phase, during which they start becoming part of the new environment. Finally, students need to undergo the integration phase during which they become fully integrated into the institution by meeting its explicit standards (Van Zyl et al., 2012; Tinto, 1993). Therefore, I believe that if all these phases could be taken into consideration, especially in relation to first-year university students, we would not be faced with students mentioning issues like adjustment to university as a major challenge in their first year. Moreover, based on the realistic elements and the practicality of Tinto's longitudinal interactionist theory, the study has indeed reaffirmed Tinto's (1975) theory. In this case, student retention is more meaningful to their academic achievement. Despite all the challenges that the top achievers (students) encountered, they were nevertheless able to persist. This finding is significant for this study because it implies that students' positive self-concept and self-motivation ideology benefitted them as they produced good results in their first year.

However, the most fundamental challenge to first-year and academic achievement is that there seems to be no appropriate guiding policy for the times when these students need support (i.e. be it academic or social support) from the university. This aspect is related to the fact that most participants complained during the interviews about the lack of university support (i.e. mentors) – only being introduced to them in the second semester when they needed them most in the first term. Finally, I should mention that the perceptions, experiences and behaviours of top achievers who were part of this study were impressive. This is significant because it provided some conception of the importance of different attributes in the highly heterogeneous context that is South Africa.



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## Appendix A – Letter requesting permission to conduct research



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

Faculty of Education  
Department of Science, Mathematics and  
Technology Education  
(012) 420 2207  
William.fraser@up.ac.za  
19 July 2012

Enquiries: Mahlangu T.P.  
Student No. 21230839  
Cell: 082 293 6043  
Email: thoko.dima@vodamail.co.za

Ms MOC Mohlabane  
Office of the Head of Department (HOD)  
Mpumalanga Department of Education  
Private Bag X11341  
Nelspruit  
1200

Dear Ms Mohlabane

### **REQUEST TO CONDUCT RESEARCH ON THE GRADE 12 TOP ACHIEVERS FOR 2008 TO 2011**

I am currently a registered PhD student at the University of Pretoria. Permission to conduct research based on Mpumalanga grade 12 top achievers for the academic year 2008 to 2011 is hereby requested. My research topic is: *Tracing the academic performance and the experiences of top ten high school learners in their first-year University programmes.*

I intend collecting data and analyze it based on the students' experiences and understanding of learning and teaching at higher education institutions. Though these students are at present in different Higher Education Institutions across the country, but it is important for me to request permission from the Department or your office since the study is based on the academic performance of these grade 12 learners and their records of achievement in grade 12 final examination will also be requested to form part of the data collection strategies.

Although participation in this project will be voluntary, it is my request that your office can assist me by providing with a list of at least 15 top achievers in matric from the year 2008 to 2011. To ensure that participation is voluntary, all participants will be requested to sign the consent form. Students' rights will also be respected at all times and they will remain anonymous throughout the process and even after the research is completed. Their names and those of their universities will be confidential as well. Students' right to withdraw anytime will also be made know to them and it will be granted whenever required.



The students will be required to complete a questionnaire and interviews will also be conducted as part of data collection. Lastly, documents (i.e. in the form of academic records) for achievement in grade 12 National Senior Certificate (NSC) examinations and the University first-year academic achievements will be analyzed to supplement the interviews data.

I have acquainted myself well with basic research procedures that would be needed in my project. With this understanding and constant supervision from my supervisor, I have no doubt that I will conduct this research in a professional manner. The results from this study will be used to:

-Provide evidence about whether and how academic performance in grade 12 can also determine performance in Higher Education Institutions.

-It will also enrich perspectives of policymakers, policy implementers, Education Departments and the Council for Higher Education (CHE) on debates concerning higher education.

Should you require more information and/or have questions or suggestions, please feel free to contact me at the numbers given above.

Hoping for your positive consideration

Sincerely

T. P. Mahlangu (Researcher)

18 July 2012

Date

Prof. WJ Fraser (Supervisor)

18 July 2012

Date

Department of Science,  
Mathematics &  
Technology Education  
University of Pretoria





## Appendix B – Permission to conduct research



**education**  
DEPARTMENT: EDUCATION  
MPUMALANGA PROVINCE

Private Bag X 11341  
Nelspruit 1200  
Government Boulevard  
Riverside Park  
Building 5  
Mpumalanga Province  
Republic of South Africa

*Litiko leTefundvo Umnyango weFundo Departement van Onderwys Umnyango wezeMfundo*

Enquiries: A.H Baloyi (013) 766 5476

**MS. T.P. MAHLANGU**  
**UNIVERSITY OF PRETORIA**  
**PRETORIA**  
**0001**

**RE: APPLICATION TO CONDUCT EDUCATIONAL RESEARCH IN THE PROVINCE.**

Your application dated 19 July 2012 to conduct educational research for **PhD program** on the topic: "Tracing the academic performance and the experiences of top ten high school learners in their first year university programs" was received on the 03 August 2012.

Your research aims and the background gives an impression that your study will benefit the entire department especially the (FET) curriculum division. Given the motivation and the anticipated report of the study, I approve your application to conduct your research.

You are further requested to read and observe the guidelines as spelt out in the research manual which is attached. You are therefore required to share your findings with the Department and all affected stakeholders. It will be appreciated if you can present your findings in electronic form and make formal presentation

*nan*



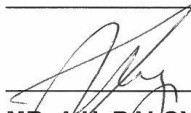
to the strategic planning's' research unit and the FET & GET curriculum directorates. The Department also has annual research seminars where all research findings and recommendations are presented and discussed by stakeholders.

For more information kindly liaise with the department's research unit @ 013 766 5476 or [a.baloyi@education.mpu.gov.za](mailto:a.baloyi@education.mpu.gov.za).

The department wishes you well in this important study and pledge to give you the necessary support you may need.

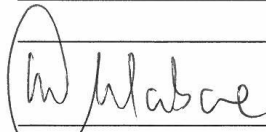
~~RECOMMENDED/NOT RECOMMENDED.~~

*Recommended.*

  
\_\_\_\_\_  
MR. A.H. BALOYI  
RESEARCH SUBDIRECTORATE

*16/08/2012*  
\_\_\_\_\_  
DATE

~~APPROVED/NOT APPROVED:~~

  
\_\_\_\_\_  
MRS MOC MHLABANE  
HEAD OF DEPARTMENT

*23/8/12*  
\_\_\_\_\_  
DATE

## Appendix C – Letter to participant

Faculty of Education  
Department of Science, Mathematics and  
Technology Education  
(012) 420 2207  
10 May 2012

Enquiries: Mahlangu T.P.

Student no. 21230839

Cell: 082 293 6043

Email: thoko.dima@vodamail.co.za

Dear Participant

I am a student at the University of Pretoria and I am currently doing my PhD. I hereby request you to participate during my data collection process on the topic: *Tracing the academic performance and the experiences of top ten high school learners in the first-year University programmes.*

Your participation in this research project is voluntary and confidential. Under no circumstances that you will be asked to reveal any information that will allow your identity to be disclosed/ established.

The data collection strategies that will be employed will be to complete a questionnaire that is made up of closed-ended questions that will take about 45 minutes to complete. The purpose of the questionnaire is to help me generate information from the experiences you had of studying at a higher education institution and how it determined your academic achievement and also the kind of support that you think is important and influence achievement. You will also be interviewed individually for approximately 1hour to 1h30 and these interviews will be recorded and the transcriber will then transcribe them. Again, your academic achievement records in Grade 12 and those of your first-year will also be used for the purposes of this study to supplement the interviews data. The sound material will only be used to ensure that data has been noted correctly.

All data will be kept strictly confidential and will not be shared with anyone. None of the written reports of this study will use you real name or the University's name. That sound material will be kept in a safe place during the course of study, so that anonymity will be assured. Your participation will remain confidential and anonymous. Should you feel uncomfortable during the data collection process, you are free to withdraw at anytime without serving any notice. You always more than welcome to ask the researcher anything concerning

the topic during the data collection period. The transcribed interviews shall be made available to you to scrutinize them before the report can be compiled.

Lastly, if you are willing to participate in this research project, please sign this letter as a declaration of your consent, i.e. that you participate in this project willingly and that you understand that you may withdraw from the research project at any time. Your participation in the completion of the questionnaire does not obligate you to participate in the follow up individual interviews, meaning participation in interviews is still voluntary and you may withdraw at any time.

Kind regards

Yours sincerely

\_\_\_\_\_  
Mahlangu T.P.

\_\_\_\_\_  
Date

Prof WJ Fraser

\_\_\_\_\_

Supervisor

Date

### **CONSENT TO PARTICIPATE IN THE STUDY**

I \_\_\_\_\_ have read the information contained in the accompanying letter. I fully understand the purpose of the study and the reasons for participating in the study and I therefore fully agree to participate. I also understand that I will remain anonymous during the entire period of the project and that my name or identity will not be reflected in the report. I also understand that all information that I will provide will be confidentially treated in all respect. I fully understand that I have the right to withdraw from the study should I feel uncomfortable with continuing with the study and that such action will not be held against me.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix D – Questionnaire



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

HIGHER EDUCATION  
STUDENTS  
QUESTIONNAIRE

Faculty of Education  
Department of Science, Mathematics and Technology Education  
Room 202  
General Sciences Building  
Groenkloof Campus  
Groenkloof  
082 293 6043

[thoko.dima@vodamail.co.za](mailto:thoko.dima@vodamail.co.za)

4 October 2013

Dear Student

### **ACADEMIC PERFORMANCE OF A SMALL GROUP OF HIGH ACHIEVERS AT HIGHER EDUCATION INSTITUTIONS**

Though there is literature on students' performance in certain subjects, there is a gap in literature pertaining to the performance of matric high (top) achievers at different HEIs. Subsequent to that, not enough knowledge or information has been generated concerning the perceptions and experiences of these high achievers and the meaning they attach to their academic achievement.

This study focuses on how matric students who are high (top) achievers perform in their first-year at higher education institutions and what perceptions and experiences do they have about the first-year university level. The outcomes of this investigation will assist policy makers from the Department of Basic Education and the Department of Higher Education as well as the Council on Higher Education (CHE) and curriculum developers to ensure that teaching and learning in HEIs does allow for transition and adjustment on the side of the students.

The questionnaire deals with a number of statements where you are expected to express your opinion regarding academic performance of students and their perceptions and experiences ranging from total agreement (4) to total disagreement (1). The following key applies: (4) totally agree; (3) mostly agree; (2) mostly disagree, and (1) totally disagree.

It will take you approximately 45 minutes to complete the questionnaire in your own time. All respondents will remain anonymous, and your name as well as academic information will not be disclosed. Your participation is voluntary and you are free to withdraw from the study should you wish to do so. All participating students will receive a summary of the findings of the study prior to the official publication of the results. By completing the questionnaire you imply that you have given consent to participate in this research.

Please note that the completed questionnaires will be collected personally by the researcher on the **30<sup>th</sup> of October 2013**.

Kind regards

T. P. Mahlangu  
Researcher



**1. SECTION A: BIOGRAPHICAL INFORMATION**

Kindly complete the following personal particulars by crossing the number in the appropriate block. For example: *Have you ever attended school?*

Yes	<b>X</b>	No	2
-----	----------	----	---

Respondent number

For official use

only

V1

**1 Which institution are you studying with?**

- University of Pretoria
- University of the Witwatersrand
- University of Cape Town
- University of North West
- Stellenbosch University
- University of KwaZulu Natal
- Potchefstroom University

1
2
3
4
5
6
7

V2

**2 Current year of study**

- First-year student
- Second-year student

1
2

V3

**3 In which year did you matriculate?**

- 2011
- 2012

1
2

V4

**4 Gender**

- Female
- Male

1
2

V5

**5 How old are you?**

.....

\_\_\_\_\_

V6

**6 Distinctions obtained in matric**

- None
- Only one
- Two distinctions
- Three distinctions
- 4 distinctions
- 5 distinctions
- 6 distinctions

1
2
3
4
5
6
7

V7



	Distinctions in all subjects	<input type="text" value="8"/>		
7	<b>Type of school you attended</b>			
	Public	<input type="text" value="1"/>	V8	<input type="checkbox"/>
	Private	<input type="text" value="2"/>		
	Other (specify below) .....	<input type="text"/>		
8	<b>Language used as a medium of instruction at school</b>			
	English	<input type="text" value="1"/>	V9	<input type="checkbox"/>
	Afrikaans	<input type="text" value="2"/>		
9	<b>Degree enrolled for is a</b>			
	3 year qualification	<input type="text" value="1"/>	V10	<input type="checkbox"/>
	4 year qualification	<input type="text" value="2"/>		
	7 year qualification	<input type="text" value="3"/>		
	Other (specify below) ..... ..	<input type="text"/>		
10	<b>Are you registered for full-time classes?</b>			
	Yes	<input type="text" value="1"/>	V11	<input type="checkbox"/>
	No	<input type="text" value="2"/>		
11	<b>Which field of specialization are you studying? (Degree)</b>			
	..... .....		V12	<input type="checkbox"/>
12	<b>Who is responsible for funding your studies?</b> <b>(Mark one only)</b>			
	Parents	<input type="text" value="1"/>	V13	<input type="checkbox"/>
	Bursary	<input type="text" value="2"/>		
	Loan	<input type="text" value="3"/>		





Other (specify below)

.....  
..

13 **Whose choice was it for you to study the course you enrolled for?**

Myself

1

Parents

2

My teachers

3

The University selected me for the course

4

I only met the requirements in this course only

5

V14

14 **What is your accommodation arrangement at university?**

I am staying on campus

1

I am staying off campus

2

I am staying with relatives close to the university

3

Commuting every day from home

4

My home is close to the university

5

I am renting with my parents who work around

6

V15

15 **Are you from an educated family?**

Yes

1

No

2

V16

16 **How do you rate your commitment to your studies at the university?**

Not at all committed

1

To some extent

2

A very high commitment

3

V17

17 **Will you change your courses if you were offered an opportunity to do so?**

Yes

1

No

2

V18

18 **Which academic stream did you study in matric?**

Natural Sciences

Commercial subjects

Social Sciences

Agricultural Sciences

Hospitality

Other (specify below)

.....  
.....

1
2
3
4
5

V19

19 **Is this your first institution to be enrolled with?**

Yes

No

1
2

V20

## 2. SECTION B: MOTIVATION TO STUDY FURTHER IN HIGHER EDUCATION INSITUATION

### 2.1 Introduction

Section B deals with a number of statements where you are expected to express your opinion regarding what motivated you in studying , ranging from a total agreement (4) to a total disagreement (1) [Use the following key: (4) Totally agree; (3) Mostly agree; (2) Mostly disagree, and (1) Totally disagree.]

In the following section a number of statements are made regarding motivation to study. Respond to **each** statement by crossing out the number that applies **directly** to you.

	Totally disagree	Mostly disagree	Mostly agree	Totally agree		
1. The main reason for me to be at university is that I come from an educated family.	1	2	3	4	V21	<input type="checkbox"/>
2. I performed very well in my matric thus had to pursue educational goals.	1	2	3	4	V22	<input type="checkbox"/>
3. I am studying because I was offered a bursary to study at university.	1	2	3	4	V23	<input type="checkbox"/>
4. I am studying because I was recruited by the university.	1	2	3	4	V24	<input type="checkbox"/>
5. I think my educators at school were my best role models to motivate me to study further.	1	2	3	4	V25	<input type="checkbox"/>
6. The availability of funds at home pushed me to study at university.	1	2	3	4	V26	<input type="checkbox"/>
7. To me self-discipline plays an important role in academic success.	1	2	3	4	V27	<input type="checkbox"/>
8. Self-motivation has helped me to persist by putting more effort on the course's workload.	1	2	3	4	V28	<input type="checkbox"/>
9. I think self-confidence has also assisted me in realizing my abilities so that I can be assisted where necessary.	1	2	3	4	V29	<input type="checkbox"/>
10. My level of intelligence has assisted me to succeed academically.	1	2	3	4	V30	<input type="checkbox"/>
11. My interest in the course has made the course to sound more achievable.	1	2	3	4	V31	<input type="checkbox"/>
12. My level of academic preparedness has determined my success in the university education environment.	1	2	3	4	V32	<input type="checkbox"/>



13.	My maturity level has influenced my behaviour which did determine my academic performance.	1	2	3	4	V33	<input type="checkbox"/>
14.	My willingness to accept university procedures has contributed to my good adjustment into the university.	1	2	3	4	V34	<input type="checkbox"/>
15.	My approaches to the studies have been influenced by the perceptions I had about what enhance chances of success.	1	2	3	4	V35	<input type="checkbox"/>
16.	Clear university requirements have made it easy for me to adjust at the university	1	2	3	4	V36	<input type="checkbox"/>
17.	Academic readiness has made me respond positively to the academic demands.	1	2	3	4	V37	<input type="checkbox"/>
18.	The belief I had about myself has led to my success academically.	1	2	3	4	V38	<input type="checkbox"/>
19.	To me, effort has been the mediator between motivation and academic performance.	1	2	3	4	V39	<input type="checkbox"/>
20.	I find it easy to combine my study and leisure time.	1	2	3	4	V40	<input type="checkbox"/>
21.	The research that I did about my career choice, made me develop more love for the course.	1	2	3	4	V41	<input type="checkbox"/>
22.	I had to acquire academic competence for me to perform to the best of my ability.	1	2	3	4	V42	<input type="checkbox"/>
23.	My appropriate choice of the course of study has made me to excel in my studies.	1	2	3	4	V43	<input type="checkbox"/>
24.	I am studying because I want to change my family's background.	1	2	3	4	V44	<input type="checkbox"/>

### 3. SECTION C: STUDENTS' EXPERIENCES AND PERCEPTION OF LECTURERS

#### 3.1 Perceptions of students

In the following section a number of statements are made of the perceptions of students. Respond to **each** statement by crossing out the number that applies **best** to you.

	Totally disagree	Mostly disagree	Mostly agree	Totally agree		
1. The impressions I get from the lecturers' personality make me find the course more understandable.	1	2	3	4	V45	<input type="checkbox"/>
2. My lecturers understood the background from where I was coming from during my first year of study.	1	2	3	4	V46	<input type="checkbox"/>
3. My lecturers have played an important role in my achievement.	1	2	3	4	V47	<input type="checkbox"/>
4. My academic potential was not revealed to my lecturers in my first year of study.	1	2	3	4	V48	<input type="checkbox"/>
5. My lecturers' commitment to me is equally important to my academic achievement.	1	2	3	4	V49	<input type="checkbox"/>
6. My lecturers availed themselves all the times for me to contact them when I needed assistance.	1	2	3	4	V50	<input type="checkbox"/>
7. My lecturers' expectations of me have been clearly spelt out.	1	2	3	4	V51	<input type="checkbox"/>
8. By being consistent in their marking, lecturers have made me develop a positive attitude towards assessment.	1	2	3	4	V52	<input type="checkbox"/>
9. My lecturers have mastered the course content that allowed me to perform as required.	1	2	3	4	V53	<input type="checkbox"/>
10. The attitude of my lecturer(s) has directly influenced my performance.	1	2	3	4	V54	<input type="checkbox"/>
11. The efforts that my lecturers put into the course have made me to excel in the course.	1	2	3	4	V55	<input type="checkbox"/>
12. The attention that my lecturers gave to me in the first year has made me more motivated.	1	2	3	4	V56	<input type="checkbox"/>
13. The help that my lecturers provided me with in the first year has made me more interested in the study.	1	2	3	4	V57	<input type="checkbox"/>



14.	The more work I was given by my lecturers, the better I performed in my studies.	1	2	3	4	V58	<input type="checkbox"/>
15.	I performed well because my qualified lecturers were able to handle content related matters.	1	2	3	4	V59	<input type="checkbox"/>
16.	The special time that my lecturer(s) reserved for me during my first year of study has made me improve a lot in my studies.	1	2	3	4	V60	<input type="checkbox"/>
17.	The workloads that the lecturers gave to me made it compulsory for me to engage in my work.	1	2	3	4	V61	<input type="checkbox"/>
18.	Continuous feedback that my lecturers gave has contributed to my better performance.	1	2	3	4	V62	<input type="checkbox"/>

### 3.2 Class attendance by students

The following section deals with statements regarding your perceptions of class attendance. Respond to **each** statement by crossing out the number that applies **best** to you.

		Totally disagree	Mostly disagree	Mostly agree	Totally agree		
1.	Regular attendance at lectures has been an important predictor of my success.	1	2	3	4	V63	<input type="checkbox"/>
2.	I liked the way in which the lecturer(s) presented the lessons.	1	2	3	4	V64	<input type="checkbox"/>
3.	Class attendance assisted me in understanding the course content better.	1	2	3	4	V65	<input type="checkbox"/>
4.	I learn a lot by listening to stimulating discussions in class during the lesson.	1	2	3	4	V66	<input type="checkbox"/>
5.	I got better results when I attended all the lectures.	1	2	3	4	V67	<input type="checkbox"/>
6.	I attended classes because feedback on assignments was given during the classes.	1	2	3	4	V68	<input type="checkbox"/>
7.	Attending classes has assisted me with useful tips about tests in preparation for the exam.	1	2	3	4	V69	<input type="checkbox"/>
8.	Most of my knowledge of the courses comes from the notes I took in classes.	1	2	3	4	V70	<input type="checkbox"/>
9.	Class attendance has motivated me to study the course further.	1	2	3	4	V71	<input type="checkbox"/>
10.	The group work in class has helped me to master the course(s) better.	1	2	3	4	V72	<input type="checkbox"/>



- |     |  |   |   |   |   |     |                          |
|-----|--|---|---|---|---|-----|--------------------------|
| 11. | Class attendance has made me to be more self-discipline in my studies.                       | 1 | 2 | 3 | 4 | V73 | <input type="checkbox"/> |
| 12. | I attended classes because of the good conditions in the lecture halls.                      | 1 | 2 | 3 | 4 | V74 | <input type="checkbox"/> |
| 13. | The lecturers who were offering classes helped me to understand the work better.             | 1 | 2 | 3 | 4 | V75 | <input type="checkbox"/> |
| 14. | Regular class attendance has helped me to understand the lecturers' way of asking questions. | 1 | 2 | 3 | 4 | V76 | <input type="checkbox"/> |

### 3.3 The availability of teaching and learning resources in the University

In the following section a number of statements are made regarding the availability of resources in your institution. Respond to **each** statement by crossing out the number that applies **best** to you.

- |    | Totally disagree | Mostly disagree | Mostly agree | Totally agree |     |                          |
|----|------------------|-----------------|--------------|---------------|-----|--------------------------|
| 1. | 1                | 2               | 3            | 4             | V77 | <input type="checkbox"/> |
| 2. | 1                | 2               | 3            | 4             | V78 | <input type="checkbox"/> |
| 3. | 1                | 2               | 3            | 4             | V79 | <input type="checkbox"/> |
| 4. | 1                | 2               | 3            | 4             | V80 | <input type="checkbox"/> |
| 5. | 1                | 2               | 3            | 4             | V81 | <input type="checkbox"/> |
| 6. | 1                | 2               | 3            | 4             | V82 | <input type="checkbox"/> |
| 7. | 1                | 2               | 3            | 4             | V83 | <input type="checkbox"/> |

### 3.4 Support structures that a student need

Below are a number of statements regarding the support structures that a student might need. Respond to **each** statement by crossing out the number that applies **best** to you.

	Totally disagree	Mostly disagree	Mostly agree	Totally agree		
1. I think the necessary primary support that has had a direct influence on my level of academic performance is family support.	1	2	3	4	V84	<input type="checkbox"/>
2. My financial position at university has a direct influence on my academic performance.	1	2	3	4	V85	<input type="checkbox"/>
3. Peer group support does motivate the focus I have on my academic work.	1	2	3	4	V86	<input type="checkbox"/>
4. The quality of the orientation by the faculty makes me adjust more easily to the environment.	1	2	3	4	V87	<input type="checkbox"/>
5. The standard of accommodation at the university makes me adjust well to the university.	1	2	3	4	V88	<input type="checkbox"/>
6. The positive influence of my friends makes me cope with the demanding workload of the courses.	1	2	3	4	V89	<input type="checkbox"/>
7. The availability of university bursaries does motivate me to put more effort into my studies.	1	2	3	4	V90	<input type="checkbox"/>
8. Having a stable personal life has made me cope at university.	1	2	3	4	V91	<input type="checkbox"/>



### 3.5 Presentation of lectures

In the following section a number of statements are made regarding the manner in which lecturers present their lessons. Respond to **each** statement by crossing out the number that applies **best** to you.

	Totally disagree	Mostly disagree	Mostly agree	Totally agree		
1. I can master a course more easily when it is well-structured.	1	2	3	4	V92	<input type="checkbox"/>
2. Well-structured presentations by lecturers have inspired me.	1	2	3	4	V93	<input type="checkbox"/>
3. Well-structured presentations by lecturers have made me develop love for the course.	1	2	3	4	V94	<input type="checkbox"/>
4. I tend to be more eager to learn when lecturers give regular comprehensive feedback on progress.	1	2	3	4	V95	<input type="checkbox"/>
5. I perform much better when the assignments given are closely related to the lecture content.	1	2	3	4	V96	<input type="checkbox"/>
6. I have a better understanding to apply my knowledge more correctly when lecturers clearly define the subject.	1	2	3	4	V97	<input type="checkbox"/>
7. I can apply knowledge more correctly when lecturers clearly demarcate the subject.	1	2	3	4	V98	<input type="checkbox"/>
8. My intellectual thinking ability has been developed by presentation of lectures that assist me in putting theory into practice.	1	2	3	4	V99	<input type="checkbox"/>
9. Being continuously assessed through tests has put me at a better chance of improving my achievement results.	1	2	3	4	V100	<input type="checkbox"/>
10. My knowledge of the language of teaching and learning makes me perform well in the course.	1	2	3	4	V101	<input type="checkbox"/>
11. My understanding of the language of teaching and learning makes me perform well in the course.	1	2	3	4	V102	<input type="checkbox"/>
12. I develop more interest in the course when lectures are structured to link with the career world.	1	2	3	4	V103	<input type="checkbox"/>
13. I think the more applicable the course content is, the more easily I master it.	1	2	3	4	V104	<input type="checkbox"/>

### 3.6 Your abilities as a student

In the following section a number of statements are made regarding your abilities as a student. Respond to **each** statement by crossing out the number that applies **best** to you.

	Totally disagree	Mostly disagree	Mostly agree	Totally agree		
1. I have creative thinking abilities that help me to generate better understanding of the course.	1	2	3	4	V105	<input type="checkbox"/>
2. My creative thinking ability has helped me score better marks during assessment.	1	2	3	4	V106	<input type="checkbox"/>
3. My ability to work as part of a group does also assist in developing more understanding in the content.	1	2	3	4	V107	<input type="checkbox"/>
4. Using effective examination techniques has produced good results for me.	1	2	3	4	V108	<input type="checkbox"/>
5. Doing timely regular examination preparations in all courses has been the best way for my success.	1	2	3	4	V109	<input type="checkbox"/>
6. An appropriate balance between academic commitments and social life is necessary for me to achieve my educational goal.	1	2	3	4	V110	<input type="checkbox"/>
7. I think having developed my logical reasoning capacity before coming to university does assist in my studies.	1	2	3	4	V111	<input type="checkbox"/>
8. My ability to study other course related material for enrichment does assist in generating better understanding in the course.	1	2	3	4	V112	<input type="checkbox"/>
9. I think my ability to manage personal encounters like stress makes me able to cope with the course's workload.	1	2	3	4	V113	<input type="checkbox"/>
10. Effective study methods that I used have improved my performance.	1	2	3	4	V114	<input type="checkbox"/>
11. My ability to work independently has assisted me in realizing that I still can perform better in putting effort to those courses that require more time from my side.	1	2	3	4	V115	<input type="checkbox"/>

### 3.7 Student experiences of University conditions and their responses to them

In the following section a number of statements are made regarding your experiences of institutional conditions and your response to them. Respond to **each** statement by crossing out the number that applies **best** to you.

	Totally disagree	Mostly disagree	Mostly agree	Totally agree		
1. I think that the quality faculty-student interaction that I had has helped to shape my progression through the university experience.	1	2	3	4	V116	<input type="checkbox"/>
2. The university does show commitment to my success when it invest resources needed to enhance my success.	1	2	3	4	V117	<input type="checkbox"/>
3. The university does show commitment to my success when it provide rewards needed to enhance my success.	1	2	3	4	V118	<input type="checkbox"/>
4. I think my individual effort does determine the impact of an institution of higher learning.	1	2	3	4	V119	<input type="checkbox"/>
5. I think that high university expectations do contribute to the change of faculty.	1	2	3	4	V120	<input type="checkbox"/>
6. I think that high university expectations do contribute to the change of major courses.	1	2	3	4	V121	<input type="checkbox"/>
7. My academical involvement in the university does influence me to persist with the hope to graduate.	1	2	3	4	V122	<input type="checkbox"/>
8. For my effort to improve academically to serve the purpose, I need the university's commitment.	1	2	3	4	V123	<input type="checkbox"/>
9. I think social support in the form of student help centre does contribute to my achievement.	1	2	3	4	V124	<input type="checkbox"/>
10. I think social support in the form of counselling does contribute to my achievement.	1	2	3	4	V125	<input type="checkbox"/>
11. The availability of academic support in the form of supplemental instruction has been an important condition for my continuation in the university.	1	2	3	4	V126	<input type="checkbox"/>
12. As a student, I am more likely to succeed when I find myself in settings that are committed to my success.	1	2	3	4	V127	<input type="checkbox"/>



13. My lecturers do understand the community from which I come.

1	2	3	4
---	---	---	---

V128

## Appendix E – Interviews schedule



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

### INTERVIEWS SCHEDULE

#### Schedule of questions to be used in interviews with University students

##### Introduction questions:

1. What is your name and where did you attend school?
2. What type of school did you attend and how was it to you?
3. How far was the school from your home?
4. What were your challenges in attending school?
5. Which subject(s) did you like most in grade 12?
6. Why did you like those subjects?
7. What contributed to your success at high school?
8. What was your career choice and why?

##### Main Questions:

9. What do you think might have contributed positively to your admission to the University? (Please elaborate).
10. What motivated you to study for the course you have register for? And in which way?
11. What were your expectations of the University as a first-year student?
12. How were those expectations met by the University? If it did. Which were not met?
13. How did the teaching and learning activities in the first-year meet your expectations?
14. Describe your experience of teaching and learning in your first-year at University.
15. Which factors contributed most to your academic performance at school and how did they influence your performance at University?
16. How did you adjust from matric into first year at University?
17. How then did you as an individual contribute positively to your academic performance?

18. Describe your academic performance in your first-year of study at University.
19. What do you think might have contributed to such performance? Describe all factors or influences.
20. Which factors impacted negatively on your academic performance? Why and how?
21. Whom do you blame for factors which impacted negatively on your academic performance?  
Why? What are the reasons for that?
22. What did you do to counteract these negative influences to your academic performance?
23. How did your action(s) change or improve your academic achievement?
24. What do you think are your roles and responsibilities as a first-year University student?
25. What mechanisms or strategies did you use in studying and in preparing for your exams?
26. How did you relate to the University environment in your first-year of study?
27. How do you balance your academic commitments with your social life?  
(peer/friends)
28. What do you think are the roles and responsibilities of the University?
29. Can you describe some of the challenges that you encountered in your first-year?
30. What is your worse experience about studying at university?

**NB. For second year students only**

31. How did you adjust from first to second year of study at University?
32. In your own view or experience, what has changed in being a second year student now?

## Appendix F – Service level agreement

Enquiries: Mahlangu T.P.

Faculty of Education

Cell: 082 293 6043

Department of Science, Mathematics and

Email: [thoko.dima@vodamail.co.za](mailto:thoko.dima@vodamail.co.za)

Technology Education

(012) 420 2207

10 May 2012

### RESEARCH PROJECT

**Research topic:** *The academic experiences of Grade 12 top achievers in maintaining excellence in first-year university programmes*

Transcriber's name: .....

Address : .....

.....

### SERVICE LEVEL AGREEMENT

I, ..... hereby undertake to do the transcription of recorded material as it is/they are without making any alterations to the data. I also undertake to transcribe the data in an authentic, true and accurate manner. I also declare that I do understand the confidentiality and anonymity of the study and I assure you that I will also keep to it.

#### Conditions under which the transcriber will work

No information or part of will be shared with anybody I know

The material shall be confidentially treated (i.e. only myself will work with the material).

The data will be accurately transcribed, i.e. not my own thinking or adding to the data.

No copy/copies of such material shall be kept by the transcriber.

Signed at .....on this date: 2012/ .....

Transcriber: .....

Signed at .....on this date: 2012/ .....

Researcher: .....