

**THE INFLUENCE OF DIVERSITY AND THE
EDUCATIONAL CLIMATE IN SHAPING CLINICAL
COMPETENCE OF ORAL HEALTH STUDENTS**

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UNIVERSITY *of the*

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THE INFLUENCE OF DIVERSITY AND THE EDUCATIONAL CLIMATE IN SHAPING CLINICAL COMPETENCE OF ORAL HEALTH STUDENTS

KEY WORDS

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Social integration



ABSTRACT

High attrition, low retention and low throughput are major problems facing South African higher education institutions. These problems have been attributed to student under-preparedness as a result of the legacy of apartheid education provision and associated limited academic opportunities available to working-class learners. South African studies indicate that black and working-class students are less likely to perform well than their middle-class peers. In the health sciences poor academic achievement is frequently associated with poor clinical competence. Diminished clinical competence has the potential to compromise patient treatment success. This study, therefore, set out to examine the influence of diversity, with particular reference to race and social class, and the educational climate in shaping the clinical competence of students in an oral health program at a Faculty of Dentistry in South Africa. The purpose of the study was to understand the relationship between diversity, educational climate, and clinical competence so as to better support the learning of all students in the oral health program.

Two concepts informed the theoretical parameters of the study – *diversity* and *educational climate*. In addressing diversity, Bourdieu's construct of economic and cultural capital provided the conceptual tools for examining the extent to which students' race and social class locations shaped their readiness for higher education and hence influenced their experiences and performance in the program. In terms of the educational climate, Tinto's constructs of social and academic integration, provided the lens for explicating students' persistence in the program, taking into account their social and academic experiences.

Set in a qualitative paradigm, a case study design was used, based on its characteristic principles of bounded place, context, time and activity. The cohort was the first-year class of 2007 in the oral health program. The students of the cohort were tracked longitudinally from 2007 to 2010. Data was gathered from a range of quantitative and qualitative sources, such as, analysis of faculty documents, observations, mark schedules, student reflective writing, focus group and individual interviews. Thematic analysis was used to analyse the data. This process involved drawing on the literature related to diversity and educational climate to identify emergent patterns and themes from the data, and then interpreting their meaning through the lenses of capital and social and academic integration.

This study illuminated many ways in which student performance was affected by diversity, with particular reference to race and social class locations and associated access to economic and cultural capital. Differences between middle-class and working-class students were noted in their performance, their preparation for university and its academic demands as well as in how these two groups of students interacted in the classroom. Significant differences were also noted in their transition and integration experiences at a social, professional and academic level. In addition, the study explicated ways in which the faculty, through its culture, structure, and pedagogy, appeared to contribute to an educational climate which either supported or deterred student integration, both in social and academic ways. Cumulatively the challenges experienced by working-class students in particular appeared to have had real effects. The most significant effects were on their morale, their intent to engage and integrate and their consequent learning, academic performance and clinical competence.

This study did not intend to solve but rather to understand the issue of differential performance. The findings of the study are envisioned to inform faculty and institutional strategies toward increasing effectiveness and responsiveness to differing student needs.

DECLARATION

I declare that *The Influence of Diversity and the Educational Climate in Shaping Clinical Competence of Oral Health Students* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all sources I have used or quoted have been indicated and acknowledged as complete references.

Priscilla Brijlal

November 2013

Signed:



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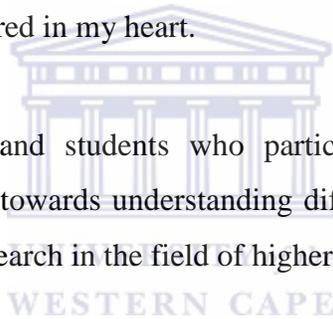


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CHAPTER ONE

INTRODUCTION

1.1. Introduction

This chapter presents a synopsis of the study, entitled ‘The influence of diversity and the educational climate in shaping clinical competence of oral health students’. The chapter includes the background to the research, a statement of the problem, the purpose of the study, the research questions, the significance and limitations of the thesis, and definitions of terms and concepts. It concludes with an outline of the organization of the rest of the study.

1.2. Background to the research problem

High attrition, low retention and low student throughput in higher education have become an international concern (Tinto, 2012a; 2010; 2004; Reay, 2012; CHE 2010; McCoy *et al*, 2010). In South Africa, this concern is manifested across both the school and the higher education sectors (Badat, 2010; CHE, 2010; Breier, 2009; Letseka & Maile, 2008; Scott *et al*, 2007). Higher education in particular is characterized by low participation and high attrition (Fisher & Scott, 2011; Letseka & Maile, 2008). Approximately one in every three students entering a university will have dropped out by the end of their first year of enrolment (van Schalkwyk *et al*, 2009b). The enrolment rate, as measured by the gross enrolment ratio (GER¹), does not peak beyond 16% (CHE, 2009), while the overall national graduation² rate remains between 16 and 20%, one of the lowest in the world. Moreover, the graduation rate drops as low as 15% when demographics such as race and socio-economic status are taken into account (CHE, 2010; 2009; Letseka & Maile, 2008; Scott *et al*, 2007). At classroom level, these patterns are a grave concern to educators, with particular reference to student under-preparedness and differential performance

¹ Enrolment or participation is measured using the gross participation rates or gross enrolment ratio (GER). These rates are measured by expressing the total higher education enrolments of the general population in the 20-24 year age group as a percentage (CHE, 2009:34; Scott *et al*, 2007: 10).

² Graduation rates are calculated by dividing the total number of qualifications awarded at an institution by the total number of students enrolled (CHE, 2010). Between 2004 and 2007 the overall graduation rate for the public higher education system was 16% (Fisher & Scott, 2011; CHE, 2009; Scott *et al*, 2007). Further statistics are presented in Chapter Three.

(Strydom *et al*, 2012; Wilson-Strydom, 2010). It is in the context of the imperative to address attrition, retention and throughput that the present study is framed.

Research in the field of attrition, retention and throughput suggests that academic performance is influenced by several elements. The following section highlights these elements from both international and national perspectives, allowing for a more in-depth examination of the research problem.

1.2.1. Aspects associated with academic performance

In international literature, social class and ethnicity feature as significant factors influencing academic performance, and by extension student retention (Reay, 2012; 2006; 2004; 2001; 1998; 1997; Archer *et al*, 2003; Archer & Hutchings, 2000). In these studies, performance is seen as related to the kinds of opportunities and resources to which ethnic groups or middle-class and working-class families have access. Access to quality schooling, the neighbourhoods in which people live and their socialization towards education have been positioned as significant in shaping academic performance, educational experience and achievement (Reay, 2012; Archer *et al*, 2003; Anyon, 1980). Some studies (Tinto, 1993; 1975) view performance from the perspective of attrition or academic failure. Within this perspective academic failure is recognized to be the result of unsuccessful integration of the student into the institution at both academic and social levels (Tinto, 2012a; 1993; 1975). While most of the literature concurs that it is the student and the background from which he or she comes that influences educational achievement, some studies emphasize the role of the educational institution as integral to student success (Tinto, 2012a; 2012b; Genn, 2001a; Roff & McAleer, 2001). These latter studies hold that the educational climate is seminal in shaping the quality of the educational experience and in facilitating learning outcomes (Hurtado *et al*, 2009; Jansen, 2009; Boor *et al*, 2007; Hurtado *et al*, 1999; Genn, 2001a; Roff & McAleer, 2001).

In South Africa, the pattern of poor academic performance and the demographics associated with it, can be traced back as consequences of differential access to resources

during the apartheid era³ (CHE, 2010; Scott, 2009; Pandor, 2006a; Naidoo, 2005) and more recently, to the complexity of emerging social classes (McKinney & Soudien, 2010). Little attention has been paid, however, to the role of the institutions in shaping student performance (Scott *et al*, 2007). The following section provides a synopsis of the South African socio-economic landscape in the post-apartheid era as a backdrop to understanding both the research problem and its context.

1.2.2. Education in post-apartheid South Africa

After almost fifty years under apartheid law and nineteen years into democracy, South Africa still experiences the legacy of the social injustices of apartheid (APRM, 2007; Bond, 2004). The persistence of large-scale poverty and high levels of inequality have resulted in the South African society remaining polarized along the lines of race, now coupled with emerging social divisions (McKinney & Soudien, 2010; Bond, 2004). This polarization is significant not only in terms of differential access to wealth but also of access to resources and opportunities, particularly in education. It is argued that of the many inherited social injustices, the greatest is evident in the education sector. It is also generally recognized that the country's education system still remains in crisis (Ramphela, 2013; 2009; APRM, 2007).

Schools serving the black, coloured and Indian population continue to be under-resourced in terms of infrastructure, with limited classrooms, shortage of textbooks and a lack of qualified teachers (Hendricks, 2008). These resources are crucial to shaping educational experiences and in preparing school learners for higher education (Mdepa & Tshiwula, 2012; CHE, 2010; Breier, 2009; Scott *et al*, 2007; Fraser & Killen, 2003). Educational inequalities, as reflected in the limited resources, are shown to impact on the higher education system, resulting in poor academic performance (Fischer & Scott, 2011; Cosser, M. 2009; Khwesa, 2009; Letseka & Maile, 2008; Scott *et al*, 2007; Johnson, 2007; McMillan, 2007b).

³ The origin of race classifications in South African apartheid law was politically driven and enforced by the ruling white Government, disadvantaging black people by limiting their access to privileges and resources (Kalfani *et al*, 2005:12; Brown, 2000:200).

Since the end of the apartheid era much has been done in the educational sector to transform schools and universities and to make them both equitable and accessible (Mabokela, 2004). This transformation has included policies to increase access and representation for previously disadvantaged race groups (CHE, 2010; 2009; Asmal, 2004; 1999). Recent studies, however, indicate that these initiatives are complicated by a number of factors (CHE, 2010; 2009; Breier, 2009; Scott *et al*, 2007).

At least seventy percent of university students who drop out are from working-class backgrounds, associated with previous disadvantage (CHE, 2010; World Bank Report, 2009; Letseka & Maile, 2008; Scott *et al*, 2007). Studies also indicate several barriers which limit the quality of the educational experience for students from such backgrounds and consequently interfere with their chances of completing their studies. One of such barriers is that many students have a limited social preparation for university as they are characteristically the first in the family to attend university (Breier, 2010; McMillan, 2007b; 2005a). A second barrier relates to students' previous experience of poor quality schooling, which influences their academic readiness for university (Wilson-Strydom, 2010; McMillan, 2007b; 2005a). The third barrier is when students experience limited access to the financial and material resources they need to support their educational aspirations (Breier, 2010; 2009; CHE, 2010; 2009; Letseka & Breier, 2008; Breier *et al*, 2007). A fourth barrier arises from a mismatch between the academic expectations of the student and those of the university (McMillan, 2007a; 2007b).

1.2.3. Statement of the problem

In the South African context studies indicate that there is a common misperception that increasing access will lead to increased throughput associated with success at university (Breier *et al*, 2007; Scott *et al*, 2007; Angelil-Carter, 1998). The evidence lies in the fact that performance rates have remained unchanged despite initiatives aimed at increasing access (CHE, 2010; Breier, 2009; Scott *et al*, 2007; Fraser & Killen, 2003). Poor performance thus remains an important issue for concern and is particularly significant given the vast differences in university throughput rates between white, coloured, black African and Indian students. The consequence of this differential performance is that it

affects not only the students but other stakeholders such as the educators and the educational institutions themselves.

Academic success is of primary importance to students in terms of achieving a better quality of life. Higher education offers the potential to generate personal wealth (Mabokela, 2004). Improved performance rates are also important to educators and higher education institutions. The central role of the university system is to develop graduates with high-level skills and the new knowledge needed for the improvement of the economy (Mabokela, 2004). Higher education institutions and their educators are therefore accountable in ensuring the qualification of graduates of a high calibre. Both institutions and educators play a central role in student throughput, creating conditions which facilitate success for those who do gain entry (Wilson-Strydom, 2010; Fisher & Scott, 2011; Scott *et al*, 2007).

In health sciences education, performance reflects the level of clinical competence which has been achieved. Clinical competence entails the contribution which individuals make not only to their own life chances but also to the improvement of general health in society. Graduating health-care professionals exit with a license to treat and cure illnesses and prevent ill-health. Hence for the student the competence achieved has implications in terms of employability, quality of patient care, and professional credibility. Competence thus becomes a key issue for scrutiny when students perform poorly or when they graduate under-prepared (Pandor, 2006a; Mabokela, 2004).

Because many of the problems of poor performance are a result of the apartheid legacy, particularly the “shortcomings in the school system” (Scott *et al*, 2007:31), many students from disadvantaged backgrounds entering the higher education system are under-prepared for the demands of such education (Wilson-Strydom, 2010; Scott *et al*, 2007; McMillan, 2007a; 2007b). Given the slowness of the transformation process in addressing the country’s past inequalities and the persistent low levels of graduation, the solution to the problem of poor success rates in higher education will to a great extent need to be found within the higher education system itself.

1.3. Purpose of the research

The persistent levels of poor performance are an increasing concern for the various stakeholders, including educators, educational policy makers, planners and governing bodies of institutions in South Africa (Wilson-Strydom, 2010; Koen *et al*, 2012; Strydom *et al*, 2012; Breier, 2009; van Schalkwyk *et al*, 2009a; 2009b; Breier *et al*, 2007; Scott *et al*, 2007; McMillan, 2007a; 2007b; 2005a). These concerns are shared by the present researcher in her capacity as educator in the oral health program at the Faculty of Dentistry, University of the Western Cape. Empirical evidence from the oral health program at her faculty, recording the performance of students from different race and class backgrounds, formed the basis of this research. Hence the reason for the study was to gain an in-depth understanding of why some students thrive while others fail to do so. *Thrive* in the current study is used to signal that a student was coping and was successful while *struggle* is used to indicate that a student experienced difficulty socially, academically and/or professionally.

From the literature, two major aspects are recognized as central to student academic performance in higher education: race/social class/ locations and the role of the institutions (Reay, 2012; Scott *et al*, 2007). In view of the literature and the empirical evidence of differential performance to which the researcher had access, she thus set out to understand the influence of diversity and the educational climate in shaping clinical competence of oral health students. The study examined differential performance in the oral health program at one particular Faculty of Dentistry in South Africa. It was envisioned that findings from the study will inform strategies aimed at increasing departmental effectiveness and responsiveness towards differing student needs. Such findings would have the potential to facilitate the creation of an environment conducive to learning and one that would promote student throughput.

1.4. Research questions

The aim of the study was to understand the influence of diversity and the educational climate in shaping the clinical competence of oral health students in the context of post-apartheid South Africa.

In order to assess the way in which race, social class and the educational climate shape academic performance, the research was framed around a particular set of questions:

- Why is it that some students thrive while others do not?
- What is the quality of academic life for students from historically disadvantaged and advantaged societies?
- How and why do certain issues influence them and in what ways?
- To what extent does the institutional culture at the University of the Western Cape accommodate all students?

As the study unfolded, it became necessary to place emphasis on the following in order to address the initial research questions:

- The quality of academic life for historically disadvantaged and working-class students.
- The research context in terms of the extent to which the educational climate at the Faculty of Dentistry accommodates these students.

1.5. Conceptual underpinnings

The study is based on the assumption that the persistence and success of students is contingent on their social class backgrounds and on their experiences and sense of integration into the educational climate of the university system (Scott *et al*, 2007; Tinto, 2006; 1975). The study is thus underpinned by several concepts which serve as lenses for examining how diversity and the educational climate shape student performance and hence clinical competence. The study draws on Bourdieu's construct of *capital* (1986) and Tinto's concept of *integration* (1993; 1975) to understand the influences respectively of *diversity* and the *educational climate*.

Diversity forms the backdrop to this study and is an expression of the different socio-economic contexts from which students come, specifically with reference to race and social class. A plethora of international research studies highlight the role of social class locations and cultural dispositions in shaping the educational experience of students (Reay, 2012; 2006; 2004; 2001; 1998; 1997; Archer *et al*, 2003). The concept of *capital*, in particular economic and cultural capital, has frequently been used to explain differential performance by relating academic performance to social class privileges or

disadvantages (Lam *et al*, 2011; Moss, 2005; Archer, 2003; Reay, 1998; Bourdieu, 1986). In this study, Bourdieu's (1986) construct of *economic* and *cultural capital* serves as a lens to focus on how the classed locations of the students shape their preparedness for and experiences of higher education. In South Africa, social class is a nested concept of race (McKinney & Soudien, 2010). Hence in this study diversity will be used with reference to race and social race locations.

Educational climate in the current study alludes to the higher education environment (Roff & McAleer, 2001). In terms of the educational climate, reference will be made to the ethos, institutional practices, curricula, teaching and rules that shape the educational experience of students (Roff, 2005; Roff & McAleer, 2001). It is argued that the educational climate in clinical programs influences students' engagement and thus their experience in terms of their clinical behaviour, their levels of satisfaction, achievement and success (Hurtado *et al*, 2009; Boor *et al*, 2008a; Genn, 2001a). *Integration* (Tinto, 1975) is deployed as a concept seminal to understanding student engagement.

Drawing on Miller's model (1990) of clinical competence, the concept of *clinical competence* is deployed with reference to the clinical competences of students in the oral health program. These clinical competences form the core of professional practice for *oral hygienists*, a designation for graduates in this program. Clinical competence in the current study is measured through a range of clinical and theoretical assessments which are recorded as performance scores – these scores reflect the extent to which a student's expected learning outcomes have been achieved (Hurtado *et al*, 2009; Boor *et al*, 2007; Genn, 2001a; Hurtado *et al*, 1999). Success is inferred from the achievement of the desired learning outcomes, and is expressed through the gaining of a degree or qualification. It involves the acquisition of knowledge and the application of technical clinical skills and professional dispositions. A student's performance in the oral health program is the bench mark against which his or her clinical competence is gauged.

1.6. Research design and methodology

The approach to the methodology was based on a qualitative paradigm. This approach is posited as appropriate for the depth of inquiry required to capture insights into the educational climate, as well as student perceptions (van der Walt & van Rensburg, 2006; Hitchcock & Hughes, 1995). In qualitative research, the researcher is seen as the key instrument in the data collection process, in managing the data analysis, and in the reporting of data (Borg *et al*, 2012; Lapan *et al*, 2012; Creswell, 2007)

The current study drew on three study designs which accounted for specific aspects of the methodology: case study design (in defining the context and the cohort) (Yin, 1984); generic qualitative research (for the data collection process) (Crowe *et al*, 2011; Yin, 1984); and thematic analysis (for the analysis) (Bazeley, 2009; Braun & Clark, 2006). Purposive sampling was used in the study (Patton, 1990). The case study comprised a cohort of first-year students enrolled in the oral health program – a program that would have led to their graduation as oral hygienists. The study was longitudinal, with the students being tracked during the period from 2007 to 2010.

The case study design allowed for generic data (Cresswell, 2012; Yin, 1984) to be collected using a variety of methods, such as, interviews, document analysis, reflective reports, focus group discussion and observations. This multi-method approach allowed the researcher to obtain in-depth data, to verify the data captured, as well as to elicit new data (Flick, 2011; Few *et al*, 2003; Roberts *et al*, 2000).

A thematic analysis approach was used to analyze the data. Thematic analysis is the most commonly used approach to analyzing qualitative data (Bazeley, 2009; Braun & Clark, 2006). It involved identifying, analyzing and reporting patterns and themes drawn from the data, resulting in a rich, detailed account of the data (Braun & Clark, 2006). Thematic analysis as an approach is both non-prescriptive in terms of procedure and flexible, allowing data collection and analysis to occur alongside each other (Suter, 2012; Bradley *et al*, 2007). It also allows for an iterative process (repetitive cycle), in which the researcher may go back and forth in the data collection and analysis process to search for

patterns and relationships (Suter, 2012; Bradley *et al*, 2007). Writing is the last step in thematic analysis, culminating in a coherent explanation of the research findings embedded with an interpreted understanding of the data in relation to the concepts adopted (Braun & Clark, 2006).

1.7. Significance and limitations of the study

1.7.1. Significance

The challenge of poor performance is neither a new phenomenon nor one unique to South Africa (Wilson-Strydom, 2010). While there is some documented evidence on student experience (Breier, 2009; Breier *et al*, 2007; McMillan, 2005a) and high attrition and low graduation rates in the research institution and elsewhere in South Africa (CHE, 2010; Scott *et al*, 2007), little is known about the qualitative nature of the problem in relation to health sciences students.

This study thus contributes to the national debate and concerns about performance rates (Koen *et al*, 2012, 2012; Strydom *et al*, 2012; Wilson-Strydom, 2010; Breier, 2009; van Schalkwyk *et al*, 2009b; Breier *et al*, 2007; Scott *et al*, 2007; McMillan, 2007b, 2005a). In particular, it supports the call for institutions to understand the needs of the students they enrol and to explore how best the institution can support them in completing their studies successfully (Ramphele, 2013; CHE, 2010). The call has been for researchers to engage with the performance rates from a qualitative perspective in order to better understand the aspects that influence performance (CHE, 2010). Most of the current research on educational access, increasing participation and differential performance rates offers significant statistical insights (Badat, 2010; CHE, 2009; 2010; Scott, 2009; Scott *et al*, 2007). However, only limited research based on qualitative insights has been carried out on the lived experiences of students, in particular those from historically disadvantaged communities (Wilson-Strydom, 2010; Wilson-Strydom & Hay, 2010; Breier, 2009; McMillan, 2005a). Even fewer studies have examined the role of South African institutions in affecting a sense of integration of such students (Koen *et al*, 2012; Strydom *et al*, 2012; van Schalkwyk *et al*, 2009a; 2009b; McMillan, 2005a). The Council

for Higher Education (CHE, 2010: 6) confirms the need for in-depth studies in this domain, as indicated in the following statement:

[D]espite their limitations, measures such as graduation rates, calculations or cohort studies are useful indicators of the need to investigate more deeply and systematically the process of teaching and learning and how students' readiness, socio-economic factors, lecturers' pedagogical resources and the institutional environment combine to produce different academic results.

Apart from satisfying an inquiry as educator/researcher, the present study responds to this national call through the qualitative nature of its approach to understanding the aspects affecting performance rates.

Over recent years, increased attention has been paid in higher education to understanding the factors which influence performance with the aim of enhancing the quality of the educational experience for students (Koen *et al*, 2012; Strydom *et al*, 2012; Wilson-Strydom, 2010; Breier, 2009; van Schalkwyk *et al*, 2009b; Breier *et al*, 2007; McMillan, 2007b, 2005a). Working towards solutions aimed at increasing success also has particular relevance for students enrolled in the oral health program at the Faculty of Dentistry of the University of the Western Cape. This study will add to this growing body of literature on facilitating student success. Specifically, it will make a contribution from the perspectives of race/social class and the educational climate.

1.7.2. Limitations

This study examines a single cohort of oral health students at a particular phase in South Africa's continuum of transformation. The findings are therefore specific to this group of students. The study does not offer generalizations to other faculties or groups of students although it may have relevance in certain instances.

The degree to which a research method and its findings are applicable in other settings depends on the research situation – that is, how similar or different the original research setting is to that to which it is being transferred, and the relevance of the research findings to individual researchers and their research questions (Lincoln *et al*, 1985).

Sufficient information is furnished in the current study about the setting, the sample and the data (Mays & Pope, 1995) to serve as a guide to their applicability, generalizability and transferability. In this study, the research participants were drawn from a larger student body, while the research setting was located within the greater institutional context. The findings may relate to other year-groups of students in the oral health program or even to groups of students in other programs at this institution. However, the findings were not intended to be generally representative.

1.8. Overview of the study

The following section provides an overview of the structure and presentation of the remaining chapters of the thesis.

Chapter Two presents the literature that contributes to framing the three major aspects of the research: diversity, the educational climate, and clinical competence. It also offers the seminal concepts of *capital* (Bourdieu, 1986) and *integration* (Tinto, 1975) as lenses to examine how race/social locations and the educational climate shape students' experiences of higher education.

Chapter Three describes the research context. It introduces the University of the Western Cape in the context of the socio-political landscape of education in South Africa. Thereafter, attention is focused on the Faculty of Dentistry and the oral health program as the specific research contexts.

Chapter Four presents the methodology. This chapter presents the qualitative paradigm, together with its associated methodologies, as an appropriate approach to answering the research questions. It also presents the criteria for selecting the cohort, for collecting and managing the data, for data analysis and for data presentation. It explains the perspective of the researcher as a research insider, concluding with the principles adopted to ensure rigour and an ethically sound study.

Chapters Five, Six and Seven are the analysis chapters.

Chapter Five analyzes student performance and foregrounds the patterns relating to performance, race and social class locations. This chapter also offers insights into the backgrounds from which the students came and the kinds of resources to which they had access.

Chapter Six focuses on social integration and presents an explanation of the ways in which race/social class locations and the educational climate influence how students integrate into the social system of the institution. Attention is given to student experiences, firstly in terms of their engagement with the institution, staff and other students (social integration), and secondly in terms of their engagement with the profession (professional integration).

Chapter Seven explains how race/social class and the educational climate influence the academic integration of students. This chapter explains integration in terms of students' engagement and pedagogical experiences.

Chapter Eight concludes the thesis. It presents a restatement of the purpose of the study, followed by a reflection on the methodological approach used, and offers concluding statements about the salient findings and the significance of the findings. Recommendations are then provided for higher education professionals involved with institutional governance, academic support programs and teaching at the University of the Western Cape. The chapter ends with suggestions for future research.

1.9. Conclusion to Chapter One: introduction

This chapter served to introduce the study entitled, 'The influence of diversity and the educational climate in shaping clinical competence of oral health students'. It discussed the background to the research, the problem statement and the purpose of the study. A brief overview of the conceptual underpinnings and methodology was presented, followed by the significance, limitations and structure of the thesis.

Chapter Two follows and reviews the literature pertaining to the factors influencing student performance. The chapter also presents relevant terms and outlines the concepts that will be used as lenses to explain the different aspects influencing student performance.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1. Introduction

The theoretical framework in a study aims to set up a system of concepts, assumptions, expectations, beliefs and theory that supports or informs the research process (Maxwell, 2008). This chapter conceptualizes the three dominant themes of the research question: diversity, the educational climate, and clinical competence. It sets out to explain these and other concepts that served as lenses to understand and explore specific issues, that is, how diversity and the educational climate influence performance and hence clinical competence.

Diversity, the educational climate and clinical competence will be explicated in three sections. The first section explains the term *diversity*, with particular allusion to race and social class. Diversity forms the backdrop in this study as an expression of the different socio-economic contexts from which students come. *Capital* (Bourdieu & Passeron, 1977), which signals social class, is deployed to explain how students' race and class contexts shape their access to education and their preparedness for higher education.

The second section explicates the term *educational climate* in the context of higher education (Roff & Mc Aleer, 2001). In terms of the educational climate, reference will be made to the institutional structure, institutional culture and pedagogy that shape the educational experience of students (Roff, 2005; Roff & Mc Aleer, 2001). *Integration* (Tinto, 1975) is deployed as a concept to understand student engagement within the educational climate.

The third section provides a conceptual understanding of clinical *competence*, with particular reference to student clinical competences that form the core of professional practice for students in the oral health program.

2.2. Diversity in relation to race and social class

2.2.1. Introduction

The term *diversity* forms a backdrop in this study, locating students in terms of race and social class. Race and social class are seminal to understanding the kinds of contexts students come from and the kinds of access and opportunities they are afforded. Bourdieu and Passeron (1977) and Bourdieu (1986) offer a conceptual understanding of social class through their construct of *capital*, which conceptualizes differential access and opportunities symbolic of patterns of privilege and inequality. This study draws on two of Bourdieu's (1986) constructs of capital, economic capital and cultural capital, which will be explicated in detail later in the section.

In South Africa, as elsewhere, social class intersects with ethnicity. In this country, social class and race are nested concepts. In order to understand social class and capital in the South African context, it is imperative to understand the social structures that make up South African society. The following section begins by providing a synopsis of race ethnicity in the country. Race, as a concept, is necessary as a point of departure because it is within the context of race that social class and capital are nested in the South African context (McKinney & Soudien, 2010; Soudien, 1996). Attention is then drawn to social class and capital in the international context as a mechanism to understand social class in South Africa. Embedded in these discussions will be an explication of the ways that capital shapes access to and success in education. Lastly, attention is again drawn to the South African literature relating to social class, capital and access to education.

2.2.2. The South African social structure

The socio-political dispensation of apartheid, which prevailed for over fifty years (between 1948 and 1994) in South Africa, was characterized by oppression, inequality and segregation of the black population (black African, Indian and coloured). This dispensation was enforced by the white government and served as a way to control black people by limiting their access to resources (Bertelsmann Stiftung, 2012; Kalfani *et al*, 2005; Brown, 2000). In principle, apartheid ended in 1994. However, the social structure

in the country remains divided along *racial* lines, resulting in a system with four stratifications (McKinney & Soudien, 2010; Kalfani *et al*, 2005; van den Bergh, 1967).

The stratification of the four race groups or “colour-castes” was and still is based on ethnicity (for example, Indian or African) and phenotype characteristics (for example, black or white) (Brown, 2000:198)⁴. In the period between 1911 and 1991, the four race groups were classified as Europeans/whites, coloureds, native/Bantu/blacks and Asiatics (Brown, 2000; van den Bergh, 1967). The term black encompassed coloureds, black Africans and Indians, that is, those who were disenfranchised under the apartheid regime (Brown, 2000), whilst black African refers to the black ethnic group from Africa (Brown, 2000:199). In this research, the term black will be used to denote a united group of people of black African, coloured and Indian ethnicity who come from communities which were disadvantaged under the apartheid regime. Where emphasis will need to be made on a particular race group within the black category, the individual classification will be used, for example, black African or coloured.

Despite the institution of democracy in 1994, Statistics South Africa (StatsSA), which is the national service responsible for the country’s statistics, preserved the division into four race groups (white, coloured⁵, black African, and Indian/Asian (McKinney & Soudien, 2010:3). The primary explanation for this continuing practice is that race remains the most useful proxy for addressing the apartheid-embedded discrimination experienced by disadvantaged groups (McKinney & Soudien, 2010) – a strategy seen as a way in which the past inequalities could be remedied (McKinney & Soudien, 2010). Thus in the post-apartheid era, the race or ethnic classification, as it is sometimes referred to, continues to have currency – most frequently to signal affirmative action commitments or differential access to resources. The labels most frequently used in this context are white, coloured, black African and Indian/Asian (Kalfani *et al*, 2005; Brown, 2000).

⁴ Race groups in South Africa are not biologically founded. The term *race* is used in the current study purely as a tool to denote differential access to resources.

⁵ The term *coloured* in South Africa refers to people of mixed origin and includes children as well as descendants from black-white, black-Asian, white-Asian, and black-coloured unions. Sunni Arab and European Muslims are also included in the coloured group (Brown, 2000).

Although among and between the four race groups there are further differences such as ethnicity and language, these are not used to classify race groups or social class. In South Africa there are eleven official languages (nine of which were spoken by black Africans). Multiple challenges are experienced at schools and higher education institutions whose medium of instruction is English. For the majority of the country's population for whom English is not a first language (it is rated as the sixth most common home language), it presents challenges to particularly black African citizens who make up 79% of the population and whose first language is other than English (StatsSA, 2001). Likewise Afrikaans is the third highest language spoken and language differences also presents challenges for those whose first language is not English. Amongst each language there are differences in vernacular or dialect that also exists. These language differences have the potential to create feelings of *exclusion* or *alienation* as will be discussed later in the thesis.

In the current social landscape, the essence of the social differences that make up South African society is still significantly associated with race (Bertelsmann Stiftung, 2010; McKinney & Soudien, 2010; Soudien, 1996). This relationship, as a basis on which to structure society, is explained in the following section. This section will highlight how the legacy of race divisions set the groups apart, not only along the lines of colour but also in terms of access to material wealth and opportunities.

2.2.3. Race and social class as a nested concept in South Africa

In the South African context, the race and social inequalities which originated from the apartheid era have influenced the diverse nature of the social structure that exists today (Bertelsmann Stiftung, 2012; 2010; McKinney & Soudien, 2010). Having inherited a racially fragmented social system from the apartheid era, South Africa remains characterized by significant inequality in all social aspects (Bertelsmann Stiftung, 2012; 2010; Beukes, 2002; Higgs, 2002). Although the goal of the newly elected government was to establish a society based on democracy (equal rights), social justice (fairness) and human rights (basic rights and privileges for all), the apartheid era engraved inequalities

to the extent that social acceptance and reconciliation may still be decades away (Bertelsmann Stiftung, 2010; Moja & Hayward, 2005).

In terms of global indicators, the Gini coefficient⁶ indicates that South Africa currently has the highest rate of inequality in the world (Bertelsmann Stiftung, 2012; Beukes, 2002; Higgs, 2002). Jansen (2004a; 2004b) argues that a major reason for South Africa remaining one of the most unequal societies is that its inequalities are still embedded along the lines of race. The people who were marginalized during apartheid continue to lead marginalized lives under a democratic government. This disparity is evident in the continuing socio-economic problems that plague South African society (APRM, 2007; Moja & Hayward, 2005). The 2007 Country Report of the African Peer Review Mechanism indicated that, despite the great progress the country made after the elections in 1994, “South Africa remains a country of imbalances, disparities and distortions with a number of inconsistencies” (ARPM, 2007:4). The most prominent of these social injustices of the post-apartheid era are highlighted as the persistence of large-scale poverty, high levels of inequality, high crime rates, and a dualistic economic and social structure (ARPM, 2007).

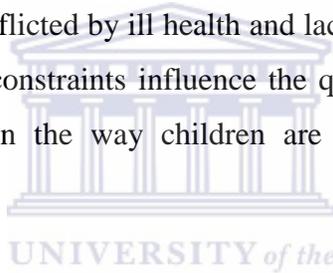


It has been widely reported that, of the many social injustices, the worst is injustice suffered by the previously disadvantaged populations through continued inequality of incomes (Bertelsmann Stiftung, 2010; Jack, 2010). This disadvantage is reflected in the higher standard of living for most white people, as compared to that of the black groups (Bertelsmann Stiftung, 2010). The recent emergence of a black middle-class has resulted in changes in the social cleavages, although this is not perceived as such among many South Africans (Bertelsmann Stiftung, 2010). This perception may be due to the fact that at least 50% of South Africans are still considered to be poor, living below the poverty line on less than R15 a day (Bertelsmann Stiftung, 2012; 2010). In addition, more than 35% of the economically viable population, the majority of who are black South Africans, remain unemployed (Bertelsmann Stiftung, 2012; 2010). It has been estimated

⁶ The Gini coefficient is the standard measurement of inequality (Bertelsmann Stiftung, 2010).

that around 56% of black people are poor, compared to about 36% of coloured people, 15% percent of Indian people and 7% of white people (Biyase, 2012).

Although political democracy was achieved in 1994, it operates under “severe socio-economic stress” (APRM, 2007:51). Income inequalities in the different race groups, especially in the black population group, increased markedly between 1995 and 2000 (Bertelsmann Stiftung, 2012). According to the Gini coefficient on income earnings, the country’s social structure has two distinct categories of households, low socio-economic and high socio-economic groups (Higgs, 2002). These terms are frequently used to refer to an individual’s access to wealth and resources, including quality of neighbourhood, parental occupation and educational levels (Khwesa, 2009). Socio-economic status is also directly linked to health status and access to resources. This association is evident among the poor, who continue to be afflicted by ill health and lack of education (Khwesa, 2009). In addition, severe economic constraints influence the quality and quantity of social or parental support, impacting on the way children are raised and orientated towards education (Khwesa, 2009).



In order to reduce these inequalities between the different population groups, the African National Congress (ANC) government relocated budgets and increased spending on social matters by investing more in education and basic services such as housing, water, sanitation, electricity and the health system (Bertelsmann Stiftung, 2010). However, reports indicate that ANC government officials have not fulfilled their objectives, neglecting to deliver on housing, employment and appropriate health care (Jack, 2010; APRM; 2007; Bond, 2004). This failure has resulted in the perpetuation of the challenging economic circumstances experienced by at least 50% of the population (Bertelsmann Stiftung, 2010). This situation translates into a more prominent social class categorization because of the vast differences in access to wealth and material resources between the different race groups (McKinney & Soudien, 2010). While not contesting the significant role of race in the socialization of the population, McKinney and Soudien (2010), Bond (2004) and Soudien (1996) argue that apartheid based on race has been

replaced with class apartheid, since the historically embedded race inequalities still affect the previously disadvantaged and oppressed majority, the black Africans.

McKinney and Soudien (2010:3), however, caution that race as a category continues to stigmatize people in a “hierarchical” way. With the emphasis being placed on the current inequality challenges, race and social class seem to be moving in parallel. Bond (2004) posits that inequality continues to worsen – this is illustrated by the poorest half of the population earning less in the year 2000 than in 1995 (Bond, 2004). This figure is in comparison to the richest 20%, who earned 65% of the country’s earnings in 2000 (Bond, 2004). It is arguable that the legacy of apartheid has left South Africa not only polarized along the lines of skin colour but that these racial cleavages overlap with social divisions, widening the polarization in a visible way (Bond, 2004). Thus while social stratification in South Africa continues to be based on race (CHE, 2010; Soudien, 1996; van den Berghe, 1967), there is an increasing tendency in social analysis to use *social class* as a proxy for race (CHE, 2010; McKinney & Soudien, 2010). The following section highlights the social class structure in South Africa.

2.2.4. Social class categories in South Africa

This section highlights the concept of social class nomenclature in the South African context. Social class in this country is not commonly categorized according to a social hierarchy. Nor has there been any theoretically informed analysis of social stratification in post-apartheid South Africa (Seekings, 2003). This situation is not only because of the dominance of race as an explanatory framework, but also because social class disparities with regard to access to resources are seldom recognized as such. The most common form of reference to social structuring thus remains the four race groups (Bertelsmann Stiftung, 2010; McKinney & Soudien, 2010; Soudien, 1996). However, the Gini coefficient measurement depicts two distinct categories, those of *high socio-economic* and *low socio-economic* (Higgs, 2002). These categories are in addition to a more prominent social class for which arguments are being offered (Bond, 2004; Seekings, 2003). Although social class structuring remains in its infancy, attempts at providing nomenclature for social class have been proposed based on the occupational ranking of

employed household members (Seekings, 2003). This categorization is similar to that used in the United Kingdom (Archer *et al*, 2003) where social class is categorized by the type of employment and the earnings of the individual. This approach to social class labelling draws on a Marxist perspective and makes use of capitalistic characteristics such as earnings, power and access to resources.

Seekings (2003) proposes a social class nomenclature for South Africa for the post-apartheid era. However, he asserts that classifying society in South African remains a challenge for reasons highlighted in the following statement:

South Africa is an overwhelmingly employment and wage-dependent society, with negligible household agricultural production and a small entrepreneurial and informal sector. But it is also a society beset by very high unemployment. Households in the richer half of the population have members with jobs; very many households in the poorer half of the population do not. Thus a majority of 'core working-class' households are actually in the richer half of the population. The poorer half of the population comprises households dependent on very low-paid workers – mostly farmworkers and domestic workers – or on remittances or pensions (Seekings, 2003:53).

Seekings (2003) thus identifies five definitive classes, which include the following categories: *upper class*, made up of managers and professionals; *semi-professional class*, comprising of teachers and nurses; *intermediate class*, comprising routine white-collar, skilled and supervisory workers; *core working-class*, who are semi-skilled and unskilled workers (except farm and domestic workers); and *marginal working-class*, such as farm- and domestic workers. Seekings (2003) explains that parent educational status and social class locations thus share an intimate relationship in which social class reproduction is favoured. Seekings (2003:47) further contends that:

Given the importance of education in determining earnings, children from marginal working-class backgrounds are much more likely to end up in marginal working-class occupations, and children from upper class backgrounds are much more likely to end up in upper class occupations.

In this way, Seekings (2003) argues, social class and social class inequality are reproduced over time.

For the purpose of this research, the terms *middle-class* and *working-class* are used. The first two categories (upper and semi-professional) were collapsed into the more commonly understood 'middle-class', so as to signal income earnings, access to resources and opportunities, family familiarity with university and consequent accrual of insider knowledge (McMillan, 2013). The remaining three categories were collapsed into 'working-class', with its associated lack of access to financial and material resources, and lack of family knowledge of university (McMillan, 2013; Reay, 2012; 2006; Reay *et al*, 2005). Thus, based on the Gini coefficient measurement which categorizes society into high socio-economic and low socio-economic (Higgs, 2002), the terms *high socio-economic* and *low socio-economic* will be used in association with middle-class and working-class when describing students' backgrounds.

The preceding discussion portrayed social class in South Africa as a nested concept within race (McKinney & Soudien, 2010; Seekings, 2003; Soudien, 1996). It also presented the concepts related to social class structuring (Seekings, 2003) and argued for the use of the concepts of middle-class and working-class to describe the cohort in the study. The following discussion outlines international perspectives on social class, offering an insight into how social class is influenced by the role of the parents and the education system. It will explain how social class locations, in conjunction with *capital*, shape students' preparation for and access to higher education. This insight will frame a partial understanding of what social class may mean in the South African educational context in the absence of a definitive theoretical model in which race is implicated.

2.2.5. Understanding social class: an international perspective

Social class is a concept in sociology used predominantly to describe a hierarchical social stratification based on occupational status, material wealth, income and access to resources through which life chances are shaped (Wright 2003). Archer *et al* (2003) note that structural inequalities based on race and class are historically embedded, are

politically and socially constructed, and are differently enacted across time and contexts for different individuals. Historically, in the United Kingdom and Western Europe, social class was documented mainly in terms of educational research and sociological theories of class reproduction (Archer *et al*, 2003). It has also been understood to be reconstituted and reinforced largely through the education sector (Archer *et al*, 2003).

Social class can be defined as groupings of people who share common socio-economic positions, characteristics, and particular kinds of access, setting them apart from other groups of people (Archer *et al*, 2003). These characteristics and particular kinds of access are what constitute *capital* (Archer *et al*, 2003; Bourdieu, 1986). Drawing on Bourdieu's construct of capital (Bourdieu, 1986; Bourdieu & Passeron, 1977), economic and cultural capital are presented as concepts mobilized to explain how social class creates patterns both of privilege and disadvantage in terms of access to education.

Economic capital refers to wealth which is attained through accumulated labour (earnings) or acquisitions from family heritage that are easily converted into money (for example land) (Bourdieu, 1986; Bourdieu & Passeron, 1977). This accumulated wealth allows access to and acquisition of a range of material resources and opportunities, such as good quality education. *Cultural capital* refers to educational attainment, dispositions, cultures and behaviours that are transmitted through family or social systems (Bourdieu, 1986). In addition, Reay *et al* (2005) explain that cultural capital is present in students in terms of their dress, demeanour and attitudes, and in particular, their attitudes towards learning and their degree of confidence in relation to academic knowledge. Whilst the roles of the family and the family milieu are considered as important aspects that shape both economic and cultural capital accumulation in students, the role of the school is also regarded as significant in contributing to cultural capital (Bourdieu, 1986).

Capital has been frequently applied in educational theory to explore differential performance in relation to social class (Lam, 2011; Moss, 2005; Archer *et al*, 2003; Reay, 1998; Bourdieu, 1986). The construct of capital in this study allows students to be assessed in terms of the capital which they accrue through their social class locations and

which facilitates their preparation for, entry into, and success in higher education. This relationship between social class and capital is explained in relation to educational access in the next section, first by explicating social class stratification and then by describing how different social classes shape access to educational opportunities. The following insights on social class are based on empirical literature and offer a conceptualized understanding of both social class advantage and disadvantage through Bourdieu's (1986) and Bourdieu and Passeron's (1977) construct of capital.

2.2.5.1. Social class stratification and access to capital

Traditionally, social class stratification was determined by the type of work and occupation a person did, translating into categories such as working-class, middle-class and upper class (Anyon, 1980). In a social class system, earnings (economic capital) and parents' occupational status and education levels (cultural capital) are commonly used as proxies in determining social class locations (Reay, 2006; Archer *et al*, 2003; Anyon, 1980). According to Bourdieu's (1986) theory of cultural reproduction, social classes are differentiated from one another in terms of the overall volume of capital that are accrued by individuals or families. His theory also surmises that, depending on the social class location and the economic and cultural capital accumulated by the family, different patterns of privilege and inequality are created for their children (Bourdieu, 1986).

An example of how occupational status and educational levels create patterns of privilege or disadvantage is shown in the contrast between two of the most commonly quoted social classes, the middle-class and the working-class. The middle-class comprises professionals such as medical doctors, politicians, accountants, managers or those who own businesses or land (Anyon, 1980). Middle-class citizens are situated in highly skilled and well-paid positions which bring economic capital into the family (Reay, 2006; Anyon, 1980). Working-class people, on the other hand, perform manual work. Parents are either unskilled or semi-skilled, holding jobs such as those of construction workers, auto mechanics, security guards, sales clerks, tradesmen, and labourers; this class traditionally also includes the unemployed (Anyon, 1980). These occupations earn low

incomes and do not generate the same economic capital as do those occupied by middle-class citizens (Anyon, 1980).

For both middle-class and working-class citizens, occupational status and educational levels are reached by taking advantage of the opportunities afforded to them through the social class contexts of their parents/families. In a similar way, opportunities are passed on to their own children (Anyon, 1980). Given their occupational status, earnings and educational levels, parents are therefore pivotal in shaping the life chances of their children through the amount of economic and cultural capital they are able to transfer to them (Reay, 2012; Archer *et al*, 2003; Bourdieu, 1986; Bourdieu & Passeron, 1977). The following section explains how working-class and middle-class parents, through the economic and cultural capital available to them, contribute to shaping their children's educational trajectories.

2.2.5.2. The role of the family in shaping educational trajectories for their children

Economic and cultural capital frequently act in concert, either to facilitate privilege or, when they are absent, to perpetuate disadvantages in terms of educational opportunities (Reay, 2012; Reay *et al*, 2005; Archer *et al*, 2003; and Anyon, 1996). Cultural capital is transmitted to children when parents pass their social class status and economic opportunities on to them (Finnie *et al*, 2010). Accumulation of cultural capital and the child's consequent access to academic opportunities thus depends on the amount of economic and cultural capital transmitted through the family (Bourdieu & Boltanski, 1978; Bourdieu & Passeron, 1977). Basically, the higher the social status and earnings of the family, the greater is the academic rewards for their children because of the kinds of opportunities afforded (Bourdieu & Passeron, 1977).

Middle-class families have a number of key possessions which facilitate their access to educational privileges. Middle-class parents, through inheritance of wealth or through their educational qualifications, have greater access to economic capital. They make use of their capital to gain access to the kind of quality education that will prepare their children for university (Reay, 2012; Reay *et al*, 2005). Middle-class children thus enjoy

the kind of schooling that is well resourced, with libraries, science and computer laboratories, well-qualified teachers and small classes (SAIRR, 2011). Access to such educational resources enhances the quality of their learning experience, which ultimately contributes to their preparation for higher education trajectories (Reay, 2012).

Middle-class family members with a history of exposure to previous educational qualifications are recognized as being a major source of cultural capital for their children (Reay *et al*, 2005). Middle-class parents, through their own educational experiences, play an important role in imparting cultural capital directly to their children, for example when engaging with their children's school experiences (Reay, 2006). The literature suggests that parental engagement increases with social status, income and parents' own level of education (Harris & Goodall, 2007). Middle-class parents are thus equipped to support, instruct and encourage their children's educational endeavours (Espinoza, 2012). They also contribute to their children's school experience by engaging in activities such as attending parent-teacher meetings to monitor their child's progress, attending school programs which involve their child's participation, and by engaging in volunteer activities at the school (Lee & Bowen, 2006). Parental involvement at home may include helping with their child's homework, structuring home educational activities, or discussing schoolwork or their child's experiences at school (Lee & Bowen, 2006). Parental involvement and engagement in children's educational performance has been shown to have significant influence in both the school experience of their children (Harris & Goodall, 2007; Reay, 2006) and in shaping their access to higher education (Reay *et al*, 2005; Archer *et al*, 2003).

Middle-class parents are also argued to have high educational expectations of their children (Reay *et al*, 2005). These expectations are linked to the norms and values placed on education within the family. For middle-class families, educational trajectories are an important aspect of their life, and their children are raised to understand that higher education is a natural progression from school (Espinoza, 2012; Reay, 2012; Reay *et al*, 2009; Lee & Bowen, 2006; Reay *et al*, 2005; Ball *et al*, 1999). In middle-class families, a child's choice of career is determined early in the decision-making process and is

facilitated through the support received from parents or siblings who have experience of or knowledge about higher education (Reay *et al.*, 2005). Thus for middle-class children, entry into university is facilitated by clear, thought-out goals and realistic expectations (Reay *et al.*, 2005).

Working-class parents, on the other hand, because of their low-status occupations, have limited access to economic capital. As a result they cannot afford the same educational privileges for their children as middle-class parents (Espinoza, 2010). Although working-class parents are supportive of their children's educational advancement, they are often unable to guide them in the way that middle-class parents do because they lack the necessary cultural capital (Espinoza, 2012). As a consequence of less access to economic and cultural capital, working-class children are disadvantaged in a number of ways. They often attend schools in poor areas, and these schools are generally under-resourced and regarded as performing poorly (Perry & Francis, 2010). Apart from the lack of access to quality education, working-class parents have limited information, experience or the networks needed to help their children with educational issues (Norris, 2011). They also tend to work long hours, travel long distances to their places of employment and have labour-intensive occupations which leave them less time to spend with their children or to engage in school matters.

As a result, working-class children receive less parental support in their schoolwork, since their parents do not have the educational skills to help them (Harris & Goodall, 2007; Reay, 2006). Working-class parents are also shown to be less active in their children's school activities. They participate less in parent-teacher consultation evenings and parents' meetings (Lupton, 2004), exert less clout in school affairs, rarely contribute to the resources of the school (Lupton, 2004), tend to condone their children's intermittent absences from school, assist little with homework, and have minimal collaboration with the school over homework and discipline (Lupton, 2004).

Through attending poorly-resourced, low-quality schools, working-class children thus receive less investment in their educational development, apart from the educational

support that their families can afford to provide (Espinoza, 2012). Both the parents and their children are dependent on society and on the schools to invest in them in areas where the family itself is unable to do so (Espinoza, 2012). A result of this dependence is that working-class families see educational support to be the role of the school (Espinoza, 2012; Harris & Goodall, 2007). Perry and Francis (2010) explain that, aside from the social support and material elements that these families cannot provide, working-class children experience a further disadvantage in that they appear to lack educational aspiration.

In most working-class families, the lack of cultural capital stems from the lack of educational attainment in the parents. In the home, low value and little emphasis are placed on education (Reay *et al*, 2009; Lupton, 2004). This low value and emphasis may also stem from the perception in the family that the attainment of a degree is not valuable in the economic development of a working-class student (Archer *et al*, 2001). This perception is often carried by the working-class student into the higher education context, leading to lower educational aspirations coupled with issues of adjustment (Archer *et al*, 2003). For working-class students, the lack of cultural capital, as summed up by Archer *et al* (2003), is reflected in a lack of knowledge about university, in issues of persistence and in failing to understand the value of the attainment of a degree. Some students may perceive university education as neither useful nor relevant for them and an opportunity only for the “rich...white, middle-class men” (Archer *et al*, 2001:436) and “not for the likes of us” (Reay *et al*, 2005: 17). Espinoza (2012) asserts that for working-class families, success is often defined as securing a full-time job after their children’s schooling is complete and not on the attainment of a degree. Hence the low emphasis placed on educational achievement amongst this group.

Apart from the influence of families in shaping educational trajectories for their children, the education system also plays a central role in this process. The following section turns attention to the role of the school in shaping interest and in preparing children for higher education trajectories.

2.2.5.3. The role of the education system in shaping educational trajectories

The education system plays a vital role in the entry of students into higher education (Reay, 2012; 2006; Bourdieu, 1986; Anyon, 1980). It also plays a role in structuring society through the way in which it appears to direct children into class-based occupations and hence into specific social class locations. This reciprocal process is referred to as *social class reproduction* (Archer *et al*, 2003, Bourdieu, 1986). Archer *et al* (2003:5) explain that structuring in society is influenced by the education system in ways which ensure the “reproduction of (middle-class) privileges or (working-class) disadvantages”. Although the State is recognized as instrumental in channelling people into social class locations, it is through the education system that it is strategically routed (Archer *et al*, 2003; Anyon, 1980). Education is perceived as an apparatus to control social class movement, through what Archer *et al* (2003) allude to as “differential channelling of working-class and middle-class children” (Archer *et al*, 2003:7).

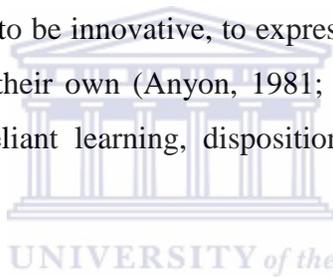
Access to higher education is thus operationalized through the schooling system and is perceived as an important mechanism through which life-chances are distributed (Archer *et al*, 2003; Anyon, 1980). Depending on the social status of the school, learners are exposed to different qualities of schooling, reflected in the kinds of access they have to educational resources, quality teaching methods, teacher engagement and careers counselling, all of which differentially prepare them for higher education opportunities (Perry & Francis, 2010; Reay, 2006; Archer *et al*, 2003; Bourdieu, 1986). The following discussion explains how schools contribute to shaping educational trajectories in terms of access to resources, engagement in class and careers counselling, and how as a consequence they appear to channel children to occupy particular rungs of the social ladder.

2.2.5.4. Access to resources, quality teaching and classroom engagement

As highlighted earlier, middle-class privileges include access to good quality schools. For the middle-classes, quality schooling is characterized by quality teaching. Such teaching enhances learning opportunities, educational experiences and levels of readiness for higher education trajectories (Lee & Bowen, 2006; Anyon, 1980). Conley (2007)

describes a student as being ready for higher education when he or she has in place well-developed writing skills, research capabilities and thinking skills. In addition, students entering higher education are expected to engage actively in small groups, to work on complex problems with peers, and to make presentations of their work (Conley, 2007).

As indicated earlier, a range of educational resources are offered in the schools attended by middle-class children. These schools also offer extra-mural activities (such as debating and speech and drama) which foster interpersonal competence and raise educational expectations (Mahoney *et al*, 2003). Liberal access to educational resources (such as computers) and small classes also make individualized teaching and learning possible, offering learning contexts in which deeper learning is developed and fostered (Perry & Francis, 2010). Middle-class schools tend to adopt a range of teaching methods that encourage children to explore, to be innovative, to express and apply ideas and concepts, and to access information on their own (Anyon, 1981; 1980). These ways of teaching foster independent and self-reliant learning, dispositions which are valued in higher education (Conley, 2007).



This kind of schooling thus prepares middle-class children in practical ways for the expectations and requirements of university. In doing so, it also transmits additional cultural capital for the learners, reinforcing the privileged cultural capital from home (Finnie *et al*, 2010). For such children, particular dispositions towards studying are inculcated and rewarded at school (Reay, 2006). Goal-setting, independence, a strong work ethic, and the assumption of a natural progression from school to university are among the dispositions supported by middle-class parents and by middle-class schools and required by universities (Reay *et al*, 2005; Ball *et al*, 1999; Warren, 1998).

Working-class children, on the other hand, benefit less in terms of the cultural capital offered through their educational experience because they attend schools that are poorer. In most working-class schools, a lack of resources is a major barrier to the success of their learners (Perry & Francis, 2010; Lupton, 2004). Lupton (2004) explains that in such schools there is limited access to resources such as adequate, well-equipped classrooms

or to extra-mural opportunities. In addition, these schools generally do not engage in educational trips or enriching activities which involve payment from parents, since the parents cannot afford to contribute financially (Lupton, 2004). In these instances, as Lupton (2004) explains, activities have to be planned in advance so that parents have time to save. Giving the child homework also poses a challenge in these schools, because few learners have access to learning resources such as reference books and computers at home (Lupton, 2004). Basic resources are also a concern, as learners cannot always afford the pre-requisite equipment, such as pens or rulers (Lupton, 2004).

Working-class schools also have teachers who tend to be less qualified, have lower expectations of the learners, and appear to teach the curriculum in less depth (Kahlenberg, 2001). In an early study, Anyon (1980) illustrated how working-class schools placed less emphasis on educational development in the way they taught their learners. Such schools were reported as largely mechanical in their approach. Teaching involved rote work, with little explanation or connection to larger contexts. Most of the teaching formats only allowed for copying the teacher's notes from the board, which was the primary source of information. Few learning opportunities required creative thinking or insights from other sources, for example textbooks or the learners' own thoughts (Anyon, 1980). In these ways, the quality of the educational experience and the educational emphasis was diminished, and the children were left under-prepared for higher education (Lupton, 2004; Darling-Hammond & Post, 2000; Warren, 1998; Anyon, 1980).

The way teachers engage with learners is also significant in terms of the inequalities which can result when one form of cultural capital is valued and rewarded over others (Reay, 2012; Archer *et al*, 2003; Grenfell *et al*, 1998; Bourdieu & Passeron, 1977). Reay (2006) in her study, *The Zombies stalking English schools*, provides empirical insights into social class inequalities in contemporary school classrooms in terms of the level of engagement that occurs with working-class children in a middle-class school. Reay (2006) argues that teachers are responsible for shaping the educational experiences of children and play a central role in their learners' successes or failures. She believes that

middle-class children are favoured and are given “preferential treatment” in the classroom because of their apparent intelligence (Reay, 2006: 298). Working-class children, on the other hand, are apparently ignored in the classroom because they are perceived as having lower levels of intelligence and are therefore marginalized and excluded from positive learning experiences (Reay, 2006). Reay noted that middle-class school children were given twice as much positive feedback, as compared to working-class children, and that working-class children received inferior support and stimulation in comparison with middle-class children (Reay, 2006).

A study by Calarco (2011) showed how children drew on their class-based dispositions to guide their classroom interaction. Her study indicated that working-class children seldom sought help but often avoided help in situations where their middle-class peers readily did so. She emphasized that middle-class help-seeking styles were also more effective. While working-class students showed concern about making requests for help, middle-class children expressed little hesitance about seeking help, expecting teachers to be responsive to them (Calarco, 2011). She also highlighted how middle-class children made strategic efforts to get the teacher’s immediate attention and that their help-seeking tendencies and strategies became a form of cultural capital that yielded them social and educational profits in the classroom (Calarco, 2011).

Another study indicates that, even in classrooms without middle-class learners, working-class children are not motivated by teachers, nor are they encouraged to excel and reach their highest potential (Archer *et al*, 2003). Reay (2006) argues that when working-class children are left unengaged or ignored, the classroom can become “alienating, disaffectionate and disengaging” and have a negative impact on learner development (Reay, 2006: 302). Negative experiences of learners are posited to lead to a decreased interest in school education, which in turn can lead later to under-preparedness for, or a devaluation of higher education (Reay, 2006). The lack of motivation in shaping educational interest in some children is also evident in the way schools place emphasis on careers guidance. This role of the school in this regard is explained next.

2.2.5.5. Access to career guidance

The vast differences between social groups are reflected in the way that schools embed information about career choices or access to different higher education institutions (Mann, 2008; Reay *et al*, 2005; Archer *et al*, 2003; Anyon, 1980). Middle-class schools place a strong emphasis on post-school education (Reay *et al*, 2005). They encourage children to attend university by engaging them in career counseling (Reay *et al*, 2005). They also involve the parents in career information and university application sessions, so that informed career decisions can be made (Reay *et al*, 2005; Archer *et al*, 2003). Middle-class students are thus more likely to enter university prepared with a foresight of what to expect since they are usually better informed about their career choices.

This understanding of university education is in contrast to the working-class perspective, in which higher education is seen as an alien and unfamiliar choice (Reay *et al*, 2005). The lack of career guidance for working-class students is partly responsible for their low participation and high drop-out rates in higher education. Archer *et al* (2003) argue that the low participation rate for such students stems from the fact that working-class schools frequently do not place emphasis on higher education. Working-class children generally receive less information about their choices and opportunities beyond schooling. As a result, they are unable to make appropriate and informed choices about accessing higher education. This deficiency in career preparation may also contribute to working-class students making career choices at the higher education level which may be wrong for them, leading to lack of engagement, disorientation and eventually to dropping out of higher education (Archer *et al*, 2003).

2.2.5.6. Summary of social class and access to education: an international perspective

It is arguable that, for middle-class students, university attendance is experienced as a natural trajectory and they therefore experience the system differently from working-class students. Middle-class children are prepared both through the family and the school – through disbursement and the accrual of economic and cultural capital – for the expectations of and dispositions rewarded at university. As a consequence, they are better prepared to take up the opportunities offered at university, and are implicitly able to

convert their cultural and economic capital into academic success. Reay *et al* (2009) argue that middle-class children simply fit in. As Bourdieu and Wacquant (1992) describe them, these students are like a “fish in water: it does not feel the weight of the water and it takes the world about itself for granted” (Bourdieu & Wacquant, 1992: 127).

For working-class students, their lack of access to economic and cultural capital from parents and the school works to their disadvantage. Their pursuit of higher education is often clouded by doubt about going to university, about the benefits or the risks associated with their entry into university and about their fitting in with middle-class students (Reay *et al*, 2009; 2001; Archer *et al*, 2003). In the event of working-class students gaining access to higher education, their low levels of academic preparation and lack of educational emphasis often result in an increased risk of further educational challenges (Wilson-Strydom, 2010; McMillan, 2005a; Archer *et al*, 2003). Since universities design their programs around their own set of standards – which are implicitly middle-class, working-class students are required to work within the given framework, having either to fit in or to opt out (Reay *et al*, 2009; Archer *et al*, 2003).

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Social class locations and capital accrued through parents and schools have been shown as pivotal in shaping educational access, and in doing so influencing social class reproduction (Archer *et al*, 2003). The foregoing discussions allow for an international conceptualization of the relationship between social class, capital and educational access. Given this relationship in an international context, and accepting the relationship between race and social class in the South African context, it is arguable that race and social class in this country shape access in similar ways. The following discussion turns attention to the South African context in which social class is portrayed as a nested concept within race. The discussion examines how the consequences of race and social class inequalities influence access to education. Understanding this aspect is crucial to appreciating how *capital* influences both preparation and performance in university.

2.2.6. Race, social class and education in South Africa

The impact of race, apartheid and social class on South African society was documented earlier in this chapter (Jack 2010; APRM 2007; Bond 2004; Soudien, 1996). One of the greatest impacts of these divisions in society is reflected in the education sector (Moja & Hayward, 2005; Seekings, 2003). Studies indicate that even more than race, social class is implicated in educational achievement for children from school level through to post-schooling (McKinney & Soudien, 2010; Scott *et al*, 2007; Seekings, 2003). These studies indicate that the educational achievement is skewed towards middle-class children who advance faster and attain higher qualifications than working-class children.

Nengwekhulu (2011:36) argues that race and classed locations are a “double exploitation” on society. He signals a context of multiple challenges across the education sector, not only in terms of access but also in the way that students are differentially prepared for higher education. Embedded in this argument is a reflection of how this context both perpetuates the reproduction of a segregated society and creates patterns of advantage or disadvantage. Hence, the literature on educational sociology, which was drawn on for this thesis, firstly positions race and social class as mechanisms for career channelling and, secondly, positions education as a mechanism which reconstitutes and reinforces social class stratification in multiple ways.

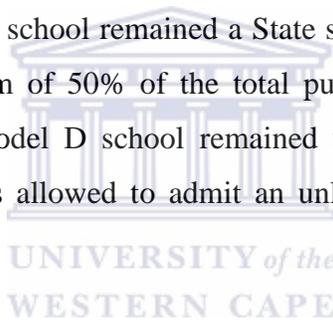
The next section will explain how social class plays out in education in South Africa by discussing how race and social class influence educational access. The discussion is presented first in an apartheid and then a post-apartheid context. This approach is necessary to building an understanding of how race and social class locations shape student access to schooling and hence their opportunities for higher education.

2.2.6.1. Access to education in the apartheid era

Access to education in South Africa is influenced by many factors, the majority of which are associated with the legacy of apartheid. Although the role of the parents in shaping educational trajectories for their child is understood from earlier international citations as being seminal to educational access (Demie & Lewis, 2010; Reay, 2006; Reay *et al*,

2005; Archer *et al*, 2003; Redding, 2000), little South African literature captures how this influence operates. Thus the literature outlined in the following discussion largely explicates the role of the South African education system in shaping access. It draws on the fact that South African families are inflicted with a legacy of apartheid, race and social inequality that affects families and their capacity to develop an educational interest in their children.

During the apartheid era, the education system comprised separate systems⁷ for the four race groups. The educational dispensation operated on the principle of segregation, reinforced through the inequitable distribution of resources, funds and opportunities (Bertelsmann Stiftung, 2012). By 1991, schools were offered a choice between four models of how they would be managed (SAIRR, 2011). In Model A, the schools became fully private. For Model B, the school remained a State school but was allowed to admit black pupils up to a maximum of 50% of the total pupil body. In Model C, schools became semi-privatised. A Model D school remained under the control of the white education department, but was allowed to admit an unlimited number of black pupils (SAIRR, 2011).



Ninety-six percent of former white schools opted for the ‘Model C’ option (SAIRR, 2011). These whites-only schools thus became public schools, but with a high degree of autonomy which allowed their governing bodies to preserve the essential nature of the schools. They received a State subsidy, but it was incumbent on them to raise the balance of funds through the school fee structure and donations (SAIRR, 2011). While all public schools were mandated to enrol learners from other race groups, Model C schools were also allowed to admit students from the other race groups as decided by the governing body (SAIRR, 2011).

⁷ The separate education systems for the four race groups were as follows: schools designated for whites were managed by the House of Assembly; those designated for Indians were managed by the House of Delegates; schools for coloureds were managed by the House of Representatives, while those for black Africans remained under the control of the Department of Education and Training (Fiske & Ladd, 2005).

Model C schools continued until 1999, after which they were abolished following a government initiative to create public (State-subsidized) or private schools (Carrim & Soudien, 1999). Although the term Model C is no longer officially used by the Department of Basic Education, it is widely used as *ex-Model C*, referring to former whites-only schools (Carrim & Soudien, 1999). These schools continue to experience greater advantages because of access to extra funds, for example through the higher school fee structure to which parents contribute (SAIRR, 2011; van Schalkwyk *et al*, 2009b). They have liberal access to resources and are better managed, with small class sizes, higher qualified teachers, a variety of extra-mural activities such as sports, and a range of cultural and educational opportunities (SAIRR, 2011). The standard of education is also high and pass rates exceed those of the overall country (SAIRR, 2011; van Schalkwyk *et al*, 2009b).

Historically, however, the greatest educational discrimination was against black children who were disadvantaged through the poorly-resourced schools they attended (Hendricks, 2008; Norris, 2001). Apart from the lack of resources, the environmental conditions under which most schools in black townships operated were not conducive to studying (Hendricks, 2008). During apartheid and into the new era of democratization, schools for the black population were often plagued by disruptions through boycotts and vandalism – these disruptions were a response by black learners and teachers to the years of political and social injustices against the black population (Pattillo, 2012). It is arguable that it was challenges such as these which contributed to shaping the way education was culturally accepted and valued in black communities. Literature suggests that disordered and disruptive schooling often led to a lack of respect for or interest in education and a failure to give it priority (Pattillo; 2012; Soudien, 1996). These experiences appear to continue impacting on the movement of learners into secondary or tertiary educational institutions (Pattillo, 2012).

Access to education was also influenced by restrictions on curricula. The directive on black schools to deliver “Bantu education” was imposed by the apartheid government in 1948 to 1994 (World Bank Report, 2009). This curriculum was designed to limit the

competences developed by black Africans, restricting their employment to low-income positions, thus limiting their social chances (World Bank Report, 2009). This racial injustice coupled with the challenges of poverty, Hendricks (2008) argues, is pivotal in shaping the life chances of children from poorer backgrounds.

During the apartheid era, access to higher education was also politically driven, through systems which ensured that blacks remained in a state of oppression (Moja & Hayward, 2005). This was mandated through an exclusion policy which restricted access⁸ for black students to white universities. In 1959, the Extension of University Education Act made provision for setting up of black tribal institutions structured to increase access to previously disadvantaged populations (Moja & Hayward, 2005). However restrictions were imposed on the options which these universities were allowed to offer. Choices were limited mainly to the arts and religious studies, thus reducing the number of career pathways for students attending these universities (UWC, 2006; Moja & Hayward, 2005). The University of the Western Cape, the context for this research, was one such *tribal* university, built to create opportunities for black and coloured students (UWC, 2006).

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2.2.6.2. Access to education in post-apartheid South Africa

It is against this backdrop of previous educational inequality that the new government introduced policies and mobilized efforts to expand access to previously disadvantaged populations. Since 1994, the South African Government has emphasized access so as to afford equal opportunity to every individual to be educated (UNESCO, 2005). It was envisaged that, through the process of desegregation of schools and universities, there would be improved access to resources (Hendricks, 2008) and increased opportunities for higher education (Asmal, 1999). In particular, these initiatives were aimed at increasing participation rates in tertiary institutions for groups of students previously denied access.

Although it is evident that the South African education system has undergone a major transformation since 1994, the country's schooling system arguably remains in crisis

⁸ Student enrolment in black tribal institutions (or historically disadvantaged institutions) was limited to enrolments in the arts and religious studies perceived as appropriate to their origins (Moja & Hayward, 2005).

(Wilson-Strydom, 2010; Bloch, 2009a; 2009b; Christie, 2008; Hendricks, 2008, Scott *et al*, 2007).

Access to quality education remains embedded in an apartheid legacy because it was and still is based on race and social class locations. This bias is evident in the current unequal material resources in government schools, in particular those previously allocated to the black population, in comparison with privileged ex-Model C schools (Hill *et al*, 2012; McKinney & Soudien, 2010). Learners coming out of ex-Model C schools continue to be better prepared for higher education; this is evident in their higher pass rates compared to those of schools originally located in the education systems designated for coloured, Indian or black African learners (SAIRR, 2011). The majority of the white population still attend ex-Model C schools. Because of their high fee structure, these schools remain well-resourced and can continue to offer quality education to the children attending them. However, the high fee structure inevitably excludes poorer children (Hendricks, 2008), further depriving them of opportunities to access better quality education.

Children from historically disadvantaged communities thus continue to experience many challenges. In this context, it is the black, coloured and to a smaller extent Indian children who experience low quality schooling. Schools servicing these race groups remain under-resourced in terms of infrastructure, with limited classrooms, textbooks and qualified teachers (SAIRR, 2012; Hendricks, 2008). Furthermore, children from poorer areas lack access to reading books because of a shortage of functional libraries (Hendricks, 2008). Nationally, three-quarters of schools have no library, while most rural areas do not even have access to a municipal library (Hendricks, 2008). The circumstances under which schooling is accessed are also often compromised by a range of poverty-associated social problems, such as hunger, violence, children's commitment to domestic chores and lack of support for learning in the home (Hendricks, 2008).

Although the new government continues to rectify past imbalances in education, the inheritance of an inequitable system has resulted in challenges to bridging the gap between schools in high and low socio-economic areas (Breier *et al*, 2007). These

persistent disparities continue to impact on educational attainment, compromising both the completion of schooling and future prospects of access to higher education (Hendricks, 2008).

2.2.6.3. How poor quality schooling impacts on educational trajectories in South Africa

The impact of lack of resources on education is evident in children from low socioeconomic backgrounds. These children generally experience lower rates of achievement (Scott *et al*, 2007). Wilson-Strydom (2010) argues that the low rate of achievement is not the only outcome of poor quality schooling; these students also lack appropriate literacy skills. This claim is echoed in international tests which reveal persistently low rates of achievement for South African school children, particularly in the areas of literacy, mathematics and the sciences (Bloch, 2009a; 2009b; Christie, 2008). This deficiency compounds the lack of content knowledge that children present with when they enter university (Bloch, 2009a; 2009b; Christie, 2008).

It has been increasingly emphasized that access to higher education does not automatically mean success. Evidence suggests that the greater the lack of student preparation, the lower the achievement (Strydom *et al*, 2012; Breier *et al*, 2007). Low educational achievement at school not only influences schooling outcomes and preparation for and access to higher education (Wilson-Strydom, 2010) but also influences the student's chances of attaining more prestigious qualifications (Breier *et al*, 2007).

Under-preparation in the areas of reading and writing, which are important for the development of cognitive skills, has become an increasing concern in the higher education sector over the past decade (Wilson-Strydom, 2010) and has been reported as seminal to the challenges educators face in their classrooms (Breier *et al*, 2007; Scott *et al*, 2007; McMillan, 2005a). These challenges have largely been attributed to the “deficits and shortcomings” (Scott *et al*, 2007:31) in the school system (Wilson-Strydom, 2010; Breier *et al*, 2007). Wilson-Strydom (2010) argues that adequate student preparation is crucial not only to supporting students' academic transition into higher education but also

in their attainment of success. Understanding the nature of student preparation is thus seminal to understanding issues of access and success.

Studies indicate that preparation for higher education is frequently associated with matriculation scores, since it is argued to reflect learners' academic potential (Scott *et al*, 2007). This potential includes literacy skills in terms of academic reading and writing (Wilson-Strydom, 2010; Hendricks, 2008; Breier *et al*, 2007) and cognitive competence (Bloch, 2009a; 2009b; Christie, 2008), as well as student attitudes, enculturation and orientation towards education (Breier *et al*, 2007; Scott *et al*, 2007). Hence it is accepted that students entering higher education on low matriculation scores are under-prepared.

Further studies indicate not only that under-preparedness manifests as poor performance in higher education but that it is associated with past inequalities (CHE, 2010; 2009; Wilson-Strydom, 2010; Breier *et al*, 2007; McMillan, 2007b; 2005a). Evidence of this association is seen in the differences in performance between the four race groups across education institutions, in which black students perform worse than white students (CHE, 2010; Hendricks, 2008; Scott, 2009; World Bank Report, 2009; Letseka & Breier, 2008; Scott *et al*, 2007; UNESCO, 2005). It can be argued that if poor performance is associated with under-preparedness, there will be a mismatch between a student's preparation and his or her actual eligibility for university (Wilson-Strydom, 2010).

Conley (2008), in theorizing student readiness for post-schooling, makes significant reference to the eligibility-readiness gap, arguing for the mismatch between preparedness and university entrance. He indicates that there is a mismatch between being *eligible* for university (meeting admissions criteria) and being *ready* for the demands of university-level study. This disparity, Conley (2008) believes, is because poor levels of preparation are not adequately reflected in school leaving results. These tend to be pitched at a level that qualifies students to gain access to university, despite their being poorly prepared (Conley, 2008). Schools prepare learners to be eligible to enter university, but do not make them ready for the demands of a university curriculum (Conley, 2008). Thus under-

preparedness is seen as a major inhibitor to bridging the eligibility-readiness gap (Conley, 2008).

Scott *et al* (2007) argue that this gap is reflected in all South African higher education institutions. They describe it as the “articulation gap” (Scott *et al*, 2007:42). Similarly, Wilson-Strydom (2010:3) uses the term “chasm” to refer to the gap between school and university. These authors contend that the gap often occurs as a result of the mismatch of expectations between the higher education and schooling systems. When this gap is too wide, students tend to struggle throughout their educational journey and inevitably end up being excluded, dropping or opting out (Breier *et al*, 2007). Thus, many of the poorly-prepared students eventually enter lower-status jobs or if they do persist and graduate, exit university with low marks and as a result are seldom marketable (World Bank Report, 2009).

The cumulative effects of disadvantage can thus have a long-term impact on life opportunities. Many students from previously disadvantaged backgrounds may become trapped in the cycle of social and economic deprivation, which prevents them from becoming economically viable in the contemporary world (Scott, 2007).

This section highlighted how different race and associated class locations in South Africa shape different opportunities of access to education. The literature suggests that post-1994 socio-economic disadvantage and deprivation of opportunity continue to shape the life chances of individuals in terms of educational access and success.

2.2.7. Conclusion: diversity in relation to race and social class

The discussions on diversity portrayed race and social class as nested concepts in South Africa. International perspectives on social class were drawn on to explain how patterns of privilege and disadvantage resulting from race/social class locations shape access to education. These perspectives also allowed theoretical insights into the relationship between social class, student preparation, access to education and performance. Parents’ social class locations in terms of their access to economic capital, their levels of

education and their engagement with their children were recognized as central to the contributions they make towards increasing their children's life chances (Reay, 2012; Reay *et al*, 2005; Archer *et al*, 2003; Anyon, 1996). The concepts of *economic* and *cultural capital* were explicated as lenses for this research, in order to explain aspects such as academic preparation, educational experience and “unequal scholastic achievement” (Bourdieu, 1986:47).

While *capital* denotes the economic resources, competences, dispositions and behaviours students bring with them into higher education, the following section explains the term *educational climate*, which is what the student experiences when he or she enters higher education. The focus is largely on this interface of transition, and is intended to develop concepts to facilitate understanding how students' experiences are shaped once they have gained physical access. Tinto (1975) offers a conceptual understanding of student experience through his construct of *integration*, which is seminal to the following discussions. Due to the lack of literature on student experiences in dental schools, literature was drawn from other health sciences disciplines, such as, nursing and medical students. The research might not be directly relevant but it is believed to be applicable because of the shared contexts for learning, that is, clinically-based programs.

2.3. The educational climate

2.3.1. Introduction

This section examines how the *educational climate* contributes to shaping student clinical competence. Educational climate is one of the core facets being studied in this research. This section conceptualizes it in relation to extant studies of educational environment, offering a working definition for the present study. These insights allow educational climate to be understood in the context of clinical programs. Tinto's (1975) model of *integration* is deployed to explain student experiences of the educational climate.

2.3.2. Locating *educational climate*

The concept of *educational climate* stems from *educational environment* studies in medical education research (Genn, 2001a; Roff & McAleer, 2001). Explaining the

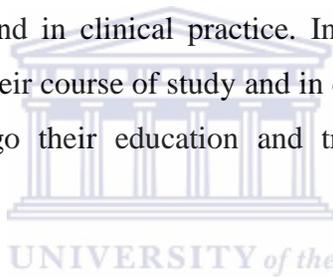
difference between educational environment and educational climate, Genn (2001a:446) defines educational climate as a “manifestation or operationalization of the educational environment and the climate”. When students experience the overall educational environment, it is perceived as a *climate* (Genn, 2001a: 446). In particular, Genn (2001a:337; 2001b:445) posits that educational climate in health practitioner education settings can be perceived as the “soul and spirit of the medical (sic) school”.

Terms such as educational climate, educational environment and institutional climate are commonly used in studies examining students’ experiences of higher education seen from various social and academic perspectives (Al-Qahtani & Al-Sheikh, 2012; Hurtado & Ponjuan, 2005; Roff, 2005; Milem, *et al*, 2004; Swail *et al*, 2003; Hurtado, 1992). There has been a growing interest in the field of education and social sciences in exploring and recognizing student perceptions of their educational environment (Al-Qahtani & Al-Sheikh, 2012; Oyeyemi *et al*, 2012; Khan *et al*, 2011; Palmgren & Chandratilake, 2011; Mayya & Roff, 2004; Bassaw *et al*, 2003; Pimparyon *et al*, 2000). These studies largely use the Dundee Ready Education Environment Measure (DREEM) (Roff, 2005; Roff & McAleer, 2001; Roff *et al*, 1997) as a tool to evaluate student experiences of the various aspects influencing the clinical educational climate. Results show that students’ evaluations of the educational climate serve as pivotal indicators of an effective curriculum (Bassaw *et al*, 2003), the quality of teaching and learning (Kilminster *et al*, 2007), the factors influencing students’ achievements, and their satisfaction with their educational environment (Mayya & Roff, 2004; Pimparyon, 2000).

The current study draws on the work of Genn (2001a) and Roff and McAleer (2001) to suggest that the climate of an institution is shaped by a range of aspects, including the atmosphere, ethos, structure and regulations of the institution, the institutional culture, the physical and material environment, and the teaching styles, expectations, attitudes and classroom interactions which are largely determined by the staff and institutional governance. Educational climate is then an appraisal, real or perceived, of the educational environment as it relates to interpersonal, academic, and professional interactions.

Educational climate is conceptualized in the following dimensions for the present research: *the institutional culture* (signifying the social aspects such as atmosphere or ethos, expectations, attitudes and behaviour of students and staff), *institutional structure* (signifying the institution in terms of demographics, governance, staffing, types of curricula offered and general rules and regulations of the institution), and *institutional pedagogy* (signifying the curricula, the role of the teacher, teacher-student interaction, discipline, specific expectations, and the curricula rules and regulations of the institution). In the discussion which follows, these dimensions are illustrated in terms of how they contribute to shaping the educational climate and ultimately the student's experience.

Educational climate in this research is centred around a health professional environment. This encompasses the environment or setting in which students becoming oral hygienists are educated both in theory and in clinical practice. In addition, in this environment, students treat patients during their course of study and in doing so also render a service to the public. They thus undergo their education and training in educational settings affiliated to clinical settings.



Cultural capital as discussed earlier denotes what students bring to this educational context in terms of skills, dispositions, behaviours and attitudes which influence their experiences. The concept of *educational climate*, on the other hand, is deployed to assess how aspects of the educational institution contribute to shaping the experiences of students once they have gained access. The following section conceptualizes educational climate. In addition, it explains how capital and the educational climate contribute to shaping student competence.

2.3.3. Conceptualizing educational climate

In order to conceptualize educational climate, it is imperative to frame an understanding of other closely related concepts. The concepts central to an educational climate study are student *experience* and the *quality* of the experience as it affects the realization of educational learning outcomes (Hurtado *et al*, 2009; Boor *et al*, 2007; Genn, 2001a).

Experience in this research refers to the social, institutional and curricula aspects to which a student is subject during his or her *interaction* or contact with the educational climate (Seabrook, 2004). The clinical educational climate influences student experience in terms of their levels of satisfaction, achievement and success (Boor *et al*, 2008a; Genn, 2001a). At the core of student experience is *quality* of experience (Oyeyemi *et al*, 2012; Boor *et al*, 2008a) and refers to a number of aspects within the educational climate that shape the value of the experience. Quality of experience can be described in terms of the degree to which participation (Boor *et al*, 2008a), student engagement, interaction and integration enhance the educational experience (Tinto, 1975).

Student engagement is recognized as a crucial appraisal of student experience and quality of experience. Student experience and quality of the experience describe the extent to which engagement occurs, that is, positive quality experiences lead to improved engagement (Tinto, 2012b; 2006; Mori, 2008). Strydom *et al* (2012:3) portray engagement as a two-pronged concept. Firstly it refers to “what students do”, including the time and energy they devote to educationally purposive activities. Secondly, it refers to “what institutions do” to engage students, and the extent to which they employ effective educational practices to induce students’ learning. Mori (2008) contends that the students’ engagement is affected by their views and perceptions regarding their studies – for example, their levels of motivation, their perception of how relevant the subject is, their previous experiences of education, preferred learning styles and their own social environments. These aspects are recognized as crucial to guiding students towards a positive learning attitude (Ali *et al*, 2010). They are acquired through general experience, for example, through modelling by family, the home environment, and by teachers and the educational environment (Ali *et al*, 2010). These aspects signal the role of cultural capital (Bourdieu & Passeron, 1997; Bourdieu, 1986) in shaping educational trajectories.

In order to conceptualize student experience and engagement with the educational climate, this study draws on Tinto’s (1975) Student Integration Model (SIM) model and his later conceptualization of the model (Tinto, 2006). The model examines student experience and engagement through the lens of student *integration*. Tinto (2012a; 2012b;

2006) explains that student involvement, or what is often referred to as *engagement*, matters in this whole process. He recognized the educational environment, in particular the classroom, as a context in which engagement is most likely to be effective, since it is the only place where students gather for the purpose of active learning (Tinto, 2012a, 2012b; Tinto, 2006). However, if this opportunity to encourage student involvement is lost, Tinto (2006:3) maintains that it is “unlikely to occur elsewhere”.

2.3.3.1. Explaining student integration

The transition from school to university marks the period in which an individual enters the university environment to be educated as professionals in a field of study. Several studies on student *transition* have centred on Tinto's theory of student integration (Daniel, 2010; Whittaker, 2008; Harvey *et al*, 2006). Students' success, retention and progression in university are viewed as being largely determined by the student's ability to *integrate* into the academic and social aspects of university life (Daniel, 2010; Whittaker, 2008; Harvey *et al*, 2006; Tinto, 1988; 1975).

In Tinto's Student Integration Model, Tinto (1975) theorized that *integration* forms the core of student persistence, or of dropping out when integration is lacking. Integration influences the students' decisions either to persevere in the system (persist) through to completion of their studies, or to drop out (Tinto, 1975). Dropping out refers to the student's decision to leave the institution prior to completion of a qualification, as defined by the concept of attrition (Tinto, 1975). To achieve full integration, students need to successfully negotiate three phases: *separation* (from their previous environment); *transition* (adjustment to their new environment); and *incorporation* (the point at which the student reaches full integration and acceptance of, and by, their new environment) (Tinto, 1987). Students, in becoming fully integrated, will experience different transitions, each with its specific challenges, for example, physical or geographic transition, transition into institutional structure and into different communities, academic transition (Whittaker, 2008) and transiting into professional roles.

Tinto's initial theory focused on the individual, assuming that the student needed to part from family and the community (Tinto's separation phase) in order successfully to integrate into the institution. His revised theory acknowledged that for many students, remaining connected to their *backgrounds* was important for their persistence (Tinto, 2006). Tinto (2006) also clarified the purpose of his model after criticisms that it did not contribute to reducing attrition rates (for a critical report on Tinto's integration module, refer to McCubbin, 2003). However, Tinto (1995) had initially asserted that his model served to explain why some students dropped out while others persisted, and was not intended to solve the issue of dropping out.

Two key concepts will be drawn on from Tinto's (1975) model. These are *academic integration*, which will talk to *institutional pedagogy*, and *social integration*, which will talk to *institutional culture and structure*. *Academic integration* refers to students' engagement and commitment to intellectual development (Tinto, 1975), while *social integration* relates to student interaction and engagement with the institution, both with staff and peers and with intangible aspects such as the rules and regulations of the institution (Reay *et al*, 2010; Tinto, 1975).

Tinto (1975) maintained that an essential ingredient of persistence is *integration* of the student into the social and academic systems of the institution. Swail *et al* (2003) in their research used Tinto's model and found that the greater the student's integration into the fabric of the institution, the greater would be his/her commitment and learning outcomes. According to Tinto's integration concept (1993), students' initial commitments to the institution and to the goal of graduation, as well as the decision to leave, are directly influenced by each student's entry characteristics. Tinto (1993) explained that students enter an institution with various individual characteristics, including those of family and community background (such as parental educational level and social status), individual attributes (such as ability, race, and gender), skills (such as intellectual and social), financial resources, dispositions (such as behaviours, attitudes and motivations), and schooling experiences (including academic preparation and achievement). Jones *et al* (2008) echo Tinto's view and explain that the extent to which students are able to

integrate academically and socially depends partly on their pre-entry characteristics, such as schooling, family background, skills and competences, as well as the aspirations and goals acquired through schooling and the family. These characteristics as highlighted by Tinto (1993) and Jones *et al* (2008) further reinforce the role of economic and cultural capital (Bourdieu, 1986), not only in shaping student preparation and access to education but also in promoting students' transition, engagement and integration and consequently their learning outcomes. These characteristics are different for all students and are based on their access to economic and cultural capital (Bourdieu, 1986). Because of this differential access to capitals, student integration is influenced (Tinto, 1993).

In terms of social integration, some students may feel socially connected during their transition because they have prior insights into university through family and friends. However, there are still some students that experience their transition as a significant *social displacement* (Briggs *et al*, 2012). Briggs *et al* (2012) allude to this displacement when they explain that for students who experience social displacement, their transition experiences may be intensified, for example, where the student is the first in their family to attend university. During transition, students must leave the familiar and begin an association in an unfamiliar environment – this phase alludes to Tinto's separation phase (Tinto, 1993; 1988). Students are displaced when they have to undergo new living arrangements by moving *physically/geographically* from one home to another, or by moving from one town to another, from one community to another or from school into the university environment (Whittaker, 2008; Katanis, 2000; Tinto, 1993; 1988). By and large they find themselves also leaving old communities (family, school) and entering new ones (new residence, university environment, new classrooms) (Tinto, 1988). Whilst the separation from the past communities and family is stressful for all students, it can be “temporarily disorientating” and displacing for some students (Tinto, 1988:443). Tinto (1988) argues that for students who leave home to live in hostels it is advantageous in that it facilitates the establishment of membership into the university community bringing social and intellectual rewards.

During transition into the educational environment students come into contact with many different people. They meet people with different cultures, different social class statuses (Reay *et al*, 2010; Reay *et al*, 2009) and people from different race groups (Jones *et al*, 2008). Students also enter a university that may be a match to their social class status or different from their own, for example, working-class students in middle-class universities (Reay *et al*, 2010; Reay *et al*, 2009). Students also experience contact with different languages, when they find themselves in an institution where there is diversity in language (Jones *et al*, 2008). Challenges for students in terms of social integration may occur where the majority of staff and other students do not speak their language and / or dialect or where the language of tuition in the university may be a second or even a third language for the student (Jones *et al*, 2008). Language issues impact profoundly on student social integration because it makes the transition from school to university increasingly complicated and demanding (Jones *et al*, 2008). These aspects of transition impact on students socially in several ways – establishing friendship groups and creating a sense of belonging to the university program and peer groups, for example, are essential in aiding personal and social adjustment to university life (Harvey *et al*, 2006).

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In terms of Tinto's (1993) *academic integration* concept, Tinto argues that the students' pre-entry characteristics also impact on the academic preparation of the student for university and consequently affect their academic integration (Tinto, 2006; 2004). Preparation for higher education has been recognised in multiple studies to include literacy skills in terms of academic reading and writing (Wilson-Strydom, 2010; Breier *et al*, 2007; McMillan, 2005a) and cognitive competence (Bloch, 2009a; 2009b; Christie, 2008), as well as student attitudes, enculturation and orientation towards education (Breier *et al*, 2007; Scott *et al*, 2007). Competence in the language of tuition is also critical in developing students' conceptual confidence (Jones *et al*, 2008; McMillan, 2005a). Complex conceptual skills are required for thinking at a theoretical level and for application of knowledge in different situations (Jones *et al*, 2008). Language proficiency is also regarded as a significant factor in students having the courage to approach their lecturers for guidance (Jones *et al*, 2008). For students who are fluent in the language of tuition, these skills are argued to be easily achieved (Jones *et al*, 2008). Under-

preparation in these areas creates barriers to student integration because of the impact that under-preparation has on student learning and its consequent influence on their performance.

Earlier discussion suggested that students develop particular dispositions, skills, attitudes and knowledge through the cultural capital accrued through parents and schools. These capitals were seen as either compatible with the expectations at university or in tension with them. It was also argued that students whose cultural capital matches that of the university are more likely to succeed. Thus success is facilitated when students use their cultural capital to integrate, persist, and so to be academically successful (Tinto, 1975). The following section examines how students' integration influences their learning outcomes and success.

2.3.3.2. The influence of student integration on learning outcomes

Swail *et al* (2003), using Tinto's model, found that the greater the student's integration into the fabric of the institution, the greater will be his/her commitment and learning outcomes. However, educational climates can affect learning outcomes such as competence and performance because social, institutional and curricula factors influence students' social and academic integration (Hurtado *et al*, 2009). As established earlier, learning outcomes are also influenced by the students' own backgrounds (Reay *et al*, 2009; 2005; Tinto, 1975) and race/social class locations (Scott *et al*, 2007). Thus educational climates and issues of diversity are crucial aspects affecting student integration.

Tinto's model (1975) suggested that academic failure was caused by unsuccessful integration. However, when students do experience academic integration, this results in observable gain. These observable gains are evident when student engagement and commitment result in intrinsic rewards, such as increased intellectual development (Tinto, 1975). Engagement and commitment are also observed in extrinsic rewards, for example, academic performance as reflected in the marks students earn (Tinto, 1975). Tinto (1975) recognized that low achievement of both intrinsic and extrinsic rewards is

due to “lack of goal commitment” and “insufficient intellectual development”. This lack of goal commitment and intellectual development leads to insufficient integration (Tinto, 1975), which in turn can result in either voluntary or enforced withdrawal (by not meeting promotion criteria). Goal commitment refers to the goals the student has framed in terms of what he or she wishes to achieve. Intellectual development relates to student performance. Preparation and goal setting however, are affected by issues of economic and cultural capital (Reay *et al*, 2005; Reay, 2004). Scott *et al* (2007) explain that *under-preparedness* for higher education manifests as poor performance and a consequent lack of goal commitment, “demoralization and drop out”. Goal commitment, as argued by Tinto (1975), reflects the level of persistence; the higher the goal commitment, the greater the chances of persistence, while the lower the goal commitment, the greater will be the chance of withdrawal.

Tinto (1975) also argued that, other than the dispositions and attributes that students bring to university and which shape their learning experience, the educational climate plays a vital role in supporting the students once they are in the system – in the absence of this support, students are more likely voluntarily to withdraw from the system, even though they may be academically able. The following section discusses how educational climates, with reference to institutional structure and culture, affect social integration.

2.3.3.3. How institutional structure and culture affect social integration

Institutional structure (signifying the institution in terms of demographics, governance, staffing, curricula, rules and regulations) and *institutional culture* (signifying the atmosphere, ethos, expectations, attitudes and behaviour of students and staff), as highlighted earlier, relate to aspects within the institution which affect social integration. Institutional structure and culture are commonly influenced by practices such as increasing diversity through opening access, participation and representation of students from diverse social classes (Reay *et al*, 2005) and race groups (Hurtado *et al*, 2009; 1999). Students who are not traditionally associated with higher education because of previous racial (Hurtado *et al*, 1999) or social discrimination, in particular working-class students (Reay *et al*, 2005), experience feelings of alienation or stigmatization in the

presence of well-represented groups such as white middle-class students (Reay *et al*, 2005). In the current study *alienation* is understood as “the state or experience of being isolated from a group or an activity to which one should belong or in which one should be involved” (Mann, 2001:8). These feelings affect how the students respond to the educational climate and how they socially integrate.

Jansen (2009; 2005) reported on forms of alienation and stigmatization in higher education, explaining that current inclusion attempts are challenging for students from communities which have only recently gained access after years of exclusion. Using empirical evidence from a South African university, Jansen (2009; 2005) described forms of alienation in which black and white students experienced decreased interaction on a social level even without having being born into or experiencing an apartheid society. His study highlighted incidents of stigmatization in which white students had rigid negative stereotypes of black people emphasizing that in the post-apartheid era racial tensions do exist at institutional level. He noted that certain race groups displayed antagonistic behaviour, attitudes and perceptions towards other race groups.

Hurtado *et al* (1999) highlighted the relationship between diversity and the educational climate through a study of students who were under-represented in a classroom or institution. The authors argued that alienating tensions can arise as a result of interactions between students from different race groups who are not familiar with sharing the same educational spaces. A lack of socialization can lead to feelings of alienation (Hurtado *et al*, 1999). *Clique forming*⁹ (Smith & Moore, 2000) is one way in which this segregation manifests. Student interactions contribute to shaping their experiences of the educational climate and influence their perceptions of whether the climate is alienating or engaging (Case, 2008; Hurtado *et al*, 1999). The more isolated students feel, and the lower their sense of belonging, the more hostile they will perceive the climate to be (Jansen, 2009; 2005; Hurtado & Ponjuan, 2005). When they feel that they do not belong in an institution

⁹ The formation of a clique is characterized predominantly by group homogeneity established through “homophilic selection” (Smith & Moore, 2000), that is, the tendency to choose members of the clique or group who are the most similar to oneself.

(Reay *et al*, 2005), or when they experience incidents of stigma (Reay, 2012; Reay *et al*, 2010; 2009; 2005; Jansen, 2009; 2005), their social integration and hence their academic integration will be weakened. This position is echoed by Jansen (2009) and Moja and Hayward (2005) who conclude that tensions between race groups contribute negatively to a learning environment (Jansen, 2009).

However, Liu and Liu (2000) attribute students' feelings of alienation to an institutional structural issue, rather than to individual problems. This attribution holds the institutions themselves as largely responsible for students' lack of persistence. Feelings of alienation are perceived to be the result of a lack of institutional effort to involve or engage the students in the classroom . This view is reinforced by an increase in recent studies which allude to the ways that higher education environments need to support and adapt to the changing student profile (Oyeyemi, 2012; Strydom, 2012; Khan *et al*, 2011; Wilson-Strydom, 2010; Mori, 2008; Breier *et al*, 2007).

The literature surveyed thus far suggests that race and social class influence the ways students experience the educational climate. Black students (Jansen, 2009) and working-class students (Reay *et al*, 2005) are thus less likely to perform well because they may experience the learning environment as alienating. Social integration is crucial to the student experience because it affects academic integration. This view is supported by Tinto (1975; 2006) when he asserts that the more socially integrated the student is in the institution, the greater will be his or her academic engagement. The following discussions highlight how institutions, through their educational climates, affect student integration from an institutional pedagogical perspective. Two aspects will be focused on to show how this operates: student integration into professional roles, and how staff, in their roles as clinical teachers influence student integration and as a consequence their learning.

2.3.3.4. Integrating into professional roles.

Professionalism is the cornerstone of all health professions education and training including oral health (HPCSA, 2007). In oral health professional disposition requires that students adopt specific practices, behaviours and attitudes appropriate to the dental

fraternity. The culture of the educational climate reflects these proficiencies, reinforcing the professional transition students need to undergo in order to experience integration at both institutional and professional levels (Koltz & Champe, 2010). The integration of students into these professional roles is a significant aspect of the educational experience and is of particular relevance in health sciences education.

In a clinical education program, professional knowledge, skills and discipline-specific values and conduct are not only embedded in curricula but are reinforced through the institutional culture of the educational climate. The educational environment in the context of the current study is responsible for inducting students into the roles and norms of a particular health care discipline. This role of the educational climate contributes to the development of both the uniqueness and deportment of practice in health care professions (Wazqar, 2012; Clark, 1997). This development involves a process of professional socialization in which knowledge, expertise, discipline, specific language, values, responsibilities and ways of doing things related to the particular discipline and profession are learned, practiced, developed, refined and assessed (Wazqar, 2012).

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Van Schalkwyk (2010) warns that staff expectations may not be met in terms of students actually attaining these implicit professional attributes. Gaining entry into specialized disciplines can present difficulties for students when institutions do not make the rules and norms governing the associated professional roles explicit. Although the curriculum as laid down by the institution embeds the knowledge, skills and dispositions which define the profession, it could be argued that it is through an informal and hidden curriculum that social and professional attributes become embedded.

A recent report on nursing education (AMS, 2011) suggests that such a hidden curriculum lies beneath the public curriculum. The latter explicitly and transparently outlines the competences which need to be developed at graduation. Informal curricula, on the other hand, entail learning that takes place through interpersonal interactions, while hidden curricula reflect the values of the organizational structure and culture (Egnew & Wilson, 2011). The hidden curriculum might be understood as the mechanisms

in the education and training process which reward or censure particular ways of being and doing. It is arguable that this hidden curriculum plays a significant role in the way in which the institutional culture and consequently the educational climate are structured. Since these hidden curriculum expectations are not made explicit, and are seldom taught or made overt, the process of being inducted into a profession may in itself present transitional challenges for the student. These challenges may be even more extreme if professional ways of being and doing are more compatible with the cultural capital of one group of students than with that of another group.

Intrinsic to the hidden curricula is the practice of role modelling which occurs when students learn from observing and imitating the behaviours of their teachers (Egnew & Wilson, 2011). The impact of role models on student learning has been well recognized (Ali, 2012; Egnew & Wilson, 2011; Raman & Leinster, 2008; Kilminster *et al*, 2007). Students in clinical programs spend a significant amount of time in the clinical environment with teachers who help to facilitate their transition into the profession. This interaction results in the students mimicking the roles of their teachers in terms of professional conduct and behaviours. In addition, students learn from the clinical knowledge, experience and skills of their clinical teachers. Thus the attitudes and behaviours of clinical teachers are seminal to what students learn. Negative attitudes and behaviours that are contrary to what is expected of clinical teachers not only have a negative influence on the learning experience of the students and the way they view their teachers but also have an effect on patient care, especially when bad practices have been learned and repeated (Ali, 2012; Cantillon & Sargeant, 2008). The educational climate thus shares the responsibility for supporting the process of role-modelling, since it promotes the development of an identity and pattern of practice in the health care profession which students will need in order to gain the competences expected of the profession and its institutions (Koltz & Champe, 2010).

Teaching staff are also important in developing the professionalism of their students in clinically based programs. They are representatives of their profession and approach training in these faculties with their professional vision in mind (Wallace & Infante,

2008). For example, dentists who are clinical teachers in dentistry programs have expectations of how their students should conduct themselves in that discipline. Their assumptions about what constitutes a competent clinical professional include attributes such as competence in knowledge, skills, and dispositions. They also expect their students to achieve levels of professionalism appropriate to the discipline, not only in terms of how to read and write but also how to “act” and “speak like a professional” – this is referred to as being “academically literate” (van Schalkwyk *et al*, 2011:2) or more specifically in the context of health sciences professions, *professionally literate*. Koltz and Champe (2010) sum up this process as *professional transition*.

It is arguable, therefore, that apart from the social and academic integration noted by Tinto (1975), student integration into the accepted ways of being and doing of a profession is equally important for successful performance (Koltz & Champe, 2010). In their study on mental health counseling interns, Koltz and Champe (2010) describe the transition of students to becoming health professionals. They ascribe different themes to the development of the student into a professional in which “shaping the professional” reflected students’ perceptions and understanding of themselves as new professionals (Koltz & Champe, 2010:5). Koltz and Champe (2010) assert that the way students understand their roles as professionals are shaped by their interaction both with people and with their clinical experiences. The interns in their study said that their interaction with professors, fellow students, patients and clinical supervisors, as well as their personal reading and classroom experiences, was influential in shaping their identity as health professionals.

In university health sciences faculties, with their combination of educational and professional contexts, the interactions between students and their clinical teachers shape the students’ experiences of, and their assumptions about, alienation and inclusion in both the learning environment and the profession. These experiences highlight the role of the educational climate with particular reference to the way institutional culture and structure contribute to shaping student transition into professional roles.

Earlier discussion on institutional culture and structure focused on the impact of student demographics on the educational climate in terms of how experiences related to race and social class can impact on student interaction and create an alienating climate. The following discussion highlights other ways in which alienation and inclusion may arise through the procedures and practices (institutional structure, culture and pedagogy) within the faculty and how they may impact on the educational climate for health professions. Inter-professional integration is of particular concern in this study, since the context for the research involves education and training for more than one profession (dentists and oral hygienists) which potentially could influence the structures and culture of an institution (Milem *et al*, 2004).

Brijlal and Mathebula (2008) and Reitz and Jadeja (2004) in their studies on the professionalization of oral hygienists highlight the professional tensions that can arise between disciplines sharing similar roles. They showed that tensions between dentists and oral hygienists are significant in shaping negative interdisciplinary working relationships in a context where the employment of oral hygienists is dependent on dentists. The kinds of professional tension displayed, including the lack of understanding of roles and scope of practice and lack of acceptance by the dental fraternity suggest that these tensions may stem from much earlier stages of interaction, for example, the lack of integration between the two professions during their education and training.

Integrated or inter-professional training is an educational method, founded on the basic value of teambuilding towards effective patient care which is achieved through effective inter-professional education (Bainbridge & Nasmith, 2011). Inter-professional education occurs when two or more professions learn with, from and about each other in order to improve collaboration and quality of care (Centre for the Advancement of Inter-professional Education, 2002). It is most effective when embedded explicitly in both academic and practical clinical learning contexts (Bainbridge & Nasmith, 2011). Conversely, a lack of integrated teaching impacts on professional integration and consequently affects the quality both of the educational experience and of the subsequent patient care.

When students are educated in settings with professionals sharing same spaces and where roles overlap, there are often struggles for power, where one profession is made to feel insignificant or subservient to the other (Rudland & Mires, 2005). Empirical studies illustrate how sharing of educational spaces impacts negatively on the learning situation and on the overall learning context. Rudland and Mires (2005), for example, showed that medical students consider nurses to be inferior to their own profession in several areas, including status in society, competence and academic ability. The authors suggest that these negative perceptions may have an impact on the success of inter-professional training and on the way medical and nursing students interact. It is arguable that these perceptions not only give rise to tense environments but also to inclusion issues. In climates where diversity issues are prevalent, problems of professional inclusion can be a double burden, over and above issues of race and social class. These situations can impact on students' professional integration, their social integration and consequently their academic integration and learning outcomes. The following section examines institutional pedagogy and how the educational climate, with particular reference to the role of the educator, impacts on professional and academic integration.

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2.3.3.5. The educational climate and institutional pedagogy

As noted earlier, *institutional pedagogy* signifies aspects of the educational climate, such as the curricula, the role of the teacher, teacher-student interaction, discipline-specific expectations, and rules and regulations. This section explains how some of these aspects of the institution contribute to shaping the educational climate.

The education and training of health care professionals involves clinical teaching that extends beyond the classroom-based modes of knowledge development. In health care education, clinical competences are embedded as the student progresses beyond the laboratory or simulated practice, culminating in a clinical setting where students treat patients in a real-life environment (UWC, 2008a). Clinical teaching is also different from the traditional classroom teaching in that specific clinical and professional attributes are taught and assessed by the teacher (Oyeyemi *et al*, 2012). The clinical teacher is therefore also expected to possess certain teaching, clinical and professional competences that will

make the learning experience effective (Ali, 2012; Oyeyemi *et al*, 2012).

Boor *et al* (2008b) indicate that the role of clinical teachers in creating a climate conducive to learning is central to the student's experience of the educational climate. In their medical education study, Boor *et al* (2008b) argue that converting clinical settings into teaching platforms is vital for effective teaching. The role of the teacher in engaging the student during clinical teaching features as the strongest component in this process. The authors suggest that in enacting this process "clinical supervisors" need to become "clinical teachers" (Boor *et al*, 2008b:47). Updating students on new evidence in subject areas and guiding them but also giving them autonomy are "important traits" that will enhance their engagement (Boor *et al*, 2008b:47). The quality of student experience is thus established when the educational climate allows for a beneficial student-supervisor (teacher) relationship (Oyeyemi *et al*, 2012).

Important aspects of the quality of experience, such as the quality of clinical teaching, teacher attributes and the atmosphere of the context, are seminal to quality training for clinical professions (Boor *et al*, 2008b; Boor *et al*, 2007; Cottrell *et al*, 2002; Kilminster & Jolly, 2000). Clinical teaching is largely shaped by the way the teacher manages the clinical sessions. These sessions are influenced by the way that lecturers use the opportunity of these sessions to supervise, teach and support students in their clinical training. However, the teaching process and the quality of teaching are also influenced by a range of psychological and sociological elements, such as, the teacher's attitudes, skill and mannerisms. These characteristics impact on the educational and clinical experiences of the student, both of which are crucial to the development of a competent graduate. In their empirical study, Mattila *et al* (2009) emphasize the quality of teacher-student interaction, stipulating that the attitudes, behaviours and skills the supervisor brings to clinical teaching are crucial in that they have the potential to make or break the process of learning. When students experience negativity, they either give up or they become more determined to succeed (Mattila *et al*, 2009).

Ineffective clinical teaching behaviours have been recognized as those that include low

empathy, failure to offer support and feedback, failure to respond to student concerns, not engaging in teaching, being indirect, intolerant and emphasizing negative rather than positive aspects (Kilminster *et al*, 2007). Teacher feedback has been widely emphasized as crucial to the learning experience (Ali, 2012; Cantillon & Sargeant, 2008; Kilminster & Jolly 2000). For Cantillon and Sargeant (2008), one of the primary reasons for feedback is to encourage learners to think about their performance. If negative feedback is not carefully managed, it can result in “demotivation and deterioration in performance” (Cantillon & Sargeant, 2008). Interaction positively affects the student’s development, particularly when combined with quality feedback (Kilminster & Jolly 2000). Feedback is important to all students, irrespective of how well or how poorly they perform. Without feedback, students who perform well do not get positive reinforcement, while those who perform poorly are prone to carry the incorrect practice through to future sessions. Hence lack of feedback impacts on student learning outcomes in terms of their levels of performance and competence as well as on patient care (Kilminster & Jolly, 2000).

The role of the teacher in the educational climate thus has a strong effect on what is learned (Ali, 2012) and the way that learners respond to the learning situation (Kilminster *et al*, 2007). Negative feelings about the educational climate and in particular about clinical supervision, can be detrimental to the students’ learning and importantly to their learning about patient care (Ali, 2012; Kilminster *et al*, 2007).

2.3.4. Conclusion: educational climate

The preceding discussions covered aspects of the educational climate and its significance in the experience of the student. Understanding the educational climate and how it influences student experience, their integration and learning outcomes, including clinical competence, is seminal to the research question. The primary application then of educational climate as a concept is to assess those aspects in the educational environment which influence student integration. It also allows for further assessment of how students’ experiences are shaped by issues of race and social class. The next section focuses on conceptualizing clinical competence as an outcome of student learning.

2.4. Clinical competence

2.4.1. Defining competence and performance

This section offers a working definition of *clinical competence*. In this study, clinical competence is a seminal concept and underpins the core of the research question. Competence is discussed within the broader scope of medical and health sciences education, with particular reference to the education and training of oral hygienists. In the oral health program, competence is understood as evidence of the attainment of learning outcomes and is seen as an end result of theoretical and practical assessments.

Clinical competence is a term frequently used by regulatory bodies and in health sciences research to describe a minimum set of competences that in a broad sense include skills, understanding, and the professional values needed by a graduate in order to practice (SAQA, 2006a; 2006b; Carr, 2004; Miller, 1990). There are several definitions of clinical competence, offering different interpretations and ways in which it can be used. The following definitions from the nursing and medical professions serve to explain the different approaches to the concept of *competence*. Levett-Jones *et al* (2011) describes three ways of understanding competence: as task-related skills, as pertaining to generic attributes essential to effective performance, and as the assembly of general attributes, such as, the knowledge, skills and attitudes appropriate to professional practice.

The Australian Nursing and Midwifery Council, in outlining their national core competence standards for licensure of a registered nurse (ANMC, 2006:8), define competence as “the combination of skills, knowledge, attitudes, values and abilities that underpin effective and/or superior performance in a profession/occupational area”. Thus a nurse is deemed competent when he or she demonstrates competence across all the domains appropriate to the level being assessed (ANMC, 2006).

The South African Qualifications Authority lists a set of exit level outcomes which serve as the guidelines for curriculum development of the oral health program (SAQA, 2006a; 2006b). These regulatory bodies state that an oral hygienist is considered competent, and therefore eligible for both graduation and professional practice, when s/he is able to

function as a practitioner in oral care and as a part of a multi-disciplinary healthcare team, focusing on holistic care of patients. This ranges from prevention of oral disease and promotion of oral health to the alleviation of abnormalities, pain and disease. Several observations might be made regarding the various definitions of what constitutes clinical competence (SAQA, 2006a; 2006b; ANMC, 2005; Carr, 2004; Miller, 1990). All the definitions foreground clinical reasoning and the acquired dispositions, such as knowledge, attitude and values, which can be influenced and shaped through the 'hidden curriculum', as being important in clinical competence – these are over and above the specific clinical skills required. When students meet all these proficiencies they are deemed competent and hence eligible for graduation (American Federation of Teachers, 2011).

In the oral health program, success goes beyond attainment of a degree or qualification. It involves the attainment of competence which reflects knowledge, intellectual ability and professional and technical skills, and is achieved through a collaborative effort between the student and the institution. Performance scores which show whether the student has passed or failed act as indicators of these competences. In order to decide whether a student is competent and therefore ready for graduation, these competences need to be assessed. The following section explains how competence is determined.

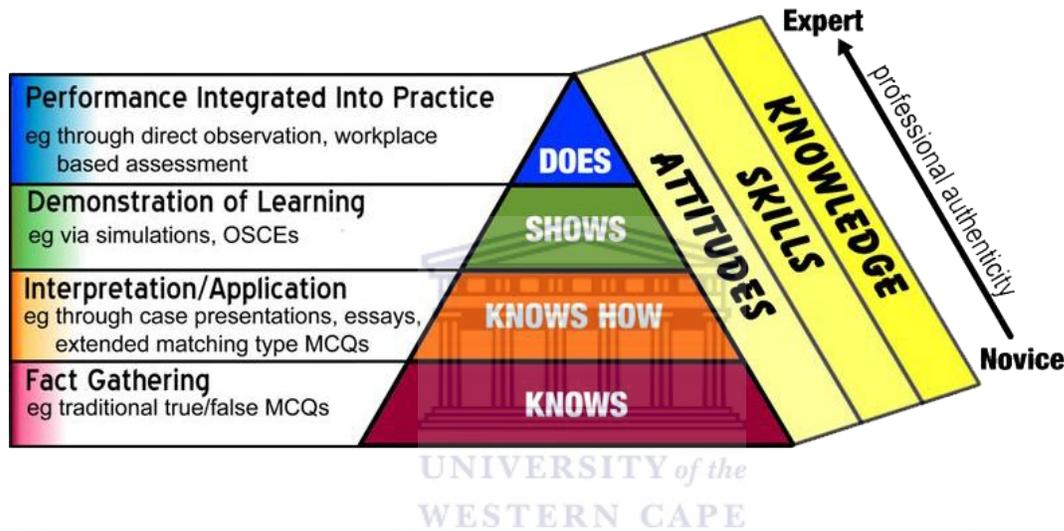
2.4.2. Measuring competence

Assessment plays a significant role in decisions regarding the measuring of competence. In a clinical field, assessment needs to gauge competence in all aspects of professional practice – including knowledge, skills, and dispositions. Levett-Jones *et al* (2011) argue that, while defining the term competence is one of the challenges of clinical assessment, assessment itself is the vital component that determines the readiness of students to become competent practitioners.

Assessments of clinical competence have traditionally focused on clinical and knowledge components. Van Schalkwyk (2010) argues that this approach raises the question as to how other dispositions, such as professionalism, attitudes and behaviours may be

converted into observable gain. In medical education, several models or frameworks for structuring the clinical assessment of competence have been proposed, including “Miller’s Pyramid” (Miller, 1990) and the “Life stages of skill acquisition” (Dreyfus & Dreyfus, 1986). The following image is derived from the basic model by Miller (1990) as a framework for guiding clinical assessment (adapted by Mehay & Burns, 2009).

Figure 2.1: Miller’s “Prism” of clinical competence (aka Miller’s Pyramid), adapted by Mehay and Burns (Mehay, 2009:21)



Originally, Miller presented his framework as a two-dimensional pyramid. The model was adapted by Mehay and Burns (Mehay, 2009) as illustrated above to foreground the knowledge (cognition), attitude (effective interaction) and skills necessary for health sciences professionals when treating patients. They thus referred to the model above as “Miller’s Prism”¹⁰, allowing for the finer details of the model to be made more explicit.

This section highlights the essence of Miller’s model (1990) which guides assessments in clinical skills, competence and performance and forms the basis upon which assessments in the oral health program are structured. It is a four-tiered pyramid with four behavioural and cognitive levels that reflect how a student progresses from understanding a task to actually performing it. The development of competence across the four stages is summarized as follows: “knows” (knowledge), “knows how” (competence), “shows

¹⁰ Further adaptation of Miller’s Pyramid (1990) was made, for example, see Dent, J. and Harden, R. 2001.

how” (performance) and “does” (action) (Miller, 1990:63). These domains record how the student demonstrates the following:

- Knows : knows some knowledge
- Knows how: knows how to apply that knowledge
- Shows: shows how to apply that knowledge
- Does: actually applies that knowledge in practice, not in an artificial test setting.

The upper two levels test behaviour, for example, can the students apply what they know into practice? The tiers relating to “knows” or “knows how”, which test knowledge, stand apart from the behaviour zone “shows” or “does” (Miller, 1990) because, as Mehay (2009) argues, a student knowing how to do something does not necessarily mean that he or she can actually perform the task.

Miller’s triangle (1990) assumes that competence predicts performance. Competence is thus evaluated in terms of what oral hygienists can do in selected or individually controlled situations during their practice. Performance is measured as all the competences of student oral hygienists in their professional practice – performance is presented as the marks achieved from assessments. The final assessment mark achieved at the end of each year in the program is a summative assessment mark. This mark is the product of continuous assessment activities during the year and a final year-end assessment. In the oral health program, assessments are thus spread across the four tiers, allowing for a better perspective on student competence, including the knowledge, intellectual ability, professional and technical skills highlighted earlier in the section. Assessments to test competence in medical and dental education and training take many forms (Carr, 2004; Miller, 1990) and are briefly listed in Mehay’s (2009) image above. Traditional assessment includes written and oral tests and examinations (Carr, 2003). These are effective for assessing knowledge, including at Miller’s (1990) level of “knows” and “knows how”. Other forms of assessment fall into the “shows how” category, and include Structured Observation and Assessment of Practice (SOAP), simulated assessment approaches using standardized patients (actors) or human patient simulation manikins, and objective structured clinical examination (OSCE) tests (Levett-Jones *et al*, 2011; Mehay, 2009; Miller, 1990).

In the oral health program, students are required to move beyond simulated learning to the actual treatment of patients. Assessment thus moves beyond the “know” and “show how” level to actually doing. But even at the “does” level, students are not merely technicians. They are required to present their patient’s case and its relevant management protocols. For this kind of engagement, students are required to display clinical reasoning, to be knowledgeable, professional and skilled. The methods of assessment complement each other and take into account the levels of knowledge, attitudes and skills a student needs in order to graduate (Bilash, 2011). In the oral health program assessment across the areas of knowledge, skills, and professional values is seminal in determining the level of competence achieved.

2.4.3. Conclusion: clinical competence

This section provided conceptual insights into clinical competence, nuancing the shift for students from discipline-specific competences to the broader generic dispositions that need to be emphasized and incorporated into clinical practice. The working definitions offered serve as conceptual tools for the understanding student competence in the subsequent chapters.



2.5. Conclusion to Chapter Two: the theoretical framework

This theoretical framework chapter presented the concepts which are seminal to this study. Setting the legacy of apartheid as a backdrop, the initial discussion highlighted the nested relationship of race and social class in South Africa. The relationship of social class, capital and educational access was examined, using the international literature to frame an understanding of educational access in the South African context of race and social class. Further discussion established the concept of educational climate. The ways in which race and social class are implicated in students’ experiences of the educational climate were examined through the conceptual lens of integration. The chapter concluded with the concept of competence in which the role of assessment in determining competence was highlighted. It offered conceptual lenses for understanding student clinical competence and how it may be influenced by diversity and educational climate. In the following chapter, the context of the research is discussed.

CHAPTER THREE

THE RESEARCH CONTEXT

3.1. Introduction

This research is focused on the 2007 cohort of oral health students, as they were tracked between 2007 and 2010 in the oral health program at the Faculty of Dentistry, University of the Western Cape. In this chapter, the research context is described. Set against the backdrop of race, social class, the chapter frames the University of the Western Cape and its Faculty of Dentistry oral health program as settings for this research – contexts in which the cohort was located.

The chapter frames an understanding of the cohort and the context of the research in the following ways: it looks at the overall school and university academic performance in South Africa; it examines the University of the Western Cape and, the Faculty of Dentistry in the light of an historical legacy of previous disadvantage and as contexts for the oral health program and cohort; it outlines the profession of oral hygienists, the structure of the oral health program, and offers demographic insight into the profile of students entering the oral health program.

As a departure point, contextual insight into the South African education system is presented, with particular reference to schooling and higher education performance.

3.2. An overview of the South African education context

“There is enough evidence pointing to our education system being in crisis and failing the majority of our children”. (Ramphele, 2009:19).

3.2.1. Introduction

As highlighted in the previous chapter, South African history is embedded in an apartheid legacy characterized by racial discrimination. Aligned to this legacy, race discrimination was portrayed in that chapter as sharing a nested relationship with social class divisions (McKinney & Soudien, 2010). While this legacy of race/social class has impacted on the

South African population in various ways, one of the greatest impacts has been on the education system. In the current South African context access to and success in the education sector is still argued as being influenced by the apartheid legacy (Modisaotsile, 2012; Mouton *et al*, 2012; SAIRR, 2011). The purpose of the subsequent sections regarding to school and university academic performance is to frame an understanding of access and success in education during the period related of the study, and in doing so to provide insight into the educational context within which the cohort was educated. This information also serves to contextualize race/social class and capital in relation to educational opportunities and performance in the study period.

It is imperative to note the following for this chapter. The period of this current study pertains to the cohort who entered the system in 2007 as first year students in the oral health program. In this cohort not all the students entered the program directly from school. Approximately 50% (n=14) of the cohort completed their Senior Certificate in 2006 – the remaining students in the cohort (n=13) had completed their schooling in the period between 2000 and 2005. Most of the literature referred to in this section presents information for the period 2000-2006/2007 on performance at school (Scott *et al*, 2007; Fiske & Ladd, 2005; van der Berg, 2002) and university (CHE, 2010; Breier *et al*, 2007; Scott *et al*, 2007).

However, several studies and reports from a later time period (SAIRR, 2011; Taylor *et al*, 2011, van der Berg, 2011; Ramphele, 2009) are also drawn on for a number of reasons. Firstly, the education landscape is argued to be very much the same as it was in 2000-2006 (Taylor *et al*, 2011; van der Berg, 2011, Ramphele, 2009). Secondly, only recently did sector-wide longitudinal performance data become available because it has “historically not been a priority” – it is only a recent requirement by the Department of Education to focus on institutional enrolment and graduation targets (Scott *et al*, 2007: 31). Thirdly, these later studies make a significant contribution in highlighting the impact of the legacy of apartheid on academic performance since democratization and similarly contribute to an understanding behind the past performance patterns in the education

sector. In considering these aspects, the ensuing section focuses on statistical insights into the academic performance of school learners pertaining to the study period.

3.2.2. Overall learner performance in South African schools

Before presenting learner performance in South Africa, it is imperative to revisit the structure of the schooling system against the backdrop of race. In considering that race and social class share a nested relationship, they serve as important contexts for understanding the implication of how they both shaped educational opportunities and impacted on learner performance. But the magnitude of issues around access and success will only be appreciated against an understanding of the race proportions in South Africa.

The 2001 census recorded the South African population in terms of the four apartheid race classifications. The population percentages for that census were as follows: black African citizens made up the largest percentage of the population (79%), followed by white citizens (9.6%), coloured citizens (8.9%) and Indian/Asian citizens (2.5%) (StatsSA, 2001). These race proportions also serve as a guide in terms of understanding that black African learners made up the largest proportion of learners in government schools and that government schools made up the largest proportion of schools.

In the previous chapter, the apartheid structuring of separate education systems for the four race groups was highlighted. The separate education systems were comprised of the following structure: the schools designated for white learners were managed by the House of Assembly; those designated for Indian learners were managed by the House of Delegates; schools for coloured learners were managed by the House of Representatives, while schools for black African learners remained under the control of the Department of Education and Training (DET) (Fiske & Ladd, 2005). Educational dispensation, as explained in Chapter Two, operated on the principle of segregation and was underpinned by inequalities in the allocation of resources, funds and opportunities disadvantaging the black population (black African, coloured and Indian/Asian groups) (Bertelsmann Stiftung, 2012). The greatest of this impact was on the black African population.

Although the apartheid system of education delivery was reshaped with the advent of democracy in South Africa, the inequalities which had been characteristic of the apartheid approach to education provision, continued to influence learner performance into the post-apartheid era (Scott *et al*, 2007; Fiske & Ladd, 2005). Evidence of this influence is reflected in the persistently poor academic attainment of learners from previously disadvantaged schools (Scott *et al*, 2007; van der Berg; 2002).

In 2007, at the time of the study, the Department of Basic Education managed schooling for all race groups from Grade one to Grade twelve, the school completion year (DoE, 2009). Fiske and Ladd (2005) reporting on access to education since apartheid indicated that although equal access existed in principle, most black African learners were still taught in ex-DET schools with close to 100% black African learner enrolment remaining in most of these schools. The authors contended that the vast majority of black African learners also continued to live in rural areas where they only had access to ex-DET schools. Likewise, most black African and coloured learners from urban areas continued to live in low socio-economic townships which were geographically isolated from the rest of the metropolis – these learners thus attended those schools which serviced these poorer areas. Most Indian learners attended former House of Delegates schools. However, many Indian, black African and coloured learners from middle-class families also accessed ex-Model C or schools formerly meant for white learners (Fiske & Ladd, 2005). The authors argued that it was the combination of transportation costs and high school fees in ex-Model C schools that kept working-class black African, Indian and coloured learners in the schools to which they had been restricted in the apartheid period. In this way, access to better quality schools remained a challenge for a large proportion of the black African population. Thus, the patterns of school enrolment after apartheid and into the period around 2007 were still significantly reflective of the legacy of apartheid segregation (Fiske & Ladd, 2005).

In the previous chapter, it was established that race, social class and access to economic and cultural capital shaped access to resources and educational opportunities, which in turn influenced academic performance. In continuing the argument for this relationship,

the following section provides empirical evidence of how race and social class were implicated in the performance of school learners from different race groups during the period under study.

Learners from former Department of Education and Training (ex-DET) schools performed worse than learners from ex-Model C schools (Scott *et al*, 2007; van der Berg, 2002). Schooling performance in the *Trends in the International Mathematics and Science Study* (TIMSS) of 2003, for example, revealed that South African ex-DET Grade eight learners performed poorly in these tests against other countries (Reddy, 2006a). In these international mathematics and science assessments, stark differences were revealed in performance between the participating countries. South Africa having achieved the lowest performance of the fifty countries assessed, which included five other African countries (Reddy, 2006a), also presented with major differences at microscopic level among South African race groups. A difference of about 50% in achievement was shown between black learners from ex-Department of Education and Training schools and learners from ex-House of Assembly schools (ex-Model C schools) (Scott *et al*, 2007). These international and national patterns were shown to be repeated over the years; for example, the mathematics and science scores in 1999 were similar to those in the 2003 examinations (Reddy, 2004). These patterns reflect the continuing effects of past inequalities on the educational performance of children from disadvantaged backgrounds.

Performance in mathematics and science are significant in that they are regarded as an indicator of the quality and the emphasis of the school educational system. Further, they reflect on the role of the education system in preparing learners for the mathematics and science fields in higher education (Scott *et al*, 2007). Poor performance in these subject areas were shown to have an impact on black learners in particular in meeting admissions criteria for many university programs or for their preparation thereof (Scott *et al*, 2007). Apart from performance in mathematics and science, literacy was a further area of concern in the school education sector.

In the Grades 3 and 6 systemic evaluations in the years 2001 and 2007 respectively, the average percentage scores achieved for the learners who undertook the assessment remained below 39% (DoE, 2009a; 2009b). Further reporting on the Western Cape Education Department 2002 and 2003 provincial study (Grant, 2009b) aimed at determining learner pass rates for literacy, indicated that only 32% of the 2002 Grade 3 learners in the province were reading at a Grade 3 level, whilst only 35% of the 2003 Grade 6 learners passed the literacy test. The TIMSS (Reddy, 2006a; 2004), the DoE, and the Western Cape Education Department provincial literacy skills assessments (DoE, 2009a; 2009b) indicate that a large proportion of learners went on to further grades lacking basic numeracy and literacy skills.

It is arguable that those learners who eventually entered higher education on low literacy scores did so with severe academic literacy deficiencies. According to Breier *et al* (2007), subtle barriers in higher education, such as language and literacy challenges, poor learning styles, inadequate problem-solving skills and lack of computer skills, lead to later academic problems at university. Poor performance in the primary and secondary years of schooling thus impacts on the learners' output in the school leaving Senior Certificate examinations as well as in their chances of entering and persisting in higher education.

Entrance into higher education, as highlighted in the previous chapter, was dependent on the final assessment in Grade 12 – in the case of the 2007 cohort of students it was the Senior Certificate examination. The following section provides insight into this examination, followed by a discussion of the Grade 12 performance scores in relation to race, so as to explain access to university.

3.2.2.1. The South African Senior Certificate examination

The Senior Certificate examination was the school exit examination at the time of the study. The Senior Certificate examination was conducted at the end of Grade 12¹¹, the

¹¹ Students in the cohort who completed their school leaving examination prior to 2005 exited in *standard ten*, an equivalent to the *Grade 12* discussed throughout the thesis.

school completion year. When students passed this examination, they were awarded a Senior Certificate. The Senior Certificate, commonly known as ‘the matric’, was based on the NATED (National Assembly Training and Education Department) 550 curricula (Grussendorff *et al*, 2010).

The Senior Certificate examination was the primary indicator of the level of readiness of learners for higher education. This examination indicated the learner’s academic potential, including literacy skills in terms of academic reading and writing (Wilson-Strydom, 2010; Hendricks, 2008; Breier *et al*, 2007) and cognitive competence (Bloch, 2009a; 2009b; Christie, 2008). It further reflected their attitudes, enculturation and orientation towards further education (Breier *et al*, 2007; Scott *et al*, 2007).

A pass in this examination was either with a Senior Certificate with Endorsement or a basic Senior Certificate pass. The former may be described as a ‘passport’ to university education (SAT Monitor, 2010; Scott *et al*, 2007; Republic of South Africa, 2000b) because it was a statutory requirement for entrance to higher education (Republic of South Africa, 2000b). Therefore passing the basic Senior Certificate examination did not imply that a learner would secure access to higher education – what mattered was attainment of *Senior Certificate Endorsement*. Although, university entrance required a Senior Certificate with Endorsement, entrance into the Diploma in Oral Health was one of the few programs that admitted candidates with a Senior Certificate. However, internal faculty selection processes gave preference to students with higher educational achievements and Endorsements.

In this Senior Certificate examination, there were two levels at which the subjects may have been written: Higher Grade (HG) and Standard Grade (SG)¹² (Republic of South Africa, 2000b). A Senior Certificate Endorsement was widely regarded as a proxy for quality as the learner was required to study at least four subjects on the Higher Grade (Johnson, 2007; Republic of South Africa, 2000b).

¹² The matric exams comprised subjects that could be written in Higher Grade or Standard Grade. The difference was that the Standard Grade was pitched at a more basic level in terms of the depth of content and the level of insight required in order to pass the examination.

At a systemic level, Reddy (2006b: xiii) argues that the Senior Certificate pass rates reflected the “health of the provincial and national education system”, while for the individual learner the examination played a major role in shaping his or her life trajectory. However, closer examination showed that these school leaving results were still characterized by implicit racial and social inequalities (Taylor *et al*, 2011; van der Berg *et al*, 2011). These inequalities are evident in Taylor *et al*'s study (2011) that tracked school learners who participated in TIMSS in 2002 as Grade 8 learners until they completed Grade 12 in 2006 or 2007 (depending when they completed Grade 12). Their study showed that ex-House of Assembly schools (ex-Model C schools for white learners) and ex-House of Delegates schools (for Indian learners) performed better than ex-DET schools (for black African learners) or House of Representative schools (for coloured learners) in both the 2006 and 2007 Senior Certificate examinations. These patterns showed consistency in later reporting (SAIRR, 2011). For example, in the 2009 examination children attending former Model C schools achieved a 94% Senior Certificate pass rate, in comparison with an overall pass rate of 60% across the country (SAIRR, 2011). These higher pass rates were attributed to the ex-Model C schools being better resourced, better managed, and having stronger community and parental affiliation than *fully* State-funded schools (SAIRR, 2011; Taylor *et al*, 2011). Further analysis of the Senior Certificate pass rates are illustrated below.

3.2.2.2. The Senior Certificate examination pass rates

The Senior Certificate pass rates are crucial to understanding access to higher education in South Africa and, in particular, access to the university where the current study was conducted. The Senior Certificate pass rates are presented in relation to race because inequalities associated with race will be seminal to explaining academic performance in this current study.

In Table 3.1, the *overall* Senior Certificate pass and Senior Certificate Endorsement rates for the period 1994-2007 are presented, showing the rates from the year of democratization to 2007. This table shows the low pass rates generally attained in the Senior Certificate examinations for several years after democracy. Democracy in South

Africa allowed for the reformation of the policies that had restricted learners' access to better quality schools in the apartheid era yet increased access did not result in significant increases in pass rates.

Table 3.1: Senior Certificate pass and Endorsement rates, 1994-2007 (Myburgh, 2007a:1, SAIRR, 2008; DoE, 2007:28; DoE, 2006:27)

Year	Candidates	Overall Pass	Overall %	With Endorsement	Endorsement %
1994	495408	287343	58.0%	88497	17.9%
1995	531453	283742	53.4%	78821	14.8%
1996	518225	279487	53.9%	80015	15.4%
1997	559233	264705	47.3%	70127	12.5%
1998	561029	279356	49.8%	71773	12.8%
1999	511159	249831	48.9%	63725	12.5%
2000	489941	283294	57.8%	67707	13.8%
2001	449371	277206	61.7%	68626	15.3%
2002	443821	305774	68.9%	75048	16.9%
2003	440821	322492	73.2%	82010	18.6%
2004	467985	330717	70.7%	85117	18.2%
2005	508363	347184	68.3%	86531	17.0%
2006	528525	351503	66.5%	85830	16.2%
2007	591251	386051	65.3%	89378	15.1%

Table 3.1 shows the number of learners who wrote the Senior Certificate examination, indicating the marginal increases and decreases in the overall numbers of candidates taking the examination. After 1994, there was an upward trend in the number of learners sitting for the Senior Certificate Examination until 1998 when this trend started to decline (1999-2004). In addition, there were marginal upward and downward trends of the Senior Certificate pass rates during the period 1994-2007. From 1994 to 2007, however, there was a definite increase in the Senior Certificate pass rate, from 58% to 65.3%. Significantly, attainment of the Senior Certificate Endorsement remained below 20% during the period under discussion. Between 2003 and 2007 there was a general decline (from 18.6% to 15.1%) in pass rates with Endorsement. The salient points of this table are summarized in Figure 3.1 below.

Figure 3.1 below presents the overall Senior Certificate pass and Endorsement rates, illustrating the relationship between the two for the period 2000-2006 (Myburgh, 2007a:1; DoE, 2006:27; 2005b:27). This period is significant because it marked the year, 2006 that the majority (50%) of the cohort was in their final year at school. It also marked the years (2000 and 2005) that the remaining 50% of the cohort were in their final year at school. Hence the statistics are encompassing of students in this cohort as well.

Figure 3.1: Senior Certificate and Senior Certificate Endorsement pass rates, 2000-2006 in percentage (drawn from Myburgh, 2007a:1; DoE, 2006:27; DoE, 2005a, 2005b)

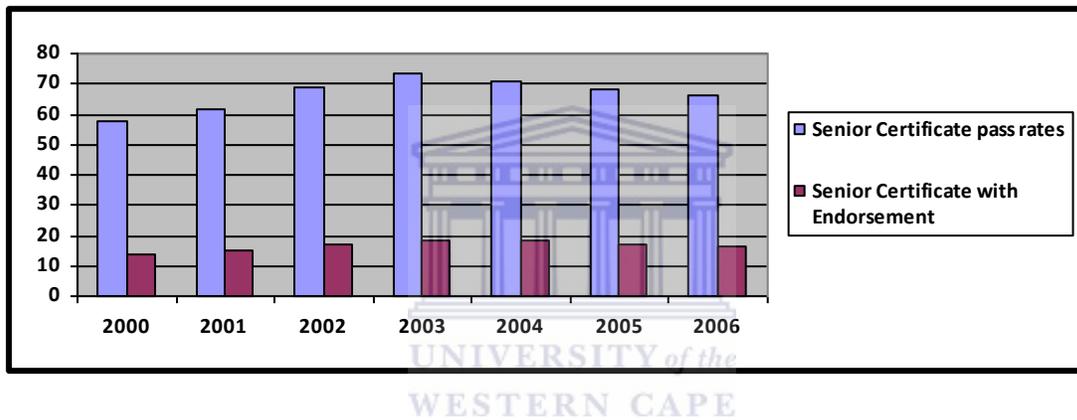


Figure 3.1 shows that the Senior Certificate Endorsement rates were consistently low compared to the overall pass rates for the period 2000-2006. This small proportion indicates the small pool of candidates who were eligible for university entry during the years indicated in Figure 3.1. The 2006 performance is similar to the previous years but shows a decline from 2003 both in terms of overall Senior Certificate pass rates and Endorsement rates.

Table 3.2 below illustrates the overall pass and Endorsement rates across the different race groups, using the 2006 cohort as an example.

Table 3.2: The 2006 Senior Certificate results by race (drawn from Myburgh, 2007b:1*)

**figures of Myburgh rounded off to first decimal place*

Overall Pass				Senior Certificate Endorsement	
Group	Wrote	Passed	% group	Endorsement	% group
Black African	442800	272890	61.6%	51180	11.6%
Coloured	34417	28181	81.9%	5902	17.1%
White	42483	41268	97.1%	22018	51.8%
Indian/Asian	10988	10090	91.8%	6013	54.7%
Unknown	2573	2244	87.2%	1073	41.7%
Government	533261	354673	66.5%	86186	16.2%
Total with private schools	540296	361588	66.9%	91730	17.0%

Table 3.2 shows the overall Senior Certificate pass rate at government funded schools in 2006 as 66.5%. Of this cohort, only 16.2% attained a Senior Certificate Endorsement. The cohort of black African learners who made up the highest proportion of the South African population (StatsSA, 2001) was also the highest proportion of the candidates who wrote the examination (83%). However, black African learners obtained an overall pass rate of 61.6%, of which only 11.6% attained a Senior Certificate Endorsement. The coloured learners accounted for 6.5% of the total learners who wrote the examination. The pass rate for coloured learners was 81.9%, with only 17.1% attaining a Senior Certificate Endorsement. The white learners accounted for 8% of the total who wrote. They obtained a pass rate of 97.1% and a Senior Certificate Endorsement rate of 51.8%. The Indian/Asian learners accounted for 2.1% of the total. They attained a 91.8% Senior Certificate Endorsement rate, with 54.7% attaining an Endorsement.

As noted from Table 3.2 above, the black African learners obtained the lowest rates of Endorsement amongst the four race groups. These low pass rates restricted their opportunities of access to university. The table also reflected the relationship between race and school performance – race in terms of access to opportunity such as good schooling has been argued as having a seminal influence in the differential Senior Certificate pass rates (van der Berg, 2007; Fiske & Ladd, 2005). These low pass rates are indicative of the slow transformation taking place in the socio-economic conditions of a

large proportion of South African households who do not have access to basic resources or to quality schooling (van der Berg *et al*, 2011; Fiske & Ladd, 2005).

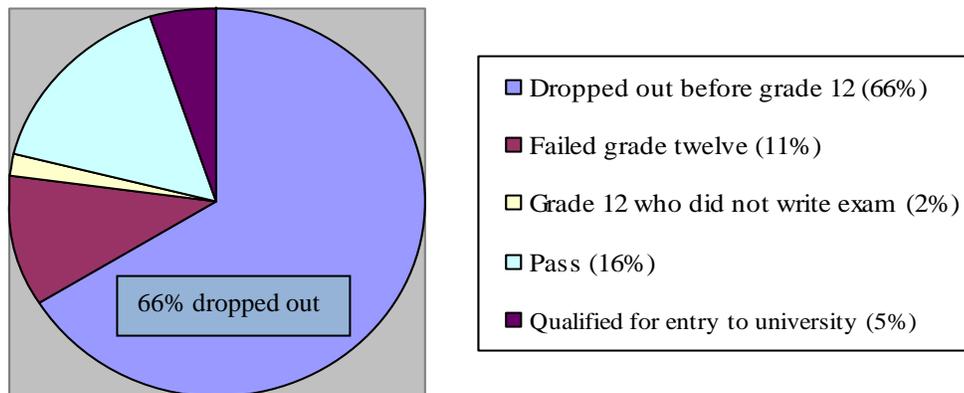
Scott *et al* (2007), reflecting on the 2006 results, argued that the Senior Certificate results as published gave an inaccurate picture of the throughput in the schooling system. Later reports echoed these claims – the results presented over the years were considered to obscure the reality of the education crisis in the country (Ramphela, 2009; SAIRR, 2009). The results were generally based on the number of candidates who wrote the examination (see Table 3.2). They were not based on the *total* cohort that had entered in Grade 1. The learners who were repeating or who had dropped out of school before reaching Grade 12 were not factored in (Ramphela, 2009; Cronje, 2009; SAIRR, 2009). If they had been taken into account, it was argued that the picture would have looked quite different (Ramphela, 2009; Scott *et al*, 2007). The following table 3.3 shows the enrolment rates for Grade 1 learners and their completion rates twelve years later in order to highlight the issue of drop out and low throughput in schools.

Table 3.3: Grade 1 enrolments in relation to Grade 12 completions (Pandor, 2006b:1)

Cohort for the period	Grade 1	Grade 12	% completed Grade 12
1991 – 2002	1 508 269	305 774	20
1992 – 2003	1 551 097	322 492	21
1993 – 2004	1 554 664	330 717	21
1994 – 2005	1 588 591	347 184	22

Table 3.3 shows that Grade 12 learners made up between 20% and 22% of each of the four cohorts tracked over a twelve-year period. The throughput results are shown to be similar across the four cohorts. To illustrate the breakdown of these results further, Scott *et al* (2007) analysed the 2006 Senior Certificate cohort, presenting the pass, drop-out and failure rates as a proportion of the total cohort entering Grade 1 in 1995 (illustrated in Figure 3.2).

Figure 3.2: Pass, drop-out and failure rates for the 2006 school cohort who entered Grade 1 in 1995 (drawn from data in Scott *et al*, 2007:33)



According to Scott *et al* (2007), over 1.6 million learners in the 2006 cohort had entered Grade 1 in 1995. Before reaching Grade 12, 66% of learners (1 111 320) had dropped out. This statistic means that almost two-thirds of those learners who started school in 1995 did not make it through to Grade 12 in 2006. In considering the enrolments for Grade 1 and subsequent failure and drop-out rates, the 2006 throughput would be significantly lower at 21.1% than at 66.5% as portrayed. The 66% calculation was based on the number of learners who wrote the examination and not on the original cohort that began Grade 1 twelve years prior. On the basis of this scenario, only 5% of the 1995 Grade 1 cohort (85 830) obtained a Senior Certificate with Endorsement (Scott *et al*, 2007).

Further evidence of this education crisis is reported from a later cohort (2007) and is drawn on to emphasize this “crisis” (Ramphela, 2009) in terms of the persistent low pass rates for the minimum time taken for school completion (Cronje, 2009; SAIRR, 2009; Ramphela, 2009). The pass rates of the cohort of Grade 1 learners from the 1997 year-group were tracked until 2008. Of the 1.1 million learners who started Grade 1 in 1997, 82% (920 716) were still in the system by Grade 11 in 2007 (Ramphela, 2009). However, in 2008 only 53.6% (589 912 learners) wrote the Senior Certificate examination. This means that 330 804 learners dropped out between 2007 and 2008. Of the group that took the examination, only 62.6% passed, which actually translates to 36.2% of the original

cohort. These statistics raised a concern over the large percentage of learners (63.8%) from this cohort who either dropped out or were repeating academic years of schooling without reaching their Grade 12 year in the expected time (SAIRR, 2009).

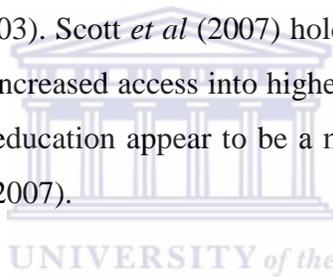
Ramphele (2009:19) argues that, if from the 2007 cohort of 1.1 million learners, only (53%) 589 912 learners did well enough to proceed to Grade 12 in 2008, “what has happened to the rest of our children?” Focusing attention on the actual school completion rates, Cronje (2009:1) challenges that when the Minister of Education addressed the nation about the Senior Certificate pass rate for the school system, she could not “simply write-off 400 000 pupils” who missed the opportunity to write their Grade 12 examinations because they performed poorly. The school performance patterns that have been highlighted suggests that the high drop out and poor performance are not unique in any one group of matriculants but are illustrative of the Senior Certificate results yearly (Ramphele, 2013; 2009; Scott *et al*, 2007). Scott *et al* (2007) in framing the problem of performance amongst black and coloured learners, argue that dropping out begins at school – this is even before any attempt is made to access higher education.

Closer inspection of these results reveals another dimension to the symbols attained. Breier *et al* (2007) highlight that, between 2006 and 2007, there was evidence of improvement in the Senior Certificate results in terms of sharp increases in A, B and C aggregates. These authors contend that at the University of the Western Cape, the site of the study, performance grades were still relatively low, particularly among black students, even after entering with these so called higher scores (Breier *et al*, 2007). Students entering the institution on these better Grades still did not perform at the expected minimum level of 50%, which is the pass mark for a module in higher education (Breier *et al*, 2007). This mismatch between school grades and performance in higher education suggests that the difference is probably the result of *inflation* of the Senior Certificate results (Nel & Kistner, 2009; Ramphele, 2009; Scott *et al*, 2007).

The perceived grade inflation in the Senior Certificate results is reflected in empirical studies at the University of Stellenbosch, a neighbouring institution to the University of

the Western Cape. Nel and Kistner (2009), in their study, highlighted marked increases in school grade aggregates in the period between 2001 and 2007. In addition, they noted a gap of between 22% and 26% in the performance of students between Grade 12 and first year university, suggesting a trend towards school grade inflation (Nel & Kistner, 2009).

At the University of Cape Town, similar patterns of grade inflation have been reported (Yeld & Hendry, 2002). Senior Certificate results presented a 31% increase in A and B aggregate intervals for students entering for the first time in the period between 1997 and 2002. This performance trend was also reported by Yeld (2003), who indicated that the institution under scrutiny in her study experienced a steady rise in the number of A and B aggregate students, and a decline in D and E aggregate students. However, the distribution of scores from the admissions testing for this institution did not show a similar upward trend (Yeld, 2003). Scott *et al* (2007) hold that the inflation of the Senior Certificate results allowed for increased access into higher education programs. However the results achieved in higher education appear to be a mismatch to the students' actual academic abilities (Scott *et al*, 2007).



The following section turns attention to the factors associated with, and the implications of poor performance in the Senior Certificate examinations.

3.2.2.3. Factors associated with, and the implications of, poor performance

In the previous chapter, perpetuation of socio-economic inequalities from the apartheid period were identified as key aspects influencing learner preparation and school performance (Bloch, 2009a; 2009b; Scott *et al*, 2007; van der Berg *et al*, 2002) and their university access opportunities (Nel & Kistner, 2009; Letseka & Maile, 2008). The inequities inherited from apartheid policies also informed the distribution of unequal educational opportunities (Bloch, 2009a; 2009b; van der Berg *et al*, 2004; Yeld, 2003). However, the privileges and disadvantages that are associated with race and social class, in particular access to quality schooling and schooling preparation (Bloch, 2009a; 2009b; Cosser, 2009; Khwesa, 2009; Letseka & Maile, 2008; Johnson, 2007; Scott *et al*, 2007)

and socialization at home regarding education, remained prominent (Khwesa, 2009; Letseka & Maile, 2008).

Studies indicate that challenges such as poverty and crime in many low income environments do not help school-going children to fully engage in school education – nor allow them to reach their Senior Certificate year, aside from their higher educational goals (Patel, 2011; Letseka & Maile, 2008; Johnson, 2007). Johnson's (2007) study provided empirical insight for the year 2004 into the challenges of access to higher education, indicating that in low socio-economic areas there was generally a scarcity of potential university candidates. His research involved his case study school which he compared to two other schools in the Cape Flats which neighbour onto the University of the Western Cape. His results revealed that for all three schools only 28 out of 1 571 (2%) matriculants received a Senior Certificate with Endorsement within a five-year period (2000-2005). His case study school in particular had a 0% pass with Endorsement. The study showed that an average of 98% of learners in these areas was not meeting the university admissions criteria each year.



Although Johnson's (2007) study focused on a microcosm of a low socio-economic area and school, it presents a picture which is not exclusive to the Cape Flats but one which is common to many of the working-class or township areas which are made up largely of black African informal settlements (Kallaway, 2005). These areas generally do not contribute learners with Senior Certificate Endorsements to higher education. Studies also indicate that the majority of learners from disadvantaged backgrounds who do eventually enroll at university, do so under challenging circumstances which include poverty, crime, lack of basic essentials and vandalized schools (Johnson, 2005; Kallaway, 2005). As a result of these circumstances, they are not adequately prepared to manage the demands of higher education. The drop-out rate, for example, has been attributed to several of these shortcomings (Beck, 2011; Letseka & Maile, 2008; Johnson, 2007; Scott *et al*, 2007). A significant number of students from these backgrounds lack skills such as literacy and numeracy to expedite their entry into, and performance in, higher education and so, experience university as challenging.

The expectation at university level is of a learner who is capable of independent, unsupervised, and self-motivated learning (Scott *et al*, 2007; van der Berg, 2002). This assumes that certain approaches to learning, knowledge and skills have been developed through the schooling experience (Scott *et al*, 2007; van der Berg, 2002). However, the reality for many students who enter higher education is that these competences are often not in place (McMillan, 2005a). Literacy shortcomings have been identified as major causes for under-achievement in the Senior Certificate year (Taylor *et al*, 2011; Grant, 2009a; 2009b) and consequently impacts on performance at university (Wilson-Strydom, 2010; Scott *et al*, 2007, McMillan, 2005a).

The following section focuses on higher education access and success through measures of the participation and the throughput rates across the higher education sector. Understanding access and throughput will allow for insights into the performance patterns of the different race groups against the backdrop of race and social class and in so doing frame a context for understanding performance in the research cohort.

3.2.3. Participation rates in the higher education sector in South Africa

The previous chapter portrayed a conceptual understanding of access to higher education in South Africa. This section in the current chapter describes empirical measures of the participation and graduation rates across the universities in the country for the period 1993-2007 (CHE, 2009; Scott *et al*, 2007). As highlighted previously, the South African higher education system can be characterized as a low-participation and high-attrition system (Fisher, 2011). The following tables and figures present gross participation rates according to race groups. These tables and figures emphasize the role race/social class plays on access to higher education.

Participation is measured using the gross participation rates or gross enrolment ratio (GER) measured by taking the total higher education enrolment and expressing it as a percentage of the general population in the 20-24 year age group (CHE, 2009; Scott *et al*, 2007). Table 3.4 illustrates the higher education participation rate based on race.

Table 3.4: Gross higher education participation rates (1993-2007) indicated as a proportion of the 20-24 year-olds in the country (Drawn from CHE, 2009: 20; Scott *et al*, 2007:10; DoE, 2008: 36)

YEAR	AFRICAN	COLOURED	INDIAN	WHITE	OVERALL
1993	9 %	13 %	40 %	70 %	17 %
2000	13 %	9 %	39 %	47 %	16 %
2005	12 %	12 %	51 %	60 %	16 %
2007	12 %	12 %	43 %	54 %	16 %

Table 3.4 indicates an overall participation rate of 16% across all higher education institutions in the country, as well as the proportion of each race group participating in higher education (Scott *et al*, 2007). The lowest rates of participation were from the black African and coloured population groups. These statistics indicate that as a proportion of the total South African population, black African students continue to be under-represented in higher education (SAT Monitor, 2010; Lemmens, 2010; Letseka & Maile, 2008; Scott *et al*, 2007). This under-representation means that, although black African young people in the 20-24 year age group made up 79% of the total South African population at the time of the study, only 12% were enrolled in higher education – the lowest in comparison to other race groups in the country (Scott *et al*, 2007).

From Table 3.4, it can be ascertained that the overall participation rates remained consistent at 16% after the official termination of the apartheid policy in 1994 and over a 14-year period (between 1993 and 2004). For white and Indian students the patterns show a decline in participation rates between 2000 and 2007. The causes of the erratic decline or “white flight” (CHE, 2010: 211) has not been explained but possible explanations are that the apparently so called absent white students may have entered the work force, left the country, or enrolled in the growing private higher education sector (CHE, 2010).

The differences in participation rates in higher education for the four race groups in the period 1993-2007 were perhaps attributed to the standard of the endorsements, that is, the level of aggregates or marks attained. Although black African learners made up the largest proportion of Grade 12 candidates taking the examination, and they achieved the greatest number of Senior Certificate Endorsement passes (see Table 3.2), they were still under-represented in high education (see Table 3.4).

Furthermore, participation is affected if students have not met university or faculty-specific entrance requirements, even though they may have attained the minimum entrance requirements specific to faculties (Wilson-Strydom, 2010). This situation applied to institutions and faculties using the *point scoring system* to rank the students according to their Senior Certificate achievement (UWC, 2003a). In this instance, students may have met the minimum entrance requirements but they were excluded because their Senior Certificate subject marks impacted on the points required for entrance. This point scoring system allocates points against school Senior Certificate subjects undertaken (UWC, 2003a) (refer to Appendix 1: point scoring table). The total of these points would indicate eligibility for entrance into the different universities, faculties or programs¹³.

Given that the pool of eligible students with the highest matriculation scores was racially disproportionate and that it was from this small pool that institutions across South Africa had to select their students, participation within faculties becomes significant. Since this pool is shared across all the higher education institutions in South Africa, specific faculties and their programs also compete to attract the best candidates. A two-year diploma program such as oral health would have therefore selected students from the lower percentile of this pool. Although for the diploma program in oral health an Endorsement was not a criteria, candidates with Senior Certificate Endorsement was given preference for enrolment. In this way, the oral health program competed against other faculties for candidates with Endorsement and may account for some of the reasons

¹³ The points are benchmarked as different from faculty to faculty and institution to institution, depending on the admission policies of the institutions concerned.

why the oral health program frequently did not meet their target enrolments, as will be highlighted later in the chapter.

Other reasons for the low participation rates, as noted previously also related to the social backgrounds of students. These include low-quality schooling which under-prepared learners to pursue higher education, low retention rates at school, cost of higher education, the learner's own aspirations and the extent to which higher education was valued and promoted in the family and communities (Scott *et al*, 2007).

In the event of students from such backgrounds gaining entry to university it is likely that their pre-entry experiences and characteristics would have had a role to play in the poor graduation rates in higher education. Although students participating in higher education made up the top decile of their race groups in terms of achieved school performance (Scott *et al*, 2007), evidence of poor performance and high attrition rates in higher education suggests that still some students were under-prepared (Scott *et al*, 2007). Thus past inequalities are argued to be reflected in graduation rates.

Given that the research cohort is also part of this broader context of higher education, understanding the overall graduation rates is important in the current study because it provides further insight into the factors that were associated with these rates, particularly how it played out for different race and social class groups.

3.2.4. Graduation rates in the higher education sector in South Africa

According to the Council for Higher Education (CHE, 2009) and Scott *et al* (2007), the *overall* higher education graduation rate is calculated by the total number of qualifications awarded at an institution and is divided by the number of enrolments for the year. These rates are often used as a proxy for throughput. Table 3.5 provides insight into the graduation rates across the public higher education sector in South Africa for the period 2004-2007. It should be noted that the focus of the current research includes a two year diploma program which is not considered in national higher education statistics as these typically refer to three and four year undergraduate programs.

Table 3.5: Graduation rates at public institutions by field of study (HEMIS, CESM¹⁴) (CHE, 2009:35; DoE, 2009:38)

	Business, Commerce and Management	Human and Social Sciences	Science, Engineering and Technology
2004	12.3%	18.7%	15.0%
2005	13.1%	19.0%	15.9%
2006	13.5%	19.6%	16.3%
2007	13.6%	18.6%	17.0%

Table 3.5 highlights the trends in graduation rates from 2004 to 2007, showing marginal improvement across the years. A more accurate picture of the rate at which students move through academic programs can be obtained using cohort studies that track the number of people in a cohort who graduate after 3, 4 or 5 years. Scott *et al* (2007), in their cohort analysis over the five-year period of 2000-2005 illustrated graduation rates for first-time registrations. Their summary of graduation, retention and drop-out rates is shown in Table 3.6 below.



Table 3.6: South African higher education throughput rates for the 2000 cohort (Scott *et al*, 2007: 12).

Graduated within five years	Still registered after five years	Left without graduating
30%	14%	56%

Table 3.6 highlights the graduation and drop-out rates across the higher education institutions in South Africa using the cohort of the year 2000. This cohort was tracked over a five-year period. The 56% of students who deregistered without graduating did so as a result of voluntary withdrawal or after being excluded from the system as a result of

¹⁴ The Department of Education is responsible for a higher education management information system (HEMIS) which plays a central role in the collection and production of data required for quality assurance. CESM stands for Classification of Educational Subject Matter, a term used in the HEMIS to signal the classification of subject matter in facilitating the recording, reporting and comparing of subject matter, both within institutions and in communications with the national Department of Education.

academic failure (Scott *et al*, 2007:12). Students who graduated within the five-year period were on traditional three- or extended curriculum four-year degree programs. The study further reported on comparisons between black and white race groups in selected programs. Graduation rates over a five-year period for black students were significantly lower than for white students across these programs (Scott *et al*, 2007).

Attrition rates are significant in that they not only highlight the educational level or status of a country but they foreground the presence of multiple factors that have an impact on student success. Several studies confirmed that the lowest rate of higher education achievements was evident among black African and coloured students, in comparison to the achievement rates for white students (Badat, 2010; Letseka & Maile, 2008; Scott *et al*, 2007). Black Africans and coloured students, who had been the most disadvantaged through exclusion by apartheid education policies and legislation, continued to lag behind in higher education success rates (Letseka & Maile, 2008).

Poverty, which is related to race/social class in South Africa, was identified as the factor that had the most significant impact on student persistence and graduation for black African and coloured students in particular (Breier *et al*, 2010, 2009; Scott *et al*, 2007). Letseka and Maile (2008:6) explain that on average 70% of the students surveyed who dropped out of higher education, were in the category “low economic status”. Students from these backgrounds thus entered university from disadvantaged positions because they lacked access to resources like funding and also academic preparation from school that would have enabled them to stay in the system (CHE, 2010).

3.2.5. Conclusion: overview of the South African education context

This section framed a contextual understanding of the South African education system with particular reference to school and higher education performance. Race was shown to be particularly significant in this regard. The following section turns attention to the University of the Western Cape, the context for the current study. It is within this context that the program and the cohort are located. It is important to understand that the University of the Western Cape was shaped by the apartheid legacy, that it was a

historically disadvantaged institution and that race features as significant in terms of access and success at institutional level as well as at program level. The following section offers insight in this regard.

3.3. The University of the Western Cape

3.3.1. Introduction

This section introduces the University of the Western Cape as the research institution in which the Faculty of Dentistry and the oral health program are situated. Embedded in this section and in the next on the Faculty of Dentistry, is a nuanced understanding of the *institutional structure* (signifying demographics, governance and staffing) and *culture* (signifying the social aspects such as atmosphere or ethos, expectations, attitudes and behaviour of students). It is acknowledged that culture is a complex concept. It is only used in this study to delineate the lens through which educational climate is understood. The section begins by framing the university against an apartheid and post-apartheid context. Thereafter, the student admissions policy, student enrolment profile, and enrolment and graduation rates of the university are explicated.



3.3.2. Historical overview

The University of the Western Cape is situated in the historically coloured suburb of Bellville South in the Western Cape Province in South Africa. It was established in 1960 by the apartheid government with the specific intention of providing black higher education and training – specifically for the coloured population (UWC, 2012; CHE, 2010). The university was created under the apartheid government’s plan for separate development, to generate a graduate body which could staff a separate civil service for the coloured community (UWC, 2012; CHE, 2010). The university was politically and socially disadvantaged in several ways, as will be highlighted in the ensuing discussions (Moja & Hayward, 2005; Reddy, 2004).

The university started in a primary school located in Bellville South, Cape Town. It was historically referred to as the “bush college” since it was surrounded by bush-veld at the time of its construction (Peck, 2012:3). This appellation was reinforced by the fact that

the surrounding areas also lacked building infrastructure and recreational facilities (Peck, 2007; Sass, 2005; Reddy, 2004). Situated on the Cape Flats, it was also regarded as geographically disadvantaged because of the high crime rates and gang violence that plagued the neighbouring areas (Sass, 2005). At the time of the study these areas had stabilized and the university had simultaneously demonstrated growth, not only in terms of the infrastructure to the campus, but also in terms of leadership in research and technology (UWC, 2007c).

At the time of the study, the university was still perceived as “historically disadvantaged” (Reddy, 2004: 11) due to the apartheid inequalities that continued to have an impact on its status, material conditions and capacity. The legacy of inequalities and lack of access to large endowments continued to influence the institution in multiple ways (Breier *et al*, 2007). Historically, academic programs that were offered at historically disadvantaged institutions, including at the University of the Western Cape, were based on the assumptions made by the apartheid government about the kinds of work, level of remuneration and the social position that were deemed appropriate for each race group (Moja & Hayward, 2005). Hence in this way, up until the 1970s, the university serviced a separate coloured community, offering programs such as lower-/middle-level positions in schools, the civil service or service positions (UWC, 2012; Breier *et al*, 2007). In the decades following the 1970s, this profile changed to incorporate various other programs, such as mathematics and science (UWC, 2012).

A salient historical feature of the university at its inception was that it was entirely under the control of white staff, with coloured staff given only an advisory or support role (Peck, 2007). The institution remained as such for fifteen years until the appointment of the first black rector in 1975 (UWC, 2012). The teaching staff profiles in all South African higher education institutions during this period, including the University of the Western Cape, were predominantly white lecturers and male (CHE, 2010; Reddy, T., 2004). By 2004 the changing permanent academic staff profile of the University of the Western Cape indicated a diverse complement in which coloured staff made up about 40%, white staff 40%, and Indian and black African staff about 10% of the total

academic staff. Nevertheless, white academics at that point occupied the majority of the senior academic rankings, holding 60% of the ranks of Associate Professor and upwards (CHE, 2010). The following section looks at the profile of students enrolling at the University of the Western Cape.

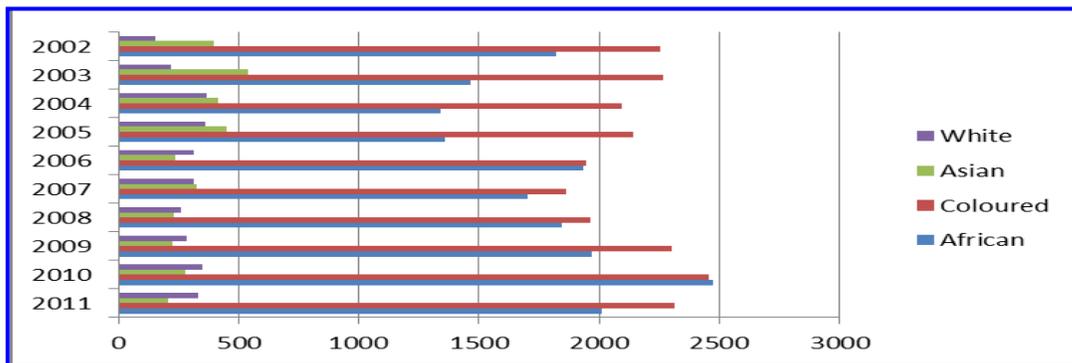
3.3.3. Admission to the university

For the University of the Western Cape, equitable access to university education involves compliance with the admission criteria (UWC, 2007). The general criteria for entrance into the university are based on the Senior Certificate examination. At the time of the study, the university requirement was a minimum average of 50% in the Senior Certificate examination. In addition, programs of study had specific measures of selection. The student had to meet the minimum number of points calculated on the university's points system (refer to Appendix 1: point scoring table). Further, the candidate had to obtain a pass at the required level in each of the subjects specified for the program to which he or she sought admission.

3.3.4. Profile of students enrolling at the University of the Western Cape

At the time of its inception in 1960 the University of the Western Cape registered 166 coloured students. After the first coloured rector was appointed in 1975, the profile of students entering the system changed. Figure 3.3 below shows the raced profile of students enrolled at the University for the period 2002 – 2011.

Figure 3.3: University of the Western Cape enrolment patterns according to race (Morta, 2012)



Between 2000 and 2006, student enrolment increased from 9 675 to 14 838 (CHE, 2010; UWC; 2007c). By 2005, the 14 590 student enrolments were made up predominantly of coloured students (50%) from the Western Cape, followed by black African students (35%), Indian students (10%), and white students (5%) (CHE, 2010; UWC, 2007c). This pattern changed little from 2005 to 2007.

The student profile at the university has been partially shaped by its mission of increasing participation for the populations disadvantaged under apartheid (UWC, 2012). The majority of students enrolling at the university were from the neighbouring areas previously designated for coloured people. Because of the legacy of geographical restrictions imposed under apartheid, the students enrolling were predominantly coloured students (Sass, 2005). Studies of the university have given insight into participation rates and have highlighted that it did not attract students from wealthier backgrounds irrespective of race (Williams, 2012; CHE, 2010). In addition, most of its students were recruited from schools characterized by limited access to resources and low numbers of Senior Certificate Endorsements (CHE, 2010). At the time of the study, the institution's fee structure was also distinctly lower than that of other historically white universities in South Africa (UWC, 2010). This may be attributed to the university's own vision and self-articulated sense of responsibility towards the national imperative of supporting students from underprivileged backgrounds (Peck, 2007). Along with the university's increased enrolment patterns, in particular of black African and coloured students, the emerging issues were those of low retention and graduation rates, low academic achievement and defaulting on payment of fees. The high failure rates were attributed to the growing evidence of unsuitability or under-preparedness of candidates (CHE, 2010; Breier *et al*, 2007).

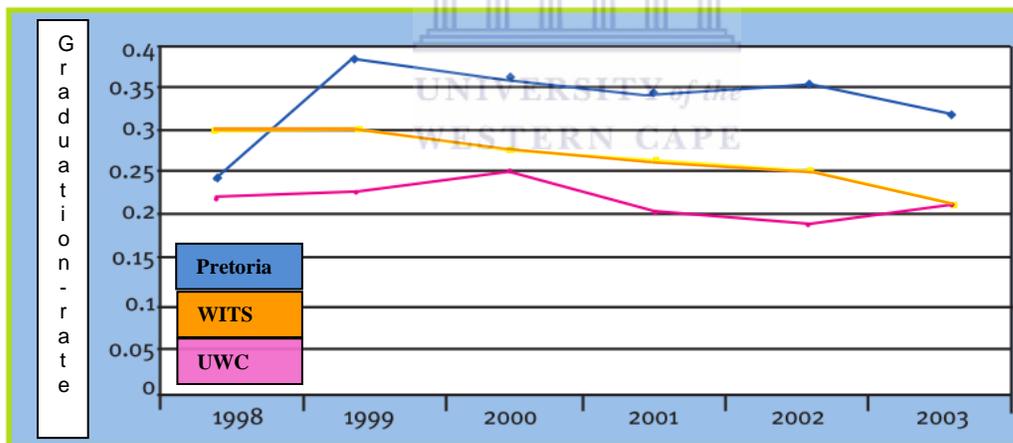
Breier *et al*'s (2007) study of the University of the Western Cape show performance indicators between the years 1999 and 2004, reflecting throughput, which signified that access to higher education did not mean that all students would succeed. By 2004, the institution had put in place criteria to ensure that academically more competent candidates were selected (Breier *et al*, 2007). In the period between Breier *et al*'s study

(2007) and the CHE report of 2010, during which the research cohort were registered in the oral health program, there continued to be a notable decline in throughput rates (CHE, 2010). During this period, an average time of four years or more was taken to complete a three-year undergraduate degree (CHE, 2010). The following section examines the University of the Western Cape graduation rates for the period under study.

3.3.5. The graduation rates at the University of the Western Cape

The University of the Western Cape graduation rates reflects the higher education performance context in historically disadvantaged institutions. Graduation rates at the university have been of concern in that they have remained persistently low over a significant period of time (Letseka & Maile, 2008). Figure 3.4 and Table 3.7 below offer a crude insight into the graduation rates in the University of the Western Cape.

Figure 3.4: Higher education graduation rates by qualifications (CHE, 2010:16)



Drawing on data from Steyn and de Villiers (2006), the Council on Higher Education (2010:16) highlighted the University of the Western Cape graduation rates by headcount of graduations. The graduation rates for the University of the Western Cape (represented by the pink line) remained under 25% between 1998 and 2003. The figure illustrates University of the Western Cape's graduation rates in this period as comparatively lower than two other universities (yellow and blue lines). These two historically white institutions performed consistently better than the University of the Western Cape. While

this measure shows crude rates, it has the benefit of providing some extent of the rate of student success (CHE, 2010).

Figure 3.4 above also gives an indication of the challenges the University of the Western Cape faces with throughput in the context of its historic disadvantage and its focus on historically disadvantaged populations (CHE, 2010; Breier *et al*, 2007). The following table highlights the graduation rates by faculty at the university. It emphasizes the actual graduation figures in relation to the Department of Education targets.

Table 3.7: Graduation rates for 2005 by faculty and degree types (CHE, 2010:26)

		Enrolled	Completed	Promoted	Withdraw	Completion rate %	DoE target rate %
EMS	Faculty overall	3,774	526	2,024	365	13.9	
	General bachelor	2,609	295	1,609	260	11.3	25
	Professional bachelor	426	30	282	61	7.0	20
	UG diploma/certificate	36	10	1	0	27.8	60
Arts	Faculty overall	2,752	529	1,182	169	19.2	
	General bachelor	1,904	346	879	118	18.2	25
	Professional bachelor	417	17	245	49	4.1	20
	UG diploma/certificate	5	4	0	0	80.0	60
Science	Faculty overall	1,997	403	772	64	20.2	
	General bachelor	1,103	162	549	58	14.7	25
	Professional bachelor	410	81	217	6	19.8	20

Table 3.7 shows the institutional completion rate, calculated by comparing student completion of programs to the enrolled headcount and broken down for the Faculties of Science, Arts and EMS (Economic and Management Sciences) (CHE, 2010). Drawing on data from Morta (2006), the Council on Higher Education (2010) presented these figures to highlight the significant low completion rates across all three faculties. These rates are well below the Department of Education targets, except for the Faculty of Arts undergraduate diploma program.

Several factors have been identified as central to the high attrition and low retention rates of the University of the Western Cape (Breier, 2010; 2009; CHE, 2010; Breier *et al.*,

2007). Socio-economic factors, such as poverty and lack of student preparedness were identified as the primary reasons for the poor performance of the students. These findings were similar to those reported across the country (CHE, 2010). Similar patterns of enrolment and throughput were shown for the oral health program in the Faculty of Dentistry for the period of the study.

3.3.6. Conclusion: the University of the Western Cape

This section introduced the university against an apartheid and post-apartheid background. The discussion was followed by an explanation of the admissions policy and an insight into the profile of students entering the university, as well the graduation rates up to the year 2005. The following section introduces the Faculty of Dentistry and contributes to further understanding of the research context.

3.4. The Faculty of Dentistry

3.4.1. Introduction

The following aspects shaped the faculty's context at the time of the study. The first was the location of the faculty in the University of the Western Cape with its associated history as an apartheid institution. The second was the nature of the faculty as a context following the rationalization of higher education institutions initiated by the National Department of Education (Asmal, 1999). In the section which follows, the Faculty of Dentistry is discussed in relation to these aspects thus providing further insights into the educational climate at the time of the research.

3.4.2. History of the Faculty of Dentistry

According to Professor M.E. Parker (personal communication, August, 2013), the Academic Dean of the Faculty of Dentistry of the University of the Western Cape, the research faculty started in 1974. It was originally located ten kilometers from the main campus in an oral health centre that also housed the University of Stellenbosch, School of Dentistry which was a historically advantaged white Afrikaans institution. The Faculty of Dentistry of the University of the Western Cape moved to its new premises in Mitchell's Plain in 1992. These premises were adjacent to a medical clinic situated about thirty

kilometers from the University of the Western Cape's main campus. The faculty site remained there until the incorporation mandate in 2004.

After the democratic elections in 1994, the Minister of Education decreed the incorporation or merging of thirty-six institutions into twenty-one as one of the approaches towards a new higher education system that would be “rational and seamless” (Asmal, 1999:11). The aim of the mergers and incorporation legislation was to rationalize programs offered at institutions by building capacity and creating new institutional identities different to the past segregated educational system (CHE, 2009; Jansen 2005, 2004b; Ministry of Education, 2001). As a consequence of a National Department of Education directive, the School of Dentistry of the University of Stellenbosch was incorporated into the Faculty of Dentistry of the University of the Western Cape in January 2004, which since became the largest dental teaching institution in sub-Saharan Africa. According to Professor M.E. Parker (personal communication, August, 2013), in 2004 the Faculty of Dentistry of the University of the Western Cape expanded its site to the oral health centre formerly occupied by the University of Stellenbosch School of Dentistry, but still retained its site in Mitchell's Plain. Since then the Management and approximately 80% of the staff were based at the Tygerberg site in the *new* Faculty of Dentistry of the University of the Western Cape.

Teaching and clinical service rendering occurs predominantly at the Mitchells Plain and Tygerberg sites. Teaching is also conducted on the main campus of University of the Western Cape. In addition there are several oral health care facilities or satellite clinics that are used as platform for teaching and training as well as service rendering to the public.

Although the political restructuring of higher education is not pivotal to this research, the context of the study is the post-incorporation period. While the aim of the discussion is not to examine the impact of the incorporation process, it nevertheless marked a notable change in the educational climate of the Faculty of Dentistry from 2004 because of the increase in diversity from both race and class perspectives.

3.4.3. The post-incorporation institutional structure

In order to understand the post-incorporation institutional structure of the Faculty of Dentistry during the period under study, it is imperative to highlight the institution's student profile prior to, and leading into, the incorporation period. In considering that the staff and student profiles changed, assessing the student cohort in this context is essential, particularly in explaining aspects of alienation and stigmatization among students (Jansen, 2005). The following insights will thus explain the shift in the race profiles of first staff and then students entering the Faculty of Dentistry of the University of the Western Cape post-incorporation.

The teaching staff profile in the faculty prior to the incorporation was predominantly Indian and coloured staff. Post-incorporation and at the time of the study the staff profile was as follows: there were fifty six full-time permanent staff members and forty one staff on a contract basis (UWC, 2011). Contract staff had limited teaching and contact with oral health students compared to full-time permanent staff. Permanent staff had a primary role of teaching (UWC, 2011). According to race profiles, there were 47% white, 36% Indian and 17% coloured lecturers – there were no black lecturers (UWC, 2011).

In terms of the student profiles, as noted earlier, the profile of the students at the University of the Western Cape was predominantly coloured, black African and Indian students. The Faculty of Dentistry had a similar race profile (Lalloo *et al*, 2005) until the incorporation of the School of Dentistry of the University of Stellenbosch. In the School of Dentistry, University of Stellenbosch, the enrolment was predominantly of white students. Since the incorporation, because of the high enrolments of white students from the University of Stellenbosch, there has been an increase in representation of all four race groups at the University of the Western Cape, albeit not in the same proportions as in the population as a whole (Lalloo *et al*, 2005). The following figure 3.5 shows the trends in the race profile of all students enrolling in the first year undergraduate programs for the post-incorporation period in the Faculty of Dentistry at the University of the Western Cape. Highlighting the period from 2006 to 2008, the figure creates a picture of

the race context of the faculty for the time period during which the study cohort entered the oral health program.

Figure 3.5: Enrolments of first-year dentistry and oral health students by race group (2006-2008) (Drawn from UWC, 2011:7-8)

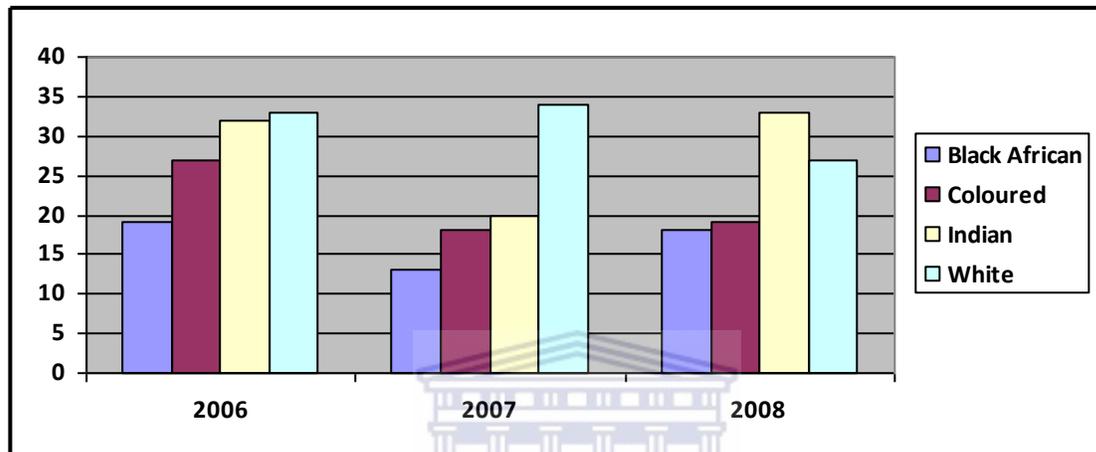


Figure 3.5 shows the trends in first-year enrolments in the dentistry and oral health programs for the period 2006-2008. Overall, black African and coloured student enrolments were fewer than for Indian/Asian and white students. There was a decrease in the black African and coloured enrolments between 2006 and 2008. By 2008, these two race groups made up less than half of the white and Indian/Asian enrolments combined. Thus students entering the oral health program encountered a faculty context in which the black African and coloured students were the minority in the faculty.

The literature on the South African rationalization of higher education suggests that, although the incorporation and merger processes had many positive effects, institutional structures and institutional climates and cultures experienced many unforeseen effects (Mabokela, 2007; Jansen, 2005; Asmal, 2004). Institutions were reported as being reluctant to embrace changes in terms of “establishing new identities, accommodating different institutional cultures and traditions and aligning policies and procedures” (CHE, 2009:8). At the University of Stellenbosch, School of Dentistry, the medium of

instruction had been predominantly Afrikaans (University of Stellenbosch, 2012). Post-incorporation, Afrikaans-speaking lecturers, were required to teach in English, since it was the common medium of instruction at the University of the Western Cape.

3.4.4. Conclusion: the Faculty of Dentistry

This section introduced the Faculty of Dentistry first from a historical perspective and then as a post-incorporation context. The section offered insight into the enrolment patterns in relation to the race in the faculty so as to add contextual insight into the educational climate at the time of the study. The following section introduces the oral health program and the student profile.

3.5. The oral health program

3.5.1. Introduction

This section focuses attention on providing insight into the oral health program and the student profile in the Faculty of Dentistry. These aspects frame an understanding of the climate and context in which the student cohort was educated. As a departure point to this section, a few terms are reiterated. At the University of the Western Cape, the *oral health program* is designed for the education of *oral hygienists*. The term *oral hygienist* is used across South Africa to denote the qualified professional who completed the education and training program specific to this field of *oral hygiene*. Internationally this professional is referred to as a *dental hygienist*. However, in this chapter and the thesis, the term *oral hygienist* is used.

The profession of the oral hygienist is discussed first in terms of its historical inception, and then in terms of the education and training of this professional within the Faculty of Dentistry at the University of the Western Cape. The admission requirements, student enrolment patterns, policies guiding the education of oral health students and the program structure and assessment of competence are then described.

3.5.2. Historical overview of the profession

The oral hygienist is a licensed primary health care professional, oral health educator, and clinician who provides preventive, educational and therapeutic services for the control of oral diseases and the promotion of oral health (SAQA 2006a; 2006b; Gordon & Rayner, 2004). At the time of the study, there were two educational programs for oral hygienists at the University of the Western Cape – the two-year Diploma in Oral Health and the three-year Bachelor in Oral Health.

The education of oral hygienists in South Africa began in the 1970s (Potgieter, 2007). Historically, the profession originated in the United States in the early 1900s with a skills-based education program initiated by a single dentist. This program evolved into a vocation termed “dental hygiene” (Adams, 2004a: 2243). It was developed in response to the increased need for dental services (Adams, 2004a). The ideology behind the education of oral hygienists internationally, and in South Africa specifically, was to develop dental personnel who could assist with specific procedures, thus alleviating the burden of disease treatment on the dentist (Adams, 2004a). Although there are male graduates currently in the field of oral hygiene, in 2007 it was still a female-dominated profession internationally as well as in South Africa (Gordon & Rayner, 2004).

In South Africa, the practice of oral hygienists has been governed since 1969 by legislation of the South African Medical and Dental Board of the Health Professions Council of South Africa (HPCSA) (OHASA, 2004). Regulations governing the education and practice of oral hygienists were formerly under the jurisdiction of the dental fraternity (Adams, 2004a). From the time of the inception of the profession in South Africa and at the time of the study, oral hygienists practiced under the direct supervision of dentists (OHASA, 2004). This means that oral hygienists had to be employed by dentists or dental specialists and that they were directed as to what treatment should be carried out. The profession was also initially managed by dentists in their capacity as representatives on the South African Medical and Dental Council of South Africa. This management was in terms of the education of oral hygienists as well as regarding their practice regulations. By the time of this study, the profession of oral hygienists had

evolved in autonomy and managed its own education and practice regulations through formal governance by the Board for Dental Therapy and Oral Hygiene of the Health Professions Council of South Africa.

The scope of practice of the oral hygienist was initially enacted in 1974 by the Minister of Health and Welfare in the Medical, Dental and Supplementary Health Service Professions Act (Act 56 of 1974). It was extended in 2000 from the traditional preventive functions to include more therapeutic and specialized functions (Gordon, 2012; Republic of South Africa, 2000a) (refer to Appendix 2: Scope of Practice for oral hygienists).

Internationally the evolving of the oral hygienist profession has kindled controversy between them and dentists (McKeown *et al*, 2003; Adams, 2004 a; Adams, 2004 b; Reitz & Jadeja, 2004). Since the inception of the profession, as it continued to refine its role as an important partner in health care delivery, it has faced much opposition particularly from dental professional bodies. The perception was that these professional bodies wished to maintain control over oral hygienists (Adams, 2004a; 2004b; Reitz & Jadeja). The perceived opposition was around the advocacy and demand by oral hygienists for educational and professional improvements, for example, to expand the scope of practice in their field and to attain independent practice from the dentists (Adams, 2004a; 2004b; Reitz & Jadeja, 2004). Much of the controversy between these two professions in America was tied to the belief that oral hygienists would infringe on the dentists' earnings and scope of work, thereby setting the stage for competition for patients (Adams, 2004a; 2004b; Reitz & Jadeja, 2004). This controversial relationship is assumed to have had some impact in the South African context as well.

At the Faculty of Dentistry, these two professions are educated alongside each other. Although no scientific evidence exists that describe tensions between these two professions as highlighted above, the potential for such tensions arguably existed in view of anecdotal evidence. Thus implicit tensions are argued to provide a further context in this study in relation to the educational climate that students in the oral health program at the University of the Western Cape would have had to enter and integrate into.

The following section turns attention to the oral health program, locating it within the broader structures of the Faculty of Dentistry.

3.5.3. Locating the oral health program within the Faculty of Dentistry

During the period of study, the Faculty of Dentistry was the educational institution for dentists, oral hygienists and dental specialists and offered a range of degrees and post-graduate diplomas/degrees. The faculty offered primarily two undergraduate programs – Bachelor of Dental Surgery and Diploma/Bachelor of Oral Health, for the education of dentists and oral hygienists respectively. The oral health program was, and continues to be, managed within the faculty by the Department of Oral Hygiene.

Education in both the dentistry and oral health programs is geared toward patient care, and the prevention and treatment of oral diseases (Adams, 2004a). The differences lie in the broader scope of treatment procedures reserved for dentistry. These two professions were educated independently. However at the time of the study, there were classroom and clinical situations in which both professions were educated together.

Approximately eighty dentistry students and thirty oral health students are selected into the first year programs each year. Both programs used the specific admissions and the point system as entrance criteria. However, for dentistry the criteria and points were bench-marked higher than those for the oral health program. As a result, the dentistry program had students enrolled who came in with higher Senior Certificate examination scores compared to students entering the oral health program. The following section turns attention to the admission criteria for the oral health program, which will highlight the minimum requirements for entrance into both the Diploma and Bachelor programs.

3.5.4. Admission into the oral health program

At the time of the study, the education of oral hygienists was through either a two-year diploma or a three-year degree (UWC, 2007b). Admission requirements for the oral health program were, and continue to be, based on a set of entrance criteria (UWC,

2007a; 2007b) and admission points scores (UWC, 2003a). The minimum admission requirement for the cohort who entered the oral health program in 2007 was the Senior Certificate for the diploma and the Senior Certificate with Endorsement for those students intending to pursue the degree program (UWC, 2007a; 2007b).

However, the entrance requirements were common for both programs. Students were required to have Biology of at least 40% (Higher Grade) or 50% (Standard Grade) (UWC, 2007b). In addition they had to have a First Language Higher Grade, a Second Language Higher Grade and an additional subject on Higher Grade. A pass in Physical Science or Physiology with a minimum of 40% on the Higher Grade or 50% on the Standard Grade was a recommendation. For both programs the overall examination average was benchmarked at a minimum of 50% (UWC, 2007b) (refer to Appendix 3: entrance requirements for the oral health program).

For admission to either of these programs the institution used a weighted system for calculating points (refer to Appendix 1: point scoring table). As an internal measure, the Faculty of Dentistry benchmarked the points for the two oral health programs as follows: in order to be admitted to the degree program, the student had to have attained a minimum of 27 points, while for the diploma program, a minimum of 23 points was required (refer to Appendix 1: point scoring table). Students with higher scores were generally given preference into the programs. Students who had the appropriate sub-minimum point scores of 27 and over were allowed direct access into the degree program based. However this opportunity was based on their personal choice of either wanting to pursue a degree or to exit with a diploma. Students that did not gain access into the degree still had the option of applying for enrolment for an additional academic year in order to convert their diploma into a bachelor degree in oral health. This selection was based on an internal decision taken by the Faculty after evaluation of the applicants' academic performance over the two years.

The following section details the enrolment patterns in the oral health program.

3.5.5. Enrolment patterns in the oral health program

Given the small Senior Certificate pool and smaller university application pool as highlighted in earlier discussions, fewer than two hundred applications for entry to the oral health program were received each year between 2004 and 2007. The application pool at the time of the study included those students who were in the process of completing their Senior Certificate examination, those students who completed their Senior Certificate examination prior to those in Grade 12, and international students. The international students were predominantly from the Southern African Development Countries (SADC)¹⁵ which was included as a small proportion in the enrolments.

The target enrollment of thirty students in the first-year program was allocated to *new* students to the program and excluded those who had failed and who had repeated the first year. The faculty selected the best candidates for the program, but endeavored to ensure representation from the four race groups, as well as the SADC applicants. However, it was not every year that the thirty seats were filled with the best candidates from the pool. This shortfall was the result of candidates applying for the program without the appropriate point scores or without having met the school subject pass criteria. The small application pool thus did not always carry sufficient candidates to meet the entry requirements as set by the faculty in order to fill the thirty seats.

On occasions when there were insufficient applicants to choose from, the enrolments for the respective year remained below thirty. While it remains a challenge to explain why there were not sufficient suitable candidates or why students did not accept the offer to study as oral hygienists – possible reasons may include lack of funds for university study (Breier *et al*, 2007), choice of other programs or that the oral health program was not necessarily their first choice of a study program.

¹⁵The international students in the current study were predominantly from the Southern African Development Countries (SADC), i.e., from southern and sub-Saharan Africa. Because South Africa was largely excluded from the rest of the African continent during apartheid, since democracy, South African universities have engaged in an agreement with SADC to enrol students as part of the diversity and access initiatives (Mdepa & Tshiwula, 2012).

Given that enrolment in the oral health program was, and continues to be dependent on a small application pool, the following section looks into the enrolment patterns in the two oral health programs. Furthermore, since university access and social class/race in the South African context are inextricably linked, the enrolment patterns in the oral health program are highlighted in Figure 3.6 below according to race. The figure shows the shifts in the enrolment patterns according to race when the incorporation took place in 2004. From that year onwards, the oral health program showed an increase in representation of the four race groups. This insight is important in understanding the educational climate in terms of the diversity that the study cohort encountered. Figure 3.6 excludes students who failed and were repeating first year as well as those students categorized as *international*. In other words, the figure only includes *new* students and does not include non-South African students, including those selected from the SADC countries.

Figure 3.6: First-year enrolments in the oral health program (2002-2011) (Morta, 2012)

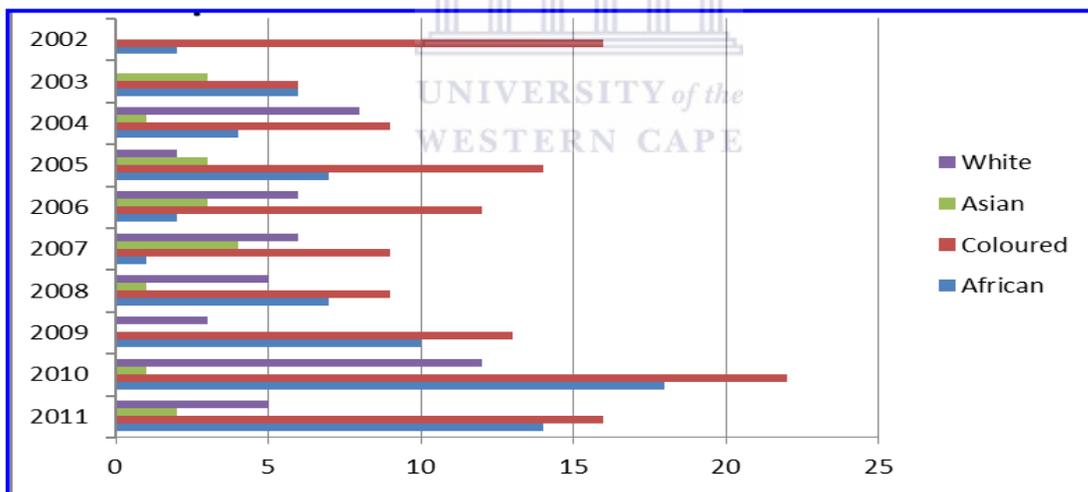


Figure 3.6 shows that coloured and black African students made up the highest proportion of students in each of the first-year enrolments of the oral health program for the period 2002 – 2011. It also shows that the enrolments in 2002 and 2003 comprised of predominantly coloured and black African students. 2003 saw the representation of Indian/Asian students, who had not been represented in 2002. In both these years, there were no enrolments of white students. In 2004, the year after the incorporation of the

historically white Stellenbosch University School of Dentistry, the representation of white students increased. Overall, coloured students remained the largest proportion of enrolments in the program.

The enrolment patterns between 2006 and 2010 revealed the racial make-up of the students in the Department of Oral Hygiene during the period of study (2007-2010). The highest proportion of enrolments was that of coloured students, followed by white students. While the year 2007 showed a small number of black African enrolments, there was a significant increase in subsequent years. Table 3.8 offers a breakdown of the actual numbers for first time entry university enrolments according to race.

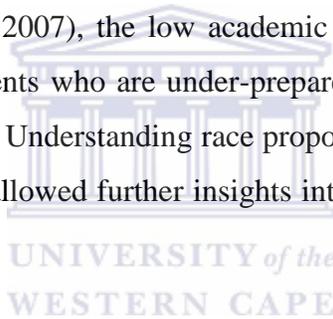
Table 3.8: First-year enrolment rates in the oral health program based on race (2002-2009) (Morta, 2012)

Year	First year enrolments for the composite diploma and degree in oral health								
	Coloured		black African		White		Indian/Asian		Total
	Number	%	Number	%	Number	%	Number	%	Number
2009	13	50	10	38	3	12	0	0	26
2008	9	41	7	32	5	23	1	4	22
2007	10	59	0	0	5	29	2	12	17
2006	12	52	2	9	6	26	3	13	23
2005	14	54	7	27	2	8	3	11	26
2004	9	41	4	18	8	36	1	5	22
2003	6	40	6	40	0	0	3	20	15
2002	6	75	2	25	0	0	0	0	8

Table 3.8 illustrates an increasing trend since 2002 in the numbers of black and coloured students enrolling in the program. These rates exclude students repeating the year as they are regarded as second enrolments. International students are also excluded. Coloured students still made up the largest proportion of enrolments each year in the program. Of

significance are also the enrolments being marked below the maximum intake of thirty students. This picture reinforces the challenge of accessing suitably qualified students for the program.

In an institution with a diverse profile of staff and students, social integration is influenced by issues of *exclusion*, *alienation* and *othering*, as explained in the previous chapter (Reay *et al*, 2010; 2009; Jansen 2009; 2005; Reay, 2006; Hurtado, 1999). Where student populations are diverse in terms of race and social class, the support to which they have access may reflect the kinds of people available to offer such support. In particular, people who are similar to themselves and who may be seen as role models are important sources of support (CHE, 2010). Considering the South African context as one with both increased access opportunities and emerging issues of low retention and graduation rates (Breier *et al*, 2007), the low academic achievement, and psychosocial adjustment difficulties of students who are under-prepared may translate into alienation and isolation (Williams, 2012). Understanding race proportions, since they share a nested relationship with social class, allowed further insights into the educational climate of the research setting.



In the next section, the expected exit level outcomes and the structure of the curricula for the oral health students are discussed.

3.5.6. Expected exit level outcomes for students in the oral health program

The curriculum was structured around a set of competences that the oral hygienist needed to acquire. The purpose of the qualification, as described by the Professional Board for Dental Therapy and Oral Hygiene of the Health Professions Council of South Africa, is to ensure that “the oral hygienist will be trained as a public health professional, health promoter, clinician and researcher to contribute to the promotion of oral health at an individual and population level” (SAQA, 2006a:1; 2006b:1). The primary focus of the oral hygienist is on promotion and prevention that is in line with national need (Bhayat, 2006) and with international best oral health care practice (UWC, 2008a). The oral hygienist offers care in primary health care facilities, hospitals and institutions, such as,

homes for the aged and for children with special needs and schools (UWC, 2008a; SAQA2006a; 2006b).

Several core functions were outlined in the documentation pertinent to the period of study for the profession of oral hygienists. These core functions included all the clinical procedures that a qualified oral hygienist was allowed to perform and which were outlined in the scope of practice (Republic of South Africa, 2000a) (refer to Appendix 2: Scope of Practice for oral hygienists). Competence in these core functions was assumed to be demonstrated through attainment of specific exit outcomes. These were spelt out in the South African Qualifications Authority Exit Outcome documents (SAQA, 2006a; 2006b) (refer to Appendices 4 and 5: SAQA exit outcomes) and were specific to the registered degree and diploma programs in the period under study. These documents addressed the following aspects of competence. The qualifying student should be able to:

- function legally and ethically in the oral healthcare environment within the relevant scope of practice
- apply management skills and universal precautions to maintain standards of health and safety of the oral health care environment
- promote oral health and prevent oral diseases in accordance with the relevant scope of practice
- apply the processes of assessment, planning, intervention and evaluation in all aspects of practice
- demonstrate professional responsibility through interaction with patients, community and peers
- actively partake in research development that would allow for an evidence-based approach to care in addition to contributing to the body of evidence in the discipline
- demonstrate an appropriate level of competence to deal with complex issues systematically both as an independent hygienist and within a multidisciplinary approach under the jurisdiction and guidelines of the healthcare system (SAQA, 2006a; 2006b).

These South African Qualifications Authority Exit Outcome documents cited (SAQA, 2006a; 2006b) also guided curriculum development at South African universities that offered education and training for oral hygienists. They further laid down competence criteria that informed whether a student was at a level ready for graduation as a practitioner. For the detailed documents governing the scope of practice and exit outcomes of the oral hygienist refer to Appendices 2, 4 and 5 respectively. The following sections provide insight into the oral health program.

3.5.7. The oral health program structure at the University of the Western Cape

The oral health curriculum was organized using a building block approach. This approach allowed for new content to be built on foundational knowledge. New content was introduced sequentially, while existing knowledge was also revisited in successive modules/years and integrated with the new understandings (UWC, 2008a). The content of curriculum was structured in modules. Modules were either term-based, semester-based or year-long (refer to Appendix 6: outline of modules in the oral health program).

The oral health program at the time of the study comprised two components, a theoretical and a clinical component. Foundational knowledge preceded the clinical curriculum. In the first semester of the first year, the program focused on basic sciences (e.g. oral anatomy, physiology and the basis of disease processes) and behavioral sciences, before introducing clinical theory, basic pre-clinical practical and instrumentation techniques and treatment of patients in the second semester. The second year was based on a comprehensive and intensive theoretical and clinical approach. The second year program encompassed all further clinically-related competences preparing the student to gain competence in all the procedures defined in the scope of practice of the oral hygienist. The reason for this structure was that students were able to exit the university after this academic year with a diploma and function fully as an oral hygienist in terms of the scope of practice. Although the clinical scope of practice remained the same for the diploma and degree programs, the degree program offered a further dimension of research and advanced knowledge on patient care and the control of disease in both the public and private sectors (UWC, 2008a; SAQA, 2006a; 2006b).

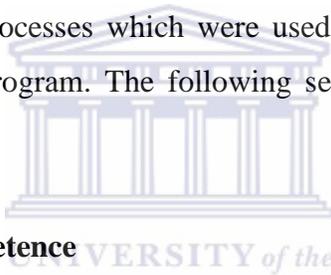
The oral health student was introduced to clinical practice through a series of core modules, preceded by a pre-clinical module. The *Clinical Practice* modules had a core clinical focus from first to second/third year and encompassed aspects such as clinical skills, clinical reasoning, enquiry, research, communication, professionalism and community-based skills, all of which contributed to the competence of a graduate (UWC, 2008a). The pre-clinical module, *Introduction to Clinical Practice*, included basic concepts of clinical practice – for example, infection control, oral examination and history taking, and record keeping were embedded. The *Clinical Practice I* module in the same academic year introduced clinical procedures and clinical problem solving. In this module, students commenced with typodonts (models of the oral cavity, including teeth, gingiva, and the palate) followed by treatment on their peers prior to treating patients. *Clinical Practice II* in the second year contributed to further skills development and served to refine first-year skills. Further specialized procedures or discipline-specific clinical functions were taught in dedicated modules by experts in specific disciplines, for example, the taking of radiographs was taught in the modules *Radiography I* and *II*.

Clinical experience was gained through the treatment of patients in the clinical environment under the guidance of teaching staff. In this way, opportunities for chair-side teaching and learning were generated. This approach is common in dental settings whereby clinical teachers support students' clinical learning in real-time in the clinical context (McMillan, 2011). Clinical teaching and learning also occurred in an integrated inter-professional context. Students in the oral health program practiced under the guidance and teaching of oral hygienists and dentists. They assisted and also practiced alongside undergraduate and postgraduate dentistry students (for example, when students were placed on rotations in other disciplines such as orthodontics and periodontics). First-year oral health students also assisted senior oral health students when they treated patients. Furthermore oral health students experienced interdisciplinary teaching and learning in modules such as *Interdisciplinary Health Promotion and Health, Development and Primary Health Care* which involved not only dentistry students but students from across the health sciences. In these ways, students in the oral health

program were positioned as members of an inter-professional educational context (UWC, 2008a).

Because students in the oral health program undertook their education in clinical settings where service was also being delivered to the public, students were therefore required to be registered from their first academic year with the Health Professions Council of South Africa. Thus in the oral health program, education was carried out under the guidance of regulations and ethical codes of conduct as defined by the Health Professions Council of South Africa (HPCSA, 2007).

The assessment of competence in oral health is an integral part of teaching and learning in the Faculty of Dentistry. Assessments in the oral health program at the time of study were governed by stringent processes which were used to gauge the competence of a student at each level in the program. The following section discusses this assessment further.



3.5.8. Assessing clinical competence

As highlighted, the oral health program was aligned to specific exit level outcomes listed in the South African Qualifications Authority Exit Outcome documents (SAQA, 2006a; 2006b). Thus all modules in the oral health program were defined by a set of outcomes encompassing the knowledge, skills, and values that needed to be demonstrated as markers of clinical competence (UWC, 2008a; SAQA, 2006a; 2006b). Assessments were used for the purpose of assessing clinical competence and were aligned to these exit outcomes reflected in each module. Assessments contributed to final marks which allowed lecturers to make judgments about the knowledge, skills and attitudes of a competent oral hygienist. These competence markers were recorded as *performance scores* (UWC, 2008a) in the current study and are presented as such.

Assessment at the University of the Western Cape at the time of the study was guided by an institutional policy which defined principles of good assessment practices, policy and procedures (UWC, 2003b). Earning graduate status in oral health was achieved through a

series of theoretical and practical/clinical assessments throughout the two years of the diploma and the three years of the degree program.

Formative and *summative* assessment strategies, which included theory and clinical assessments, determined whether a student was deemed competent – and therefore determined whether the student graduated or not (UWC, 2008a). *Formative* assessments, which were conducted at intermittent periods in modules, were largely used to aid learning through providing feedback on a student's work, and was not necessarily used for grading purposes. Formative assessments also helped students recognize their shortcomings and strengths and served to develop strategies with the clinical teacher aimed at improving their clinical practice (UWC, 2008a). These assessments also allowed staff to reflect on student performance scores and decide whether intervention was necessary at any point in the module. The assessments were thus aimed at enhancing student learning outcomes prior to the final assessments (UWC, 2008a). Examples of these formats of assessments included tests, essay writing, case study analysis, case presentations, clinical work, research projects, group-work activities, making posters and pamphlets, oral presentations, and peer-assessments (UWC, 2008a).

Summative assessments were final assessments. Together with formative assessments, decisions about a student's academic future were made, that is, whether the student was competent or not at a particular level in the program and whether he or she would pass or fail, or graduate (UWC, 2008a). Summative assessment benchmarked the student in terms of the outcomes for a module or for the full program. Examples of strategies used in these assessments included objective structured clinical examinations and clinically and theoretically based tests and examinations. Clinical assessments were not restricted to classroom- or laboratory-based assessments, but included assessments of students as they treated patients (UWC, 2008a). Clinical assessment tools were used to guide continuous assessment of skills, attitudes, behaviour and values in the clinical context.

3.5.9. Conclusion to the section on the oral health program

This section introduced the oral health programs at the University of the Western Cape as context for the education of the research cohort. Insight into the profession of oral hygienists from a historical perspective, its location within the Faculty of Dentistry, student admission requirements, the policy guiding the education of oral hygienists, the faculty approach to the program structure and the assessment of competence further served to frame an understanding of the context within which the cohort was educated.

3.6. Conclusion to Chapter Three: the research context

This chapter described the context of the research. In considering that race, social class and academic performance (in the case of students in the oral health program, competence) was central to the research it was imperative to first draw on the broader South African statistics of school and higher education to frame an understanding of access and success in relation to race and its implicit association with social class. Following these discussions, the chapter then introduced the University of the Western Cape and the Faculty of Dentistry as contexts for the oral health program and cohort. The chapter highlighted the profession of the oral hygienist, the structure of the oral health programs, and the demographic profile of students entering the oral health program. The next chapter presents the methodology used in tracking a particular group of oral health students so as to understand the influence of race and social class and the educational climate in shaping their clinical competence.

CHAPTER FOUR

RESEARCH METHODOLOGY AND STUDY DESIGN

4.1. Introduction

The research is located in the context of higher education and health sciences. The aim of the study was to understand how diversity and the educational climate shaped students' clinical competence. It was a study that required in-depth understanding and interpretation of the context and the participants' perceptions of their educational experiences. This methodology chapter constitutes a map of the study design and will include the following sections: locating the research paradigm, the study design, the research participants, the data collection methods, mechanisms for ensuring rigour, the approach to the data analysis, the role of the researcher as *insider*, and ethical considerations.

4.2. Locating the research paradigm

Not everything that can be counted counts; not everything that counts can be counted (attributed to Einstein in Cameron, 1963:13).

The approach to the methodology in this study was based on a qualitative paradigm. The core purpose of qualitative research, as aptly captured in the quotation above (Cameron, 1963), is particularly to *interpret* the social world (Schensul, 2012). It is about understanding and interpreting the meanings and intentions that underlie everyday human actions (Creswell, 2012; Schurink, 2003; Byrne-Armstrong *et al*, 2001) and how people's lives and experiences are shaped by the social phenomena around them (Ritchie & Lewis, 2003; Patton 2002). Thus, qualitative research is enquiry into particular subject matter in small sample sizes and contexts, rather than a search for generalizations across larger populations (Hitchcock & Hughes, 1995).

Qualitative research also involves theoretical perspectives that guide the research process (Creswell, 2012; Schensul, 2012; Leedy & Ormrod, 2005). In addition it allows for the

conceptualizing of relationships between the phenomena under study (van der Walt & van Rensburg, 2006). Qualitative research usually draws on a theoretical foundation, where it is either embedded in established theoretical perspectives or where the research itself induces theory (Glaser & Straus, 1967).

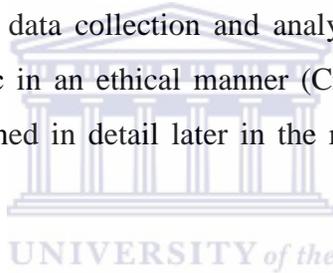
Although qualitative research has been perceived to be the “poor relation” to quantitative research, this perception was based on a lack of understanding of its value, methods and rigour (Dunnion, 2012:1). Most qualitative researchers would agree with Snider’s (2010) position that numbers may provide impressive conclusions however they can also conceal far more than they reveal. Qualitative researchers value rigour in research design, data collection, data analysis, and data interpretation (Gelo *et al*, 2008) (refer to section 4.4. in this chapter). Although qualitative research has been criticized for its rigour, it has been argued that “good qualitative research has equaled, if not exceeded, quantitative research in status, relevance, and methodological rigour” (Davis, 2007:574).

Whilst statistical research is valuable in educational research qualitative research has been recognized as being most suitable. Because educational environments and their participants are made up of complex layers, meanings, interpretations, values and attitudes, understanding these aspects necessitates a thought process that is both deep and interpretive and are generally not experienced with statistical insights (van der Walt & van Rensburg, 2006; Hitchcock & Hughes, 1995). The current study assumed a qualitative approach as appropriate for understanding the type of questions and complex phenomena framed within education research.

Qualitative research operates on the following basic principles: the research occurs in natural settings; it is underpinned by theory; the researcher is positioned as the instrument through which data is channeled; it has numerous data collection methods; the analysis is based on rigour; the process is largely inductive; and the outcome is descriptive (Schensul, 2012). These principles will be discussed in subsequent sections in this chapter. The entire process of conducting qualitative research analysis is based on the researcher’s ability to marshal dedication, effort, time and commitment by immersing

him/herself in the data in order to produce a rich description of the findings (Dunnion, 2012).

Two additional principles of qualitative research are *reflexivity* and *ethical considerations* (Creswell, 2012). Reflexivity is the researcher's conscious evaluation of his/her relationship with the research itself. It is an awareness of the multiple influences she/he has on research processes and on how such processes affects his/her interpretation (Gilgun, 2010). *Reflexivity* enables the researcher to contemplate in terms of what he/she stands to gain from the research and how his/her background informs the interpretation phase (Creswell, 2012). *Ethical consideration* refers to the guiding principles that the researcher conforms to throughout the research process (Creswell, 2012; Merriam, 2002). These ethical considerations include how access was gained and consent was negotiated with the participants, how the data collection and analysis phases were managed, and how the data was made public in an ethical manner (Creswell, 2012; Merriam, 2002). These concepts will be explained in detail later in the relevant sections as the chapter unfolds.



Qualitative research is both a systematic and an artful process (Creswell, 2012; Miller & Dingwall, 1997). The systematic process in qualitative studies refers to and rests on the scientific management of the research design, the meticulous inventory of events in the data collection process and the analysis of data – a process that validates the interpretation of the data (Creswell, 2012). The inventory of events is referred to as an *audit trail* which validates the approach in terms of its quality of detail and scientific rigour (Carcary, 2009). Miller and Dingwall (1997) argue that the art of qualitative research rests on the *tact* and *creative innovation* that is required in the management of data. The researcher is signaled as key in managing the data from analysis through to reporting. This process relies on the researcher's skill and ability to identify, understand, interpret and explain phenomena (Miller & Dingwall, 1997).

Qualitative research also encompasses a range of approaches to the study design, sample selection, data collection methods and analysis (Schensul, 2012). The following section introduces the research design and methods for this research.

4.3. Study design

4.3.1. Introduction

The methodological framework of the current study drew on two study designs that accounted for specific aspects of the methodology: for the context and the cohort, a case study design was used whilst for the analysis a thematic analysis design was used. The data collection methods and strategies were generic to qualitative research. The following discussion begins by presenting the case study design as it pertains to this research. The discussion will encompass defining the case study approach, the various characteristics of this approach, its appropriateness to this research and the rationale for selecting this approach.

4.3.2. A case study design

The case study design for this research used aspects of the methodology of *case study* specifically to identify the research site (or context) and the research cohort. The context was the oral health program at the Faculty of Dentistry at the University of the Western Cape, South Africa. The case study focused on a cohort of first year students, the class of 2007 enrolled in the oral health program. This study was longitudinal in that the students were tracked between 2007 and 2010.

As highlighted in the previous chapter describing the context for the research, at the time of the study the oral health program was either a two-year diploma or a three-year degree (UWC, 2008a; UWC, 2007b). Towards the end of the two-year diploma students had the option of completing an additional academic year to qualify for a bachelor degree in oral health (UWC, 2008a; UWC, 2007b). The student cohort was tracked until they graduated. The following discussion examines the characteristics of a case study design.

Yin (1984:23) defines a case study as “an empirical inquiry that investigates a contemporary phenomenon within its real life contexts ... and in which multiple sources of evidence are used”. Baxter and Jack (2008:546) posit that case study designs are set against a “bounded” framework to prevent the research becoming too broad in focus. These authors explain that binding a case in terms of time and place or time and activity or by definition and context will ensure that the research remains within reasonable focus (Baxter & Jack, 2008). Having clearly defined questions are also vital. Creswell (2012) argues that if the setting of boundaries is ignored, researchers doing case studies run the risk of collecting too much information thereby reducing the reliability of the design. The case study design is thus argued to be unreliable when it is too broad in focus (Creswell, 2012).

An important aspect in case study designs is that of defining the unit of analysis (Creswell, 2012). It means that the case should be bounded in terms of what or who will be included in the case, in addition to determining what should be collected (Creswell, 2012; Hamilton, 2011). In case study designs, the research focus may be on an individual or group of students (Yin, 2004; 1989).

After defining the case, allocating a period of time to the case is essential to enhancing focus (Creswell, 2012). Creswell (2012) and Leedy and Ormrod (2005) explain that case study designs are usually time-bound, engaging the researcher and the researched for a specified period in a time-bounded context. In the current study, tracking the 2007 class of oral hygiene students at the Faculty of Dentistry, at the University of the Western Cape, exemplified a time-bounded and context-bounded case (Creswell, 2012). A true picture of how student *clinical competence* was influenced would not have been established without considering the context and the time frame in which this attribute was expected to be developed (Baxter & Jack, 2008). A case study method was thus appropriate for the exploratory nature of the research questions framed in this study. Yin (2004; 1989) highlights its appropriateness for assessing aspects like the interrelationship of students’ raced and classed identities and their active engagement in learning contexts.

In order to define the boundaries of this research, the researcher started with the careful formulation of the research question, which in itself delineated the contextual boundaries. These were the cohort, clinical competence and the contexts of diversity and the educational climate. Further elucidation of the boundaries in this case is carried out in the following chapters in this thesis: explanations of the conceptual boundaries are outlined in the literature chapter; the contextual chapter foregrounds the context within which the research was conducted (where); whilst this methodology chapter delineates the contextual boundaries in terms of the cohort (who), time frame (when), and the activity under study (what and how).

Yin (2004; 1998) points out that in case studies, the selection of a theoretical position and the development of a conceptual framework are well-recognized aspects of the qualitative research design process. These are decided prior to the undertaking of any data collection and represent the point of difference between case studies and grounded theory. For case studies, theory development or concept development at the outset is essential for guiding the parameters of the research design and the analysis process (Schensul, 2012). The literature chapter outlining the conceptual framework for this research fulfilled this role.

Creswell (2012) explains that when planning the research, once the boundaries of the case have been decided on, it is important to acknowledge the focal point of the case, that is, what the research will focus on. In this research, the focus was on a particular issue of concern using a bounded case or unit of analysis to pursue the enquiry (Creswell, 2012). This case type is regarded as an *instrumental* case study (Creswell, 2012; Hamilton, 2011). An instrumental case study allows the researcher to obtain a broader understanding of phenomena using a particular case. It seeks to capture information on the questions “how, what, and why” around a bounded case (Crowe *et al*, 2011:4). Since the focus here was on gaining an in-depth understanding of how diversity and the educational climate shaped the clinical competence of oral health students, the instrumental case study was deemed as appropriate for examining this phenomenon.

The next section begins by describing the selection of the cohort for the case study.

4.3.3. Selecting the cohort

The key focus of this research was on understanding aspects influencing clinical competence of students in the oral health program at the Faculty of Dentistry at the University of the Western Cape. This focus meant that insider accounts of students' own experiences would generate the depth and detail required to answer the research question. The case study was thus focused on a student cohort. In order to gain insight into the influences on differential performance, it was imperative to record students' experiences from their first enrollment in the program until they graduated. This time period and depth of inquiry signaled a longitudinal case study. Selecting a group entering the program was judged as most likely to yield optimal information for the study (Leedy & Ormrod, 2005), since students could be tracked over a period of time to ascertain performance patterns. The 2007 class of twenty seven first-year students enrolled for the oral health program was invited to be part of the case study. All the students agreed to be part of the research cohort.

The sampling approach in this study was thus *purposive* (Patton, 1990). Purposive sampling, which is a common approach in qualitative research, is a strategy in which particular settings or persons are deliberately selected for the important information they can provide (Greenhalgh & Taylor, 1997; Patton, 1990). Patton (1990) explains that the criteria for selection need to be identified before selecting the group. Hence purposive sampling is not "haphazard" – it is based on a systematic application of criteria (Flick, 2011), and participants are selected because of characteristics which are related to the research question (Patton, 2002; 1990). A purposive sampling approach is also not assumed to be a basis for generalizations or representativeness; rather, the findings are specific to the sample selected.

The next section describes the generic data collection methods that were used to elicit information about the context, the educational climate, student performance as well as to generate insider accounts from the students.

4.3.4. The data collection

The most characteristic features of the data collection methods in qualitative research and in a case study design are the use of a wide range of sources and the face-to-face nature of collecting data (Schensul, 2012). Data collection in the current study was based on generic methods used in qualitative research. The process from the moment data was collected through to the analysis stage, required skillful techniques to extract in-depth information and to manage the data – a process that relied on a rigorous and systematic style (Srivastava, 2009).

The data which needed to be collected was framed around student demographics and how diverse students experienced the educational climate. In terms of diversity, there was a particular focus on student demographics, such as race, social class, economic status, home environment, schooling experience and preparation for university. In terms of educational climate, the focus was on students' social and academic integration experiences.

This study used methods such as self-reflective writing (Polkinghorne, 2005), analysis of official documentation, participant observations, and interviewing (Hitchcock & Hughes, 1995; Savage, 2000; LeCompte & Preissle, 2003). Whilst analysis of documentation, interviews with lecturers and observations shaped pertinent insights into the student cohort, it was the reflective writing and largely the in-depth interviews with members of the student cohort that served as a core strategy to elicit insider accounts of student experiences. Furthermore, specific data from documents, observations and self-reflective reports also served to inform the student interview questions. The following section gives a brief description of each of the data collection methods used.

4.3.4.1. Documentation

Schensul (2011) explains that for every data collection method selected there should be an equally clear rationale for the choice. The use of documents in this study was to generate particular information for the study and “for making a specific case” (Flick, 2009:261). In this research, several documents were identified that contributed to

understanding aspects related to the student cohort in more detail. These documents served to provide not only new but also “unfiltered” perspectives of a field (Flick: 2009:261) compared to data elicited from the students. Demographic information about the students, their Senior Certificate results, student entrance interviews and year-end mark schedules capturing student performance for the years 2007-2010 served this purpose. These various sources of documentary evidence provided the initial sources of data and were accessed in the first year (July 2007) in the research phase. These documents will be discussed systematically following the order in which they became available. This systematic approach was deliberately designed to build a profile of the student cohort and to inform the gathering of other data such as the questions which were posed for reflective writing or in the interviews.

Flick (2009) posits that the use of documents as a form of data is guided by the context of the documents, for example, who compiled them, for what purpose, and who uses them in their natural context. Sources that contributed to the demographic data in this research included documents compiled by the faculty administration staff for student application and faculty selection purposes. These documents included personal information, such as, place of residence, parents' employment, funding arrangements, application for residence, name of school, Senior Certificate results and points allocated to these results. These registration documents were made available to the first-year coordinator (the researcher at the time of the study) and the Department of Oral Hygiene at the outset of the students' application. However, it was in the capacity as researcher and through the due process of gaining official permission to access these documents that the data was collected.

Student *entrance* interview responses were a second source of documentary data. At the time of the study, interviews were conducted as part of the application process and were among the formalities students had to go through in the Department of Oral Hygiene after gaining provisional acceptance in the program. Students residing locally were interviewed face to face whilst those living away were interviewed telephonically. The interviews included a set of pre-constructed questions that students had to respond to

verbally. Student responses were captured on a structured questionnaire by the Department of Oral Hygiene staff lecturers interviewing the candidates. These interviews served to ascertain students' pre-registration insights and their interest in the program, their reasons for selecting the profession, their hobbies and if their family members had attended tertiary educational institutions. Although having been designed to serve a particular purpose in the application process of the students, these interview responses served as data in the current study. Students' responses provided insight into aspects pertaining to their preparation for university in terms of their prior interest as well as their level of knowledge about the profession and the program.

Assessment records presented as mark schedules were yet another source of data, one that was crucial to monitoring students' progress throughout the duration of their enrolment in the program. These records served as a continual source of reference throughout the data collection process. Data from these documents recorded academic performance which reflected students' clinical competence at different points in the program. This data allowed for the categorization of students' performance according to those who appeared to have struggled and those who thrived academically. Explanation of how assessment records informed the performance categories is presented in the following chapter.

Access to data in the form of documentation is regarded as an "unobtrusive" method, acting as a way to create meaningful insights rather than offering large amounts of in-depth data or "containers of content" as in many other qualitative methods (Flick, 2009:261). Documents in this research provided specific information on particular aspects of students' demographic profile and progress. However, a frequent hurdle encountered in the use of the documents is argued to be in conceptualizing the "explicit content, implicit meaning and context for use" and how these relations are taken into account when interpreting the data (Flick, 2009:261). In this research, the multi-method approach, which involved the use of data from several sources, served to build understanding. Hence documentation, although offering insights, was used in conjunction with other data to make meaning.

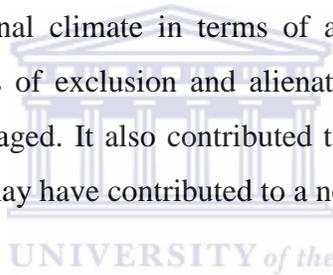
4.3.4.2. Observations

Observation as a data collection method originated with ethnographic studies in which a researcher would actually live among the research participants and take part in their daily activities (Schensul, 2012; LeCompte & Preissle, 2003). In its basic form, observation is what is seen and recorded by the researcher. As a method, it is substantially inductive in nature. In other words, it has the power to allow the researcher to generate insights into information which may not be reliably obtained through asking questions (Ekanem, 2007).

The process of observation involves recording information about behaviour, interactions and events in a particular context (Flick, 2009). In contemporary forms of observational methods, the researcher may be positioned on the inside as a participant or on the outside as an observer (Flick, 2009). While some researchers use observations simply to become familiar with a group, it is also used to generate information through the eyes of the observer (De Clerck *et al*, 2011; LeCompte & Preissle, 2003). In most qualitative data collection techniques, the researcher is the primary instrument for data collection (Lapan *et al*, 2012; Rooney, 2005; Merriam 2002). Thus the researcher plays a key role in the way data is perceived, recorded and interpreted (Lapan *et al*, 2012).

Non-participant observation or observation from a distance was used in this research. This technique involves the researcher's "long-distance" observation of activities related to the topic of interest (De Clerck *et al*, 2011:8). Recording real behaviour through observations is achieved by watching and listening to people. It is a form of observation that is spectator-like, not participatory (De Clerck *et al*, 2011). Because it is unobtrusive in nature, the research participants are less likely to notice the researcher (Flick, 2009). It allows participants' behaviour and interactions to continue as if the researcher were not present (Flick, 2009). Non-participant observation differs from the *participatory approach*. In the latter the researcher's presence is vivid and allows for the recording of the daily and routine activities of those being observed, such as observations about students' interaction with peers and their lecturers (De Clerck *et al*, 2011).

Non-participatory observation records real behaviour aiming to understand how settings affect behaviour and to assess the connectedness between events, behaviour and interactions (De Clerck *et al*, 2011). In this research, however, observation only served to obtain an overview of the research context and research participants, that is, the student cohort. Observations were conducted between July 2007 and November 2008 at intermittent periods. Observations were important in this research to gain insight into students' behaviour and practices. This process of observing students allowed the researcher to assess aspects of student engagement, both in class and in the clinics, with lecturers, clinical teachers and their peers – for example, the interactions in class between differently raced and classed students, or which students engaged in class discussions. In the clinical setting, observations were made of how students engaged with staff members and how students interacted with each other. This overview was important in gaining an understanding of the educational climate in terms of aspects within the setting (race tensions, hegemony and forms of exclusion and alienation) which might contribute to shaping the ways students engaged. It also contributed to identifying aspects within the educational environment that may have contributed to a negative climate for learning.



Observations were also conducted during formal faculty meetings. During student progress meetings, for example, notes were made on the observations of how academics portrayed students in the cohort in terms of their achievements and struggles. At faculty assemblies and board meetings, observation recorded the ways in which the dental and oral hygiene programs and their respective staff members and students, were positioned in the power structures within the faculty. Observed data was recorded as field notes written in a diary. Flick (2009) explains that at the end of the observations, data collated from these notes leads to the production of texts as empirical material. These notes took the form of written descriptions of the behaviours and interactions that occurred (Flick, 2009).

The type of enquiry in this study warranted the use of other techniques to obtain data at a much deeper and individual level. The notes made from observations were understood to be limited, since they only gave accounts of attitudes and behaviours and the researcher's

interpretation of these. Obtaining insider information, that is, perspectives from the students about their own experiences of the educational climate, was seminal to the research. This insider information was achieved through interviews. Flick (2009) and Roberts *et al* (2000) posit that a *multi-method* approach is appropriate and advisable if researchers need to access deep and detailed data. For a multi-method approach, Few *et al* (2003) recommend that researchers be creative in devising multiple strategies to assist the researcher in accessing rich, detailed data. The incorporation of a multi-method approach in this research allowed for the kinds of detail and depth which are characteristic of qualitative research. In this research it meant the researcher drawing on the initial data from the documents and observations to generate interview questions. Another valuable characteristic of a multi-method approach is the ability to empower the participant to “find his/her voice” within his/her own story (Few *et al*, 2003: 212). Reflective writing and interviews allowed the space for the participants to voice their perceptions, opinions and feelings about their experiences.

4.3.4.3. Field notes

Field notes refer to the notes made about the self, the context or the cohort (LeCompte & Preissle, 2003). The field is the research setting – in this case, the Faculty of Dentistry. Field notes are intended to record pertinent occurrences or thoughts as they occur or immediately thereafter (LeCompte & Preissle, 2003). They are detailed and accurate descriptions of what the researcher sees, hears, or experiences (LeCompte & Preissle, 2003). In the current study records were kept of observations of interactions between students and staff members in their clinical and classroom settings, as well as of formal and informal conversations as an ongoing practice throughout the research data collection time frame. Students’ interaction with other students in particular was significant in this regard. These recordings served to capture additional perspectives of students’ experiences. Few *et al* (2003) advise that a journal can also play another pivotal role, promoting accountability to a group by serving as a site for the insider researcher’s self-reflexivity. This aspect will be discussed in section 4.5.

4.3.4.4. Reflective writing

Reflective writing or self-reflection is a technique that has been applied frequently in psychology studies (Polkinghorne, 2005). In this technique, research participants are generally asked to reflect on and write about their experiences. In this research, self-reflection was used to capture a snapshot of students' perceptions of their first-year experiences. The literature chapter highlighted the challenges of transition to university, specifically for first generation students – and the relationship between these challenges and throughput and retention (Scott *et al*, 2007). This activity aimed to collect specific data into these issues. This reflective writing activity was conducted at the end of their first year in October in 2007, in order to capture their *first-year experience* as closely as possible in time to the experience itself. A time delay could have resulted in the students failing to recall detail, thereby reducing the credibility of this method. Students in the cohort were requested to write a reflective account of their expectations, experiences and perceptions of particular aspects: transitional challenges, how they perceived their schooling to have prepared them for university, whether their expectations of the program and university were met, the availability of finances, quality of educator and faculty support and the nature and quality of support from home.

Insights from these reflective reports were used to inform aspects of the interview questions. Although this data collection technique allowed valuable insights into the first-year experiences of the student cohort, the richness of the reality in the form of data might have been lost had the student research participants not expressed themselves well enough. Polkinghorne (2005) posits that data generated from this technique depends on the ability of the participants to reflectively recognize aspects of their own experience and to effectively communicate what they recognize through the symbols of language.

In using this technique multiple aspects need to be taken into account. Polkinghorne (2005:139) argues that expressing experience in writing does not do justice to the richness and deep meaning behind the experience because participants vary in their facility to “explore experience and to express the exploration” in language. This nuance and information is also lost when oral data from interviews are transcribed into written

text (Polkinghorne, 2005). However, whilst this technique offers challenges, participants are able to give valuable insights because the gist is not lost. Research participants will tend to draw on aspects that most influenced them. Thus, reflective writing in this instance allowed the students of the cohort a space where they could express themselves – the expectation was that writing would allow for the expression of feelings which might otherwise not have been divulged during the interview. However this strategy or any form of writing to be used as data may have been a limitation because of the barrier posed to students whose first language is not English (van Schalkwyk, 2008a). Interviewing, which was the final stage and the core of the data collection process, will be discussed next.

4.3.4.5. Interviews

Hitchcock and Hughes (1995:26) posit that data sourced from the “eyes of the participants rather than the eyes of an observer” add deeper and more authentic meaning to phenomena under study. Thus interviews as data sources are obtained direct from research participants and are arguably more valuable than questionnaires. At their most basic, interviews involve perceived accounts being made to and recorded by the interviewer (Hitchcock & Hughes, 1995). An in-depth interview is meant to be a personal and intimate encounter in which open and direct verbal questions are used to elicit detailed and rich information (DiCicco-Bloom & Crabtree, 2006). Generally interviewing involves face-to-face individual interactions with participants, with the primary intention of getting insider accounts through drawing on the participants’ perspectives on issues or phenomena (Schensul, 2012). When these perspectives are analysed they may illuminate similarities or differences between participants (Schensul, 2012).

Interviews take on various formats: open-ended, semi-structured, structured or focused (Schensul, 2012). In this study, semi-structured individual interviews and semi-structured focus group interviews were used (Schensul, 2012). Individual interviews were conducted with the student cohort and staff, whereas the focus group interviews were used for the student cohort only. Semi-structured interviews are introduced next,

followed by a discussion first of the staff interviews and then of the student interviews. Thereafter the student focus group interviews are described.

It should be noted that lecturers' interviews served a different purpose to that of the students. The data from staff interviews along with documents and field notes contributed to shaping an understanding of the student cohort and their performance. The students on the other hand were the *cohort* and were central to this study. Their interviews together with the reflective reports were essentially to generate insider accounts of the students' backgrounds and their experiences of the educational climate. Together these insights were meant to allow the researcher to make inferences and to draw conclusions on the aspects that contributed to shaping students' clinical competence.

4.3.4.5.1. The semi-structured interview

Interviews can be structured according to an interview guide made by the researcher, which outlines themes to be covered during the interview. *Semi-structured* interviews in particular are organized around a set of pre-determined open-ended questions in conjunction with other questions which emerge as the dialogue progresses (DiCicco-Bloom & Crabtree, 2006). The interview guide is typically without specification or formulation of exact questions – questions are open-ended to encourage the respondents to give long elaborated answers (Fink, 2000). The researcher uses questions to stimulate discussion and to probe – the questions guide the focus so that similar data can be collected from a larger sample of individuals (Schensul, 2012). During the interview, the focus has to be maintained on the research question, allowing data about similar or possibly shared experiences of the topic to be collected from all the individuals within the cohort (DiCicco-Bloom & Crabtree, 2006).

In structuring a question schedule, there are several considerations. Leedy and Ormrod (2005) explain that interviews have many advantages, one of which is related to the flexibility that they offer. Semi-structured interviews differ from structured interviews in that a structured interview has a list of questions guiding the whole interview, without leaving room for exploration. DiCicco-Bloom and Crabtree (2006) warn that in semi-

structured interviews the researcher should be prepared to “depart from the planned itinerary” since deviation can prove beneficial if led by the researcher’s knowledge and further insight into the research question. The opening questions should be broad and reflect the nature of the research. In the current study, the semi-structured interview was initiated by the researcher with an overview of the research problem and the purpose of the research to give the interviewee a sense of direction (refer to Appendices 7 and 8: interview guides). The first few questions were meant to start the dialogue. Further subsidiary questions had been designed to guide the direction of the interview when there was a need to probe further or shift the focus. The main questions also served as guidelines, directing the researcher to aspects that needed to be explored and that would elicit a more comprehensive insight into the research focus.

In this study, consent was first gained from the research participants for their participation in the interview and is discussed in detail later in this chapter. During the interview brief notes were written about specific points needing clarification and further questions that emerged during the interview were noted. These notes served as reminders of questions that needed to be included before concluding the interview in the event that there was deviation during the interview. The interview concluded with an opportunity for the research subject to ask questions of the researcher and to offer closing comments on the issues which had been raised during the interview. The researcher was also given an opportunity to probe any unclear comments made by the research subject and to explore possible areas of misunderstanding. It also served to cover any further aspects that would add value to the research and also summarized the main points. This process was one way of ensuring credibility, a concept which will be discussed later in this chapter.

Audio or tape-recording is the commonest way of capturing interview data (DiCicco-Bloom & Crabtree, 2006). Recorded interviews are used as valid evidence and once recorded becomes “incontrovertible” (DiCicco-Bloom & Crabtree, 2006:318). Therefore meticulous preparation which lies on an ethical foundation needs to be strictly applied. Ethical considerations for this research are discussed in section 4.6. in this chapter. In this

study, the interviews, both individual and of focus groups, were tape-recorded. The tape-recordings of the group discussion had to be transcribed and formally coded prior to any analysis work began. Transcribing involves the capturing of the taped or audio-recordings into a textual format (DiCicco-Bloom & Crabtree, 2006). This process is discussed in detail under *thematic analysis* later in this chapter.

The essence of the interview process, for both the staff members and student research participants, will be discussed next. The student research participants were interviewed in two formats, as individuals and as a group using the focus group interview method. The intention for the student cohort was to gain group perspectives, on broad issues as well as on the participants' personal and individual accounts. The staff members on the other hand were interviewed individually. The following sections present details on the interviews for staff members and then the student cohort, before turning attention to the focus group interviews for the students.

Interview with academic staff members

Academic staff members were participants in the research because of their affiliation with the cohort as educators. Only academic staff positioned as educators to the cohort were invited to share their perceptions and experiences of teaching the student cohort. Questions that were used to guide the interviews were framed in line with the concepts of the study (refer to Appendix 8: staff interview guide). The information they shared included their perceptions of the cohort regarding academic and professional progress, student engagement in class and clinics and challenges they experienced when teaching the student cohort. The key focus of the staff interviews was to elicit data which would allow the researcher to draw conclusions about the issues affecting the student cohort. Although these interviews served to gain insight into the performance of all students in the cohort, particular emphasis was also placed on students who failed or struggled in the program so as to ascertain the factors lecturers perceived to influence their performance.

In total, thirteen academic staff members who had most frequent teaching contact with the cohort were invited to share their experiences, being fully aware of the nature of the

interview. All invited staff accepted to participate in this research. The staff included five full-time and one part-time oral hygiene departmental members and seven dentistry staff members. Staff who agreed to share their experiences through these interview discussions was consulted for an appointment. Time, place and venue were agreed on. The interviews for staff members were conducted from July to November in 2008. The end of 2008 would have marked the exit for the 2007 cohort of students in the two-year Diploma program. This period to do the interviews was chosen because by this time the lecturers would have spent sufficient time teaching the research participants to be able to justify their comments. They would also have gained a fairly good understanding of academic progress for this cohort of students and probable factors that they perceived to have influenced their performance.

Interviews with students in the cohort

Student interviews included individual face-to-face interviews and focus group interviews. The individual interviews preceded the focus group interviews. As highlighted earlier the individual interviews for the student cohort were the most significant source of data. The individual interviews will be focused on first followed by a discussion on the focus group interview process.

The individual student interviews were conducted from March to October in 2008. Each student had a minimum of one interview (refer to Appendix 7: student interview guide). However, six students had second interviews during 2009. These interviews were with those students who had failed their second year. For these six students the second interviews were conducted in February 2009 and occurred on a smaller scale, only capturing students' perceptions of aspects that were influencing their academic performance. Two questions formed the basis of these interviews:

- In knowing your performance in the program, describe the factors that you perceive as having an influence on your performance.
- What do you feel can improve your performance?

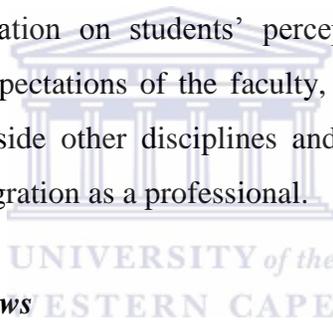
The primary student interviews focused on the following aspects: student backgrounds, schooling preparation, experience of the educational climate and perceptions of progress. Interrogation of these aspects allowed the researcher to gain deeper understanding of how students' socio-economic backgrounds, past educational experiences and their current experiences of being students at the faculty influenced their clinical competence (refer to Appendix 11: extract from student interview transcript). These aspects talk to *capital* and *educational climate* which were signaled as crucial to student progress.

In terms of socio-economic backgrounds, questions were posed to elicit insights into their living conditions, schooling experience, access to resources and factors influencing their choice of career. In terms of questions pertaining to their living conditions students were asked to describe where they lived and to share their views on how their living environments influenced their learning. Questions on their schooling experience were framed around whether they attended government schools or private schools, the fee structure, access to resources, the school's focus on academics and extra-mural activities, their own involvement in extra-mural activities, the kind of input the school provided in terms of career guidance and the kind of academic teaching and support received from teachers. Students' responses to these questions allowed insights into the schooling experience such as teaching and learning experiences, access to resources and opportunities that enhanced their learning experience and their academic preparation for university.

Questions pertaining to the family focused on the support received from the family in relation to the research participants' academic interest. Questions were framed to elicit information on family members who had experience of or attended tertiary education, career guidance and academic support received from parents/family, funding of their studies, living and travel arrangements for university and general challenges experienced on the home front. Further questions were asked about the community they lived in terms of the support they perceived to receive from these communities. The role of the family and community in the lives of the student was explored as it was important to understand

the socio-cultural context from which the students came and the perceptions about education within their families and communities.

Transition from school to university was another focus area in the interview. Questions were framed so as to generate data that would allow the researcher to construct an understanding of how aspects of the educational climate influenced students' perceptions and experiences thereof. Questions pertaining to the following aspects were posed: students' perceptions and expectations of university, their experiences of the university environment, their perceptions and experiences of the program, the aspects that facilitated or hindered their learning, their experiences of social and academic interaction with peers and with lecturers and their perceptions of being involved in classroom activities peer learning and their participation in decisions that affected the class. In addition questions were framed to elicit information on students' perceptions and experiences of the profession and professional expectations of the faculty, their clinical experiences, their experiences of working alongside other disciplines and the aspects that facilitated or deterred their learning and integration as a professional.



4.3.4.5.2. Focus group interviews

Focus groups are a form of group interview used when obtaining information from a group of research participants (Schensul, 2012) but are generally reserved for those research participants who have shared the same experience (Moriarty, 2012). Focus groups capitalize on communication between research participants and overtly use group interaction as part of the method in order to generate *conversation* about particular topics (Kitzinger, 1995). Focus groups are not held with individuals hence revealing personal information is not encouraged (Schensul, 2012; Kitzinger, 1995). This means that instead of the researcher asking each person to respond to a question in turn, people are encouraged to talk to one another: asking questions, exchanging anecdotes and commenting on each other's experiences and points of view. The method is particularly useful for exploring people's knowledge and experiences, and can be used to examine not only what people think but how they think and why they think that way (Kitzinger, 1995).

In this research, focus group interviews were used in conjunction with the individual student interviews (Moriarty, 2012) to gather data of insider accounts. The focus group interviews were conducted in the students' second year at the end of August 2008 when students' particular performance challenges surfaced as a concern. Marks schedules from the mid-term exam in June indicated that many students were struggling academically.

This focus group discussion was intended to capture students' perceptions of the factors that they perceived to be influencing their performance. Due to the nature of focus groups, participants sometimes tend to use them as a forum to discuss or alert the researcher to individual concerns. Few *et al* (2003:212) argue that interviews have their limitations in that any form of "caring in the research process" does not license the researcher to take on the role of therapist, that is, the researcher does not "step out of the professional boundaries". This practice of blurring these roles may compromise the ethical boundaries of any research (Few *et al*, 2003).

However, as a researcher working within the ethical boundaries and structure of the research, these focus group interviews were operationalized as a formal part of the data collection phase. The focus group interviews allowed the researcher to gain group perspectives on key issues around what students perceived to be influencing their performance. Particular perceptions that surfaced during several individual interviews highlighting negative learning experiences served as cues in this discussion with students. These aspects included: experiences of prejudice from dental students, dental academic staff members' negative attitudes towards students, quality of lecturers' academic support, students' challenges regarding workload and their challenges in understanding lecture content.

The focus group interviews were organized for three groups. The student cohort was already divided randomly into three groups for clinical rotations. For convenience of scheduling the interviews, these groups were adhered to in the data collection process. In any group of people, there are bound to be group dynamics. Kitzinger (1995) posits that focus groups encourage participation from people reluctant to be interviewed on their

own or who may be less confident. In this research, there were a few less confident students but the focus group interviews generated discussion among the students as if they were in a natural conversation. Kitzinger (1995) further highlights the role of the researcher as important in being able to encourage less confident participants to speak and to curb dominance by participants who may tend to ‘take over’ the discussions.

Focus group interviews, however, rely on group dynamics and the synergy between participants to generate fruitful discussions (Kitzinger, 1995). However, Kitzinger (1995:300) explains that group dynamics have a downside too; for example, when most of the group participants agree on an issue, it may “silence individual voices of dissent”. This situation was recognized as a potential problem. In the position of focus group facilitator, the researcher was sensitive to students who chose not to voice their opinion. Tact had to be used in promoting alternative perspectives on an issue. The researcher had to gently shift the power so as to encourage all students to participation, and did this by posing questions to the quieter students to initiate new discussion.

Kitzinger (1995) explains that certain issues may prove sensitive to some participants, especially if they have had a negative experience around an issue. It may be the reason that some interviewees do not participate or feel afraid to do so. Kitzinger (1995) argues that in a focus group interview, the presence of other research participants compromises the confidentiality of the research session. Students who were reluctant to speak were later invited to have individual conversations. At least three of these students had opportunities for such individual conversations in the second interviews, whilst two others aired their views informally after the focus group interview had been concluded. Their insights were journaled since they were not captured during the audio-recorded focus group interview session.

In audio-recording focus group interviews there are often specific technical problems. The audio-recorder has to be of a high quality so as to capture voices from different angles within the group. Kitzinger (1995) highlights that audio-recordings can also yield poor quality transcriptions which in-turn compromise that quality of the data. This

compromise occurs if the audio-recording is unclear because of several people speaking at once or if it is not clear as to which participant is speaking. In this study, the audio-recordings were not of poor quality because the audio recorder was designed for recording purposes and was thus of high quality. Further, the group interview itself was designed to be an intimate insight-sharing session thus the group was made to sit in a smaller circle. This process thus enhanced the quality of the recordings.

In this section on the data collection process, the techniques that were used as tools to collect the data were discussed. The focus was on observations, documentation, reflective accounts and interviews, which included semi-structured and focus groups. Observations, documents and reflective accounts served to inform aspects of the subsequent interviews and focus group discussion with the students. Hence the nature of the data to be collected was enhanced as the data collection phases progressed (Kennedy & Lingard, 2006; Sandelowski & Barroso, 2003). In addition, there were instances where there was constant movement between the data so as to explore meanings of the data collected through the different techniques. For example, documentation such as student mark sheets was a constant data source that was used throughout the data collection and analysis phase. These records were constantly compared to data from the reflective reports and interviews. This iterative process is not uncommon in qualitative research (Bradley *et al*, 2007; Suter, 2012). A timeline is presented below to highlight the time frames within which the data collection occurred.

Documentation (demographic information, school results, performance in the oral health program	Sourced throughout the data collection period
Observations	July 2007-November 2008
Field notes	Throughout the data collection period
Reflective report	October 2007, marking the end of the first year
Interviews staff	July-November 2008
Interview students	March-February 2009
Focus group interviews	August 2008

The next section focuses attention on the approach to the analysis.

4.3.5. Thematic analysis

4.3.5.1. Introduction

Key features of a qualitative study lie not only in the selection of the research participants, the data collection methods, data types and sources, but also in the data analysis methods. In this study, a thematic analysis approach was taken to analyse the data. It is important at this stage to clarify what *data* and *data sets* are. *Data* is information in a raw or unorganized form. A data set can be understood as a collection of similar data, sharing a specific structure, for example data from a single interview can be a data set, likewise a collection of reflective reports can also be a data set.

Thematic analysis is regarded as a foundational, and the most commonly used approach to analysing qualitative data (Bazeley, 2009; Braun & Clarke, 2006). Thematic analysis is also valuable in capturing the complexities of meaning within a data set (Guest *et al*, 2012). This analysis approach involves identifying, analysing and reporting themes from the data (Bazeley, 2009; Braun & Clarke, 2006), resulting in a rich account of the data (Braun & Clarke, 2006). However, Kelly (2010:286) posits that some researchers tend to undermine thematic analysis, treating it like “generic analysis” by failing to take the data beyond a surface level description. The tendency of some qualitative analysis, according to Bazeley (2009), is the heavy reliance on describing data and then attaching a quote as a primary form of analysis and reporting (Bazeley, 2009).

In qualitative research, a characteristic feature would be for analysis to move away from descriptions to interpretations. It is a move from *what* is the case to explanations of *why* that is the case (McMillan, 2010; Hitchcock & Hughes, 1995). However, some qualitative research stops short of generating explanations because they fail to move beyond descriptions (Kelly, 2010; McMillan, 2010). Reaching the stage of *interpretation* is only achieved through active engagement with the coded data by refining, relating themes and building an argument which establishes answers to the research questions (Kelly, 2010; Bazeley, 2009). Kelly (2010) argues that conceptual tools in a study are also significant in that they allow the researcher to elicit enquiry beyond the thematic descriptions, advancing to in-depth description, interpretation and explanation. In this research, the

conceptual tools were used as lenses facilitating the process for the researcher to organize the data according to themes within a concept. This process of analyzing and interpreting is explained in detail in the discussion of the stages of thematic analysis.

Thomas and Harden (2008) posited that thematic analysis has been awarded minimum recognition, probably resulting from its lack of a formalized structure. Braun and Clarke (2006) argue for the development of a defined set of steps to characterize thematic analysis. These authors note that numerous data analysis methods are essentially thematic but are named differently, while in some cases the method is not assigned a name even though the analysis centers on assigning or generating themes (Braun & Clarke, 2006).

An important aspect of any research methodology is the reporting of a detailed explanation of the steps used to manage and analyse the data (Bazeley, 2009). This process of reporting is so that researchers scrutinizing the research may understand the assumptions that informed the analysis and the coherent build-up towards the conclusions being drawn. A detailed account also allows an evaluation of the research process and comparisons to be made with similar studies and thus serves as a guide for future related research (Braun & Clarke, 2006). This process signals *validity* in qualitative research and will be discussed in detail later in this chapter. Drawing on guidelines from Braun and Clarke (2006) the following section introduces thematic analysis. Thereafter a description of each of the stages of the analysis process that was applied in this study is provided. Finally, the process of how themes are developed and how interpretation is facilitated is outlined.

4.3.5.2. Stages of thematic analysis

Research towards explaining how student backgrounds and the educational climate shape clinical competence signaled these as complex phenomena. Multiple data collection methods had to be used to gain these insights – thematic analysis allowed for the systematic and iterative analysis of numerous data sets. Thematic analysis generally entails a non-prescriptive set of procedures for analysing data (Braun & Clarke, 2006).

Some of the procedures are not unique to thematic analysis, but in fact are similar to those in other qualitative analysis strategies (Braun & Clarke, 2006).

The first characteristic feature of the procedures in thematic analysis is that the analysis process starts at the outset once the first set of data is collected (Bradley *et al*, 2007). For example, the documentation and notes from the observations which were consulted early in the research process, were analyzed using broad themes to make sense of the initial data. Many qualitative researchers (Bradley *et al*, 2007; Braun & Clarke, 2006) would say that the analysis starts from the moment that the study is designed – that insights from knowledge of the research context or the research problem and from the literature inform how things are understood and interpreted. Examples of this practice are indicated in journaling or in the way that questions of clarification are sought in interviews. The second characteristic is that the timing of data analysis is flexible allowing data collection and analysis to occur alongside each other (Bradley *et al*, 2007). As data is analysed, the findings guide the collection of more data. Thematic analysis is also an iterative (cyclical) process that allows the researcher to go back and forth in the data collection or analysis process, constantly searching for patterns and relationships (Bradley *et al*, 2007; Suter, 2012). In this study, thematic analysis involved drawing on the literature related to diversity and educational climate to identify emergent patterns and themes from the data, and then interpreting their meaning through the lenses of capital and social and academic integration.

4.3.5.3. Where do themes come from?

At the outset of this section it is important to clarify specific terminology that are used in the current study particularly pertaining to the analysis process and assigning of themes which is a characteristic feature of thematic analysis. Clarification of particular terms is essential in understanding the discussion that ensues. *Concepts, codes, categories* and *themes* are central in this regard.

Concepts are words used to express an abstract idea. Concepts are essential for guiding the parameters of the research design and the analysis process. Concepts can be found

through experience, observation of real phenomena or from previous theories or empirical research (social class and capital). Some concepts have multiple subparts (diversity = race and social class). *Concept* development in this study occurred at the outset of the research process itself. In this study *diversity*, *educational climate* and *clinical competence* were the central concepts. *Capital (economic and cultural)* and *student integration* (social and academic) were the constructs that were used to explain issues of diversity and the educational climate.

A *code* is a word/words or phrases that best describe a quotation from the data. *Coding* is the process of attaching a name to a passage of text or piece of information or a quotation. Coding is thus a method that enables the organizing and grouping of similarly coded data into broad themes because they share some characteristic. A *theme* is then a phrase of *meaningful essence* (Morse, 2008:727) which is assigned to a *group of similar codes*. These themes can then be classified into broad *categories* that allow ease of data management and shapes the reporting structure. An example of how these terms are used in this study and how they differ is presented below.

Concept	Category	Theme	Examples of codes
<i>Educational climate</i>	<i>Teaching</i>	<i>Ineffective clinical teaching</i>	<i>Lack of feedback, Lecturer's negative attitudes, Inconsistency between lecturers' feedback</i>

Themes come from both an “*a priori*” approach and “*inductive*” approach (Ryan *et al*, 2003:88). *A priori* themes are derived from the researcher’s prior theoretical understanding of the phenomena being studied, through the generation of conceptual tools, literature reviews and the researcher’s own commonsense constructs. *Induction* refers to themes that the researcher articulates from the data analysis (Ryan *et al*, 2003:88). Ryan *et al* (2003:88) explain that the conceptual framework already comprises of concepts that contribute as a lens for the analysis process. Embedded in these concepts are *a priori* themes providing a rich source of support for the thematic analysis to follow. In this research, both approaches were used to generate and assign themes. One of the

sources for *a priori* themes were the concepts that were embedded in the conceptual framework generated from the literature, and informed by the researcher's own insights that she had as an insider prior to the study. In the current study, the concepts of *diversity*, *educational climate*, and *clinical competence* served to generate some *a priori* themes. Other *a priori* themes for example included unsupportive home environment, poor schooling preparation and financial challenges. These themes, for example, were preconceived from reading the literature that highlighted these as influencing student performance.

4.3.5.4. Transcribing the data

A unique feature of qualitative data is its sheer volume and that it presents in an unstructured way. The first step in analysing the data is to transcribe audio recordings (DiCicco-Bloom & Crabtree, 2006) into a text document. Transcribing involves creating a verbatim text of each interview by writing out each question and response using the audio recording. In the current study, an anonymous transcriber, who was sourced through a recruitment company, was contracted to perform this task. This decision to obtain a transcriber was made on the basis that it would save time. Getting an anonymous transcriber allowed for the protection of student and staff identities. The anonymity between the researcher and transcriber was important in that issues raised within the interview remained as confidential knowledge to either person. The transcribing process resulted in the data being presented in a Microsoft Word electronic format (Braun & Clarke, 2006). The turnover for transcripts to be recorded electronically was a week. Only one transcript or occasionally two were received per week. Once the transcripts were received, they were printed out as paper copies for the reading and coding phase.

In transcribing, there are many aspects to consider. However, of importance in the processing of texts are sentence structure, use of quotations, and avoidance of mistaken words or phrases (DiCicco-Bloom & Crabtree, 2006). The tendency was for the transcriber to write the word which he/she considered most appropriate in the face of these challenges. Braun and Clarke (2006) argue that to ensure accuracy the transcripts must be read by the researcher against the original audio recordings. Two ways to

overcome this problem in my research were firstly to keep the time between sending of the audio-tapes and receiving transcripts as short as possible for better recall, and, secondly to take each transcript as it arrived, check it against the audio-recording, *fill* in the blanks and make corrections. Furthermore, expressions or subtle nuances cannot be picked up on audio recordings. In this study, making notes about important aspects served to contextualize the dialogue, for example, when a research subject struggled to speak because she was tearful or when one of the participants left the room because she was emotionally overwhelmed. Although transcribing is time-consuming, it is important in that it informs the early stages of analysis, allowing for a thorough understanding of the data (Braun & Clarke, 2006).

4.3.5.5. Reading

Reading and interpreting are the two most fundamental steps in meaningful analysis (Bazeley, 2009). In this research, the process involved analyzing large sets of mark sheets, transcriptions and notes, examining and comparing the data with regard to the research questions (Braun & Clarke, 2006). Braun and Clarke (2006) advocate that the researcher immerse him/herself in the data to the extent that he/she is familiar with the depth and breadth of the content (Braun & Clarke, 2006). Immersion usually involves repeated reading of the data, searching for meanings and patterns. The data set is read comprehensively at least once before coding begins irrespective of the method used.

4.3.5.6. Coding

Coding is a formal system employing an interpretive technique that organizes qualitative data and provides a means to generate interpretations (ATLAS.ti, 2010). Coding gives significance to the text by identifying the meaning of *chunks* of text. As the researcher combs the data by reading the transcripts, segments or phrases are demarcated and assigned a code, which is usually with word/words that best describe the quotations. All similar passages of quotes are marked with the same code. Codes can then be retrieved for comparison and analysis (Taylor & Gibbs, 2010). Codes also enable the researcher to identify the issues that emerge in the data set (Taylor & Gibbs, 2010). Coding is useful in summarizing the prevalence as well as potential links within and between concepts

(Bradley *et al*, 2007). It also makes it easier to search the data to identify any patterns that require further investigation (Taylor & Gibbs, 2010).

In this study, the coding stage of the data analysis was supported by a computer program, ATLAS.ti, metaphorically known as the “knowledge workbench” (ATLAS.ti, 2010:1). This program provided a sophisticated space to manage and make sense of unstructured information (ATLAS.ti, 2010). ATLAS.ti emulates the pencil and paper exercise traditionally conducted during assigning of codes on segments of texts (ATLAS.ti, 2010). When working with ATLAS.ti, the transcripts may be ported in multiple-word formats into the Hermeneutic Unit. Projects in ATLAS.ti are known as “Hermeneutic Units” (Archer, 2012:16). It is basically a unit which contains the researcher’s coding. ATLAS.ti does not copy the documents into the program, but only stores the links to retrieve the documents that have been coded. It also contains notes made by the researcher and networks along with the paths to find the documents the researcher has been working with (Archer, 2012). A typical screen appearance will have data of one research subject appearing on the left-hand-side, while coding and notes are recorded on the right-hand-side. The researcher manually highlights segments of the transcript and assigns a code to each segment. From the segment, specific parts can be assigned as quotations that may be used when reporting.

When using ATLAS.ti in the current analysis, a code, a category and a theme were assigned alongside each segment/sentence/quotation (refer to the example in 4.3.5.3 above). In this way it was easier to retrieve the codes in already defined themes and categories (refer to Appendix 9: screen-shot of ATLAS.ti). Should the coding become too detailed or require renaming, having this level of detailed coding makes the splitting of codes or the reallocation of codes easier to achieve (Archer, 2012). Once coding is complete, the researcher can filter for information to view all codes or a specific code with its associated quotes or, the frequency of a code.

The aim of using this program was to enhance efficiency in terms of data storage and retrieval and to put in place a formal method of assigning codes to the data. This process

cannot supplant the interpretive nature of coding, because it does *not* create the codes *nor* does it interpret the meaning of codes or their relationship with other codes or concepts. However, its purpose-built tools allow the classifying, sorting and arranging of data, thereby allowing the *researcher* the space to creatively assign themes and to search for similarities or dissimilarities and relations (ATLAS.ti, 2010).

4.3.5.7. Assigning themes to the data

After coding, the sorting process further involves the assigning of themes. Morse (2008:727) explains that a theme which is a phrase of “meaningful essence” is assigned to a group of similar codes. Categories can then be formed. Themes differ from a category in that a category refers to the broad term describing a collection of similar themed data once codes have already been assigned (Morse, 2008; Braun & Clarke, 2006). It is in this theming phase that the interpretative analysis of the data occurs (Braun & Clarke, 2006).

Assigning themes involves searching *across* a data set to find repeated patterns of meaning (Braun & Clarke, 2006). Bazeley (2009) and Braun and Clarke (2006) posit that researchers should move away from being passive in the analysis process, waiting for themes to “emerge” (Braun & Clarke, 2006:8) out of the data. Themes do not just appear out of the data but need to be thoughtfully derived (Srivastava, 2009). Braun and Clarke (2006) explain that researchers need to be *creative* in identifying patterns. In addition, they need to select appropriate themes that provide explanations to the research question. As similarities and dissimilarities are noted, relationships are established or comparisons are made and recorded. These comparisons can be made within data sets, for example, interview with interview, or between data sets, for example, interview with observations.

4.3.5.8. Interpretation and writing

Qualitative research aims to generate an interpreted understanding of people’s experiences and perceptions of the social world (Ritchie & Lewis, 2003) through written texts. This aim is only achievable once saturation of themes has been reached. Saturation refers to the point when the research participants add no new dimension to the data which

has been collected (Guest *et al*, 2006). The themes, together with the categories will form the skeleton that will guide the researcher towards a coherent argument in the writing phase (Braun & Clarke, 2006). Writing is the last step in thematic analysis. It culminates in coherent explanation of the research findings. Writing is embedded with an interpreted understanding of the data and concepts (Braun & Clarke, 2006). It is to “tell the complicated story of your data” in a way which convinces the reader of the merit and validity of the researcher’s analysis (Braun & Clarke, 2006:23).

4.3.6. Conclusion: research design

In this section on the research design for this study, the case study design was introduced. This discussion was followed by a description of the sample selection, the data collection process and the thematic analysis approach to analyzing the data. The application of thematic analysis was described with a step-by-step guide of the sequence of events that was involved. Next, aspects of validity related to the research process will be discussed in conjunction with how validity was ensured in the current study. Thereafter, aspects of ensuring validity and ethical considerations will be discussed.

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4.4. Validity and reliability in qualitative research

“The aim of social science is to produce descriptions of the world – not just any descriptions but descriptions that in some *controllable* way correspond to the social world that is being described” (Perakyla, 2004:283).

4.4.1. Introduction

Qualitative research can be described as a process with the central aim of producing credible descriptions of the social world (Bapir, 2011). Drawing on Perakyla’s (2004: 283) quotation above and Bapir (2011), qualitative research is positioned as having a dual task – the first is to produce credible descriptions (Bapir, 2011), and the second is to carry it out in “some controllable way” (Perakyla: 2004:283). In following discussions focus on how credibility is achieved generally and how it was made possible in this research.

In qualitative research, many terms are used to describe *credibility* or truthfulness of the research. *Validity* and *reliability* are the most common concepts used to describe whether a research study is *credible* or not (Silverman, 2006; Cohen *et al*, 2000; Perakyla, 2004; Johnson, 1997). In some studies, *credibility* and *authenticity* (genuine reflections of the data) are frequently used to describe *accuracy* of the data (Thomson, 2011; Silverman, 2006; Hoepfl, 1997), and are more preferred concepts than validity (Lincoln & Guba, 1985). Validity has been identified as an important aspect in qualitative research – in its absence the *credibility* of research is argued to be at stake (Silverman, 2001).

4.4.2. Validity in qualitative research

When researchers speak of qualitative validity they are referring to qualitative research that is plausible, trustworthy, dependable and credible and thus defensible (Hoepfl, 1997; Johnson, 1997). Validity in qualitative research refers to whether the research is based on “truth” (Silverman, 2001: 232) and “certainty” (Guion *et al*, 2001:1), that is, whether the research findings are supported by evidence. Validity is also described as the extent to which an account “accurately represents the social phenomena under study” (Hammersley, 1990:57) or to which the findings accurately describe reality (Guion *et al*, 2011:1; Hoepfl, 1997:7). Reliability, on the other hand, as Hammersley (1992:67) explains, is the “degree of consistency with which instances are assigned to the same category by different observers or the same observer on different occasions”. The following discussion offers a further and brief explanation of validity with embedded examples of the techniques used to endorse this concept. It also highlights the actions that the researcher took to ensure the validity of the research findings in the current study.

Conventionally, there are two common types of validity, *internal* and *external validity*. *Internal validity* refers to the extent to which research findings accurately describe and reflect reality (Hoepfl, 1997). However, Hoepfl (1997) argues that there is no single reality and that if it were known there would be no reason to explore it except to refute it. Lincoln and Guba (1985:295) characterize qualitative research as having a “constructivist approach”. They argue that findings are shaped by multiple realities which are

constructed as the research proceeds through interaction between the researcher and participants and that:

The world consists of multiple constructed realities, multiple implying that there are several versions of reality, depending on from whose perspective it is viewed ... constructed means that participants attribute meaning to events as they occur, that meaning is part of the event and not separate from it (Lincoln & Guba, 1985:295).

Hence, qualitative researchers assume the presence of multiple realities and set out to describe them adequately and accurately (Hoepfl, 1997). In order to establish internal validity, the researcher must determine the extent to which conclusions effectively represent empirical reality (Cohen *et al*, 2000; van der Walt & van Rensburg, 2006, 2006).

There have been multiple conceptualizations of validity in qualitative research, but all such conceptualizations (Silverman, 2006; Perakyla, 2004; Cohen *et al*, 2000; Johnson, 1997) have two characteristics in common – the first is an emphasis on the research process in terms of how professional, accurate and systematic it is. The second relates to the researcher’s ability to transparently state how research is invented (Bapir, 2011). In order to collect data that can be regarded as valid, the following considerations need to be taken into account in the qualitative research process: transparency and honesty in the research process, honesty of the researcher towards the research participants and in presenting the data; adequate depth, richness and scope of the data generated and collected, the researcher’s ethical approach to the participants, the extent of triangulation and the genuine interest of the researcher in the field (Cohen *et al*, 2000). Cohen *et al* (2000) explain that if research is not presented as valid, then it is judged as worthless.

In ensuring credibility, strategies are not conducted at the end of a research project but rather are steps taken throughout the research process at different phases to ensure a valid result is produced (Johnson, 1997). Cohen *et al* (2000:47) explain that versions of validity and reliability strategies should be selected on the basis of “fitness for purpose

rather than caprice”. Hence the researcher draws on those strategies that talk to aspects in the current study which lend themselves to ensuring credibility and validity.

In discussing validity and its applicability, a number of authors (Cohen *et al*, 2000; Johnson, 1997; Barbour, 2001) were drawn on for empirical explanations and illustrations of the concept. Johnson (1997) identifies three conceptions of validity appropriate for qualitative research: *descriptive*, *interpretive* and *theoretical*. Descriptive, interpretive and theoretical validity are of importance to qualitative research because they reflect the primary activities of such research, which are describing what is observed and interpreting participants’ thoughts and actions (Johnson, 1997). These concepts are discussed with examples of strategies/ways that were used in ensuring validity.

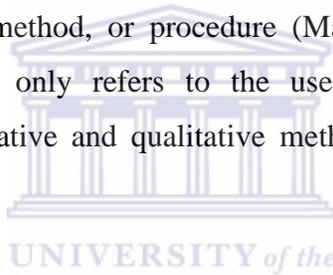
4.4.2.1. Descriptive validity

Descriptive validity refers to *accuracy* of data and relies on the ability of the researcher to ensure factual accuracy of the accounts reported by the participants – in other words, did the researcher accurately record what they saw and heard (Johnson, 1997). Due to the detailed and descriptive nature of qualitative research, descriptive validity relies on the accuracy of the researcher in describing events and responses as they have actually occurred (Johnson, 1997). The sincerity of the researcher in the accurate representation of the data from a study and the presentation of the findings to the readers, talks to *accuracy*. It is this accuracy that makes the research credible (Johnson, 1997). The researcher can achieve accuracy of the account using one or more of the procedures for validation, such as, *spending ample time with the research participants in the setting* and *triangulation* (Creswell, 2012). This process ensures rigour or thoroughness and thus validates the data.

One of the ways of achieving factual *accuracy* and *authenticity* in this regard is for the researcher to spend ample time in the context, in order to make valid interpretations and claims. Repeated observations and interviews, as well as the sustained presence of the researcher in the setting, can help rule out false claims (Maxwell, 2008). In the current study, holding a position as teacher-researcher allowed for a *sustained presence*. Having

had the opportunity to spend sufficient time in the research setting facilitated the verification of findings. Daily observations and daily interactions in the classroom and in clinical teaching allowed for prolonged contact. The individual interviews and focus group interviews served as intimate sessions with the students allowing the researcher the opportunity to gain a better understanding of student perspectives. To this end, prolonged time with the cohort proved beneficial to the research process in that accurate reporting and interpretation was facilitated and enhanced.

A second yet valuable measure to ensure accuracy is to use triangulation. Triangulation is a strategy used by qualitative researchers to check and establish the validity in their studies by analysing the issues raised by the research question from different perspectives (Guion, 2011). Triangulation reduces the potential systematic bias that can occur with using only one data source, method, or procedure (Maxwell, 2008). Contrary to the assumption that triangulation only refers to the use of multiple data sources or specifically the use of quantitative and qualitative methods, there are numerous other ways of triangulating.



Creswell (2007) illustrates the multiple perspective from which triangulation can be achieved, for example: using multiple data sources (e.g. facilitators, participants); multiple methods of data collection as in *data triangulation* (e.g. observations, individual interviews, focus groups); multiple data collectors (e.g. more than one interviewer); multiple data collection points (e.g. the same person interviewed several times over a defined time period); multiple theories (e.g. using theories from multiple disciplines) and using a mixed-methods approach (e.g. collaborating with a quantitative researcher). *Investigator* triangulation is yet another way of triangulation whereby the perspectives of different researchers or participants are used to verify the data (Guion, 2011).

For this research, the most applicable ways to ensure descriptive validity in terms of accuracy of data and accuracy of interpretation, were data triangulation and investigator triangulation (Guion, 2011; Johnson, 1997). Data triangulation will be discussed as part

of descriptive validity, because of the technique involved in ensuring that the researcher obtains rich accurate data.

Data, or *methodological* triangulation as it is sometimes called, is the application of a multi-method technique (Barbour, 2001; Johnson, 1997; Hitchcock & Hughes 1995; Mays & Pope, 1995). This technique allows for data to be collected using more than one data collection method to answer a question (Guion, 2011). This form of triangulation was included in the current research process as a strategy that allowed exploration and verification of data (Guion, 2011; Barbour, 2001; Hitchcock & Hughes, 1995).

Data triangulation, for example, allowed findings from observations to be compared with findings from focus groups and interviews to see if similar findings had been arrived at. If similar findings are reached, then descriptive validity has been achieved (Guion, 2011). The data generated by the different methods of data collection can do the following: firstly, different sources of data can provide deeper insight to verify an issue (sometimes referred to as corroboration or reassurance). Secondly, it can provide new insights that are complementary. In this way value and richness is added to the findings, thus ensuring validity (Barbour, 2001).

The current study adopted data triangulation as a validating tool – a technique adopted so as to contribute to the validation of findings, as well as to offer a way of generating deeper and alternate views on specific issues (Barbour, 2001). The value of this technique was evident when applied in the analysis phase to compare data generated from the reflective writing, individual interviews and the focus group interviews in which similar issues were explored. The interview raised certain questions that had already been asked in the reflective writing process, for example, the students' first-year experiences. Data triangulation was applied in the individual interview for two purposes: firstly, it provided clarity on student responses from the reflective writing and, secondly, it allowed for deeper probing and insights.

Barbour (2001:1116) notes that data triangulation using two methods to get a broader view sounds feasible in principle, but due to the completely different strategies used, it “defies direct comparison”. By this Barbour (2001) means that when there is an absence of similar findings it merely indicates a lack of corroboration and not refutation. Barbour (2001) warns that when different methods are used, it can also provide parallel *data sets* (such as data from the interview and that from observations) unique to the method’s individual structure, and each dataset may therefore only allow a partial view of the whole picture. However, rather than hoping the data are similar, Mays and Pope (2000) suggest that a more realistic goal is *comprehensiveness* in data collection. This approach does not pose a threat if there is dissonance or exclusions, but it can also provide an opportunity for refining theory (Mays & Pope, 2000). In the current study, the reflective reports and students’ individual interviews serve as an example of how reflective reports provided partial insight into students’ perceptions of their transition experience. The individual interviews allowed for more probing around this aspect.

Investigator triangulation on the other hand allows the perspectives of multiple researchers who are already involved in collecting and analysing the data to contribute to validating the findings (Johnson, 1997). Barbour (2001:1115) refers to the process of coding by multiple researchers as “inter-rater reliability”. She argues that this process does not require complete replication but instead offers cross-checking of coding strategies for consistency and interpretation by individual or independent researchers. Basically the process allows researchers to agree on the actual occurrences and conclusions about the research (Johnson, 1997). Barbour (2001) argues that, although the exercise promises thoroughness and puts the data through interrogation, this process can also be achieved by a lone researcher. She posits that, whether research is done by multiple researchers or a lone researcher, the aim should be to follow a systematic process that is transparent throughout the reporting phase (Barbour, 2001).

In this research, investigator triangulation was not exercised with multiple researchers because the researcher worked alone. Lone researchers are a common feature of the individualized nature of post-graduate research programs. However, during the analysis

phase frequent consultations with the researcher's supervisor also served to provide a platform to discuss interpretations of the data. Besides allowing specific analytical skills to be developed, these consultations also enabled the researcher to assess judgment error in data coding, misinterpretation or inadequate interpretation of the data.

Time and contexts also have an influence on data that is generated at different phases during the research process (Hoepfl, 1997; Mays & Pope, 1995). When data is generated at different phases, during the time in-between the participant may mature and may perceive things differently (Hoepfl, 1997; Mays & Pope, 1995). In the context of the current study, data from initial reflective reports that described experiences of a novice first-year student differed in some instances in that the aspects that seemed overwhelming at first year were not as emphasized upon by second year. The triangulation in this study allowed for different, richer and deeper perspectives and understanding of phenomena. If data was actually verified in the process, triangulation as a technique added greater value. However its use remained dependent on the nature of the research question.

4.4.2.2. Interpretive validity

Credibility is not only dependent on accessing rich data but also on the abilities of the researcher to analyse that data. *Interpretive validity* requires what Johnson (1997:285) refers to as, a “window into the minds” of participants. Due to the core process of understanding participants' inner worlds, it requires the researcher to see and feel the way participants experience an issue and to be able to reflect the meaning attached. Interpretive validity is therefore based on two issues: the degree to which the researcher accurately understands the observed or actual participants' reported accounts and the accuracy of the reporting of these accounts in the research report (Johnson, 1997). Member checking, independent analysis or using a peer or external auditor of the account and the researchers own skills in interpreting and reporting are discussed in this regard.

One way of checking coding and research interpretation is through participant feedback, which is commonly referred to as *member checking* or *respondent validation* (Creswell, 2012; Maxwell, 2008). Respondent validation, also referred to by other authors as

“member checks” (Creswell, 2012:54; Bryman, 1988:78) involves the researcher checking with participants the accuracy of the data and interpretations and soliciting feedback about conclusions made (Creswell 2012). It allows participants an opportunity to reaffirm their accounts thereby providing a way of validating the accounts (Creswell, 2007). It is also a way of improving reliability of coding in the analysis phase (Creswell, 2012; Maxwell, 2008). This strategy allows for a few or even all participants to review copies of the transcript data and/or the findings section of a report and to edit, clarify, or elaborate on the aspects of the interview.

Maxwell (2008) highlights that this technique allows the researcher a way of ruling out misinterpretations of what participants said and did, and their perspectives on particular issues. In addition, Maxwell (2008) explains that through this process the researcher is able to identify his/her own biases and misunderstandings of what participants said. However, Pope and Mays (2000) argue that this process is inappropriate. These authors deem the process questionable on the grounds that researchers seek to provide an overview, whereas participants have individual concerns which may lead to discrepant accounts. Barbour (2001:1117) argues that, these strategies may be useful in “alerting the researcher to potentially competing explanations . . . what ultimately matters is the systematic and transparent account”, even if this process is done by a lone researcher. Maxwell, however, contends that participants’ feedback is no more innately valid than their original interview responses; both should be taken simply as evidence regarding validity of the account (Maxwell, 2008).

The concept of respondent validation has been applicable to my research. The current study was based on a strong emphasis on capturing reality as accurately as possible so that authentic representation of students’ opinions and perceptions could be validated. Respondent validation was employed, but its practice was confined to the recap and summarization process during the interview (van der Walt & van Rensburg, 2006). It was at these individual interview sessions that I gained clarity on issues raised. The recapping served to confirm participants’ perspectives, for example, on issues of a more general nature pertaining to the educational climate.

A second way of achieving accuracy is through *independent analysis*. Accuracy can be enhanced by having a person independent of the research encode the same data for agreement (van der Walt & van Rensburg, 2006). Although independent analysis is a recognized way of validating findings, I did not utilize this concept fully, firstly, because student confidentiality was a concern, and secondly because I relied on my own judgment to ensure the data was best represented in the writing phase. Apart from having a bounded theoretical framework, being steeped in the research as insider and having engaged with the student cohort at a very deep level, I felt that I was most suited to make representation of the data.

A third way of achieving accuracy in terms of interpretation and reporting is largely through the researcher's own skill in reporting the findings. *Authenticity* talks to the ability of the researcher to portray a genuine or truthful presentation of the findings (Barbour, 2001). Barbour (2001) highlights the risks that researchers run should they fail to verify data. One serious risk is that of misrepresentation and misinterpretation of the findings due to a lack of depth and clarity by the researcher. Authenticity can be achieved by using content-rich and original data like attaching quotations of the research participants as evidence when presenting interpretations (van der Walt & van Rensburg, 2006; Denzin & Lincoln 2000; Cohen *et al*, 2000). Authenticity can also be achieved by the researcher maintaining a neutral stance in the interpreting and reporting processes (Patton, 1990).

Patton (1990:58) refers to this stance as “empathic neutrality”. While neutrality refers to the neutral stance of the researcher with regard to the findings, empathic refers to the researcher's stance towards the participants (Patton, 1990:58). Authenticity is thus one of the prime objectives in preventing biases in validation. The researcher's role itself is a crucial aspect underlying the concept of validity. Validity becomes increasingly salient due to the researcher's direct involvement as insider (Rooney, 2005). It is so because in qualitative research the researcher is the research instrument in the data collection process (Borg *et al*, 2012; Creswell, 2007). Qualitative researchers collect data themselves through examining documents, observing behaviour and interviewing participants

(Creswell, 2007). Although they may use an interview protocol, it only serves as a guide of what to focus on – the researcher is the one who actually probes for the data.

Rooney (2005) argues that the role of an insider researcher may lead to a lack of objectivity, resulting in a distortion of the findings which threatens validity and trustworthiness, for example, when participants assume that researchers have the inside information and so omit pertinent information, or when the researcher's hidden agendas leads to misrepresentations, or when the researcher's own moral, cultural and political stances leads to distortion of data (Rooney, 2005). However, Lincoln and Guba (1985:320) talk of a "confirmability audit", which refers to an audit trail consisting of raw data, analysis notes and personal notes which allow the researcher to demonstrate trustworthiness. Such an audit allows the researcher to illustrate the process of rigour attached to data collection sessions, the researcher's own reflexive accounts and stance, as well as the system that was used to analyse and interpret the findings so as to produce an evidence-based understanding of the context. The detailed discussion in this current methodology chapter serves as part of such an audit trail.

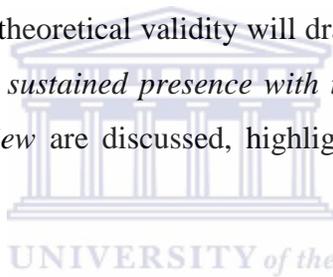
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Furthermore, it is arguable that the potential for bias exists in the role of insider researcher. However not all insider research may be subject to bias. The nature of the research question alone may make some research more prone than others, for example, Rooney's (2005) analysis of validity of Fraser's (1997) curriculum evaluation study. Rooney (2005) identified the following issues that might compromise valuable research. Fraser was responsible for program quality and in her action research she recognized her professional role as a possible influence on participants' honesty, that internal politics may have prevented staff members from revealing pertinent information, and that some participants were 'directed' to participate by senior management, thereby compromising their voluntary participation and honesty thereof. Furthermore, in the attempt to evaluate a program in which the researcher taught, she ran the risk of establishing the effectiveness of a program for which she herself was responsible (Rooney: 2005).

Apart from any bias in the research process itself, the research aim, that is, what a researcher actually wants to do with the research may make some research more prone to bias than others. Malterud (2001) holds that the researcher's background and position will affect what s/he chooses to investigate. The extent to which my role as an 'insider' at the institution where the present research was conducted, and the extent to which it might have led to bias in the research process, is discussed later in this chapter. The next discussion focuses on how theory and research structure contribute to validity.

4.4.2.3. Theoretical validity

Theoretical validity reflects the extent to which a theoretical framework has been aptly interpreted in the analysis (Johnson, 1997:286). Some of the ways of ensuring theoretical validity overlap with certain strategies/ways of ensuring descriptive and internal validity and so discussions of ensuring theoretical validity will draw on two strategies used in the latter two concepts. Having a *sustained presence with the research participants in the research setting* and *peer review* are discussed, highlighting the extent to which they were applied in this research.



Apart from facilitating the verification of findings, having a *sustained presence with the research participants in the research setting* also allowed for *theoretical validity* to be partly achieved (Johnson, 1997). It allowed researcher to be confident that the patterns she believed were operating was stable. It also allowed her to be confident in understanding the relationships between phenomena so that valid conclusions could be made in relation to the theoretical framework.

Another strategy for promoting theoretical validity is *peer review* (Johnson, 1995). Peer review is similar to investigator triangulation except that in the latter, researchers involved in the data collection and/or analysis are used to validate findings – the researcher involves peers independent of the research to discuss findings and explanations for the findings. Involving peers allows for verification of the findings and to assess if the interpretations made were in response to the theoretical framework set out. Just as investigator triangulation not being exercised in this research, so too was peer

review not conducted. However, just as for investigator triangulation, in the analysis phase frequent consultations with the researcher's supervisor also served to provide a platform to discuss interpretations of the data. These consultations also enabled the researcher to assess misinterpretation or inadequate interpretation of the data when using the theoretical framework as a lens.

Thus far strategies that can be applied to ensure internal validity were discussed. In this last section on validity and reliability in qualitative research, three further aspects are discussed: *reliability*, *dependability* and *external validity* (generalizability). Strategies aimed to ensure reliability, dependability and external validity allows a demonstration that research is both credible and defensible, and thus theoretically valid (Johnson, 1997).

4.4.3. Reliability

Conventionally, reliability of the design or data collection tools refers to the degree to which a design or tool repeatedly yields similar findings, remaining stable over a time period (Hoepfl, 1997). Cohen *et al* (2000:105) explain that reliability, while necessary, is an “insufficient condition” for validity in research; nevertheless, it is a necessary “precondition” of validity. Mays and Pope (1995) highlight that in qualitative research findings are specific for a particular cohort and are not generalizable. But Cohen *et al* (2000:105) argue that there are two goals that *qualitative* researchers should aim to achieve in demonstrating rigour with their findings: creating an accurate detailed account of the method which “can stand independently so that another researcher can analyze the same data in the same way and come to the same conclusions”, and producing a credible and consistent explanation of the phenomena under study.

My position on the significance of this conventional approach to replicating findings is that the existence of multiple realities allows for differing behaviours depending on the contexts in which they are studied. Therefore the provision of an *audit trail* would enable other researchers to assess the extent to which aspects of the research design or data collection methods may be rendered reliable for replication of similar findings. In the current study certain findings were repeated when insight was sought about the same

issue at different points in the research by using different methods or strategies. But these repeated findings occurred within a period of a few months, within the same context and from the same student participants. For example, student perceptions of the kinds of challenges they experienced in their home environment, and the kinds of preparation they perceived to have had for higher education were conveyed as the same on different occasions. While some environmental contexts would change over time, events concerning the community and family backgrounds are arguably slowly evolving phenomena and hence student responses to questions about their backgrounds were not expected to yield very different findings.

In considering that in qualitative research findings are specific for a particular cohort and are not generalizable, achieving reliability is arguably not meant as a measure against other research but can be tested within the same research to check for accuracy.

4.4.4. Dependability

Dependability refers to whether the findings arrived at are consistent with the data collected (Hoepfl, 1997:1). Lincoln and Guba (1985) argue that as long as research indicates reliability, it is valid and thus if it is dependable, it is credible. In demonstrating a sufficient presence of reliability, credibility is established (Lincoln & Guba, 1985). As a lone researcher, I allowed the conceptual framework to serve as a guide throughout the research process, ensuring that there was alignment between the research question, data collection, analysis and interpretation. My stance on dependability concurs with that of Lincoln and Guba (1985), who propose that one way to enhance dependability is through an inquiry audit in which other researchers are encouraged to examine the process and the product of the research for consistency before adopting a similar research process. The detailed attention to ensuring an accurate reporting of the methodology in this thesis allows for researchers to make judgments about the usefulness of this study to them.

However qualitative researchers still emphasize the constraint on *generalizability*, whereby the research is only applicable, transferable and *generalizable* to the extent that contexts, sample profiles and other contending factors are similar (Hoepfl, 1997; Mays &

Pope, 1995). Lincoln and Guba (1985) posit that qualitative researchers assume that the nature of knowledge is both time and context dependent, so time and context will shape the extent to which qualitative studies can be replicated or applied to the broader society. This concept of *generalizability* will be explored next under external validity.

4.4.5. External validity/ generalizability/transferability

External validity refers to the extent to which the findings can be generalized to other settings or samples (Cohen *et al*, 2000; van der Walt & van Rensburg, 2006). One of the common ways of achieving external validity is by providing a detailed and descriptive methodology that will inform other researchers on the likelihood of findings being reproduced in other settings (Cohen *et al*, 2001; van der Walt & van Rensburg, 2006).

Whilst qualitative research searches for depth and detail of enquiry and understanding of particular participants in small samples sizes and contexts (Hitchcock & Hughes, 1995), its unique feature is that it aims to reflect the diversity within a given population, rather than aspiring to highlight statistical similarities, generalizability or representativeness (Mays & Pope, 1995; Barbour, 2001). The purpose behind purposive or theoretical sampling is deliberately to include “outliers” (Barbour, 2008:43) who are usually discounted in quantitative approaches (Barbour, 2008, 2001). This sampling method allows for subtle but important differences to be illuminated (Barbour, 2001). However, Mays and Pope (1995) argue that purposive sampling has the potential, even as a single case, to provide features relevant to other settings or provide aspects of research which *may* be transferable or generalizable. A more appropriate term for this kind of transferability would be *selective* transferability.

Barbour (2001:1116) warns that, in choosing a sample purposively, it should also be used “purposely” to interrogate the data. The differences and similarities that exist within a sample should not only be described in the methods sections but how these differences or similarities influence the findings should also be explained in the analysis section (Barbour, 2001). This process will enhance transparency and add rigour to the claims made for transferability and generalizability by researchers.

However, the ability and degree to which the research method and findings can be applied in other settings are dependent on several factors: the conditions of the research situation – meaning how similar or different the original research setting is to that to which it is being transferred, and the usefulness of the research findings to individual readers (Hoepfl, 1997; Mays & Pope, 1995). Hoepfl (1997) and Johnson (1997) argue that qualitative researchers are not in a position to specify the transferability of the research findings. In providing sufficient information about the setting, the sample and the data should be an indication in themselves as to the extent to which applicability, generalizability and transferability could be made. Johnson (1997) posits that this act of transparency will allow readers to make informed decisions about to whom the findings may be generalized.

In this research participants were drawn from a larger student body in the faculty and a institutional context, the University of the Western Cape. The data and findings may relate in some aspects to the other groups of students in the oral health program or even other groups of students in other programs at this institution. However, the findings are not representative of other students' experiences and were not intended to be.

My stance regarding validity was aimed at working towards minimizing the impact of biases on the research process and maintaining honesty and transparency in my role as researcher and teacher of those researched. The validating processes in the current study will enable the readers to “construct their own perspectives” (Rooney, 2005:7) that are just as valuable as my own.

4.4.6. Conclusion: validity and reliability in qualitative research

In this section insights were provided into the approaches that were used to address validity and reliability. Where this study could not satisfy strategies suggested in the literature, the researcher argued for ways in which this study managed issues around validity and reliability. The next section provides insight into the researcher's role as insider/outsider, one that allows insight into the multiple realities that the researcher brings to the research situation.

4.5. The researcher as “insider” (LeCompte & Preissle, 2003)

Reflexivity requires the researcher to be aware of themselves as the instrument of research. This is a particularly important issue for ... researchers who are intimately involved with the subject of the research, the context in which it takes place, and others who may be stakeholders in that context (Borg *et al*, 2012:52).

4.5.1. Introduction

This section on the role of the researcher begins with a historical synopsis of my life which will offer insights into the background from which I have come. These insights will shape an understanding of the experiences, understandings and knowledge I brought with me into this research.

4.5.2. Historical synopsis of the researcher

I am an English-speaking Indian-classified woman, born in 1967 in South Africa, from an originally working-class background, but now located in middle-class economic status. My great-grandparents were from India and entered South Africa as indentured laborers to work on the sugar cane plantations. I was raised in a family that started from humble beginnings, but progressed rapidly to a middle-class lifestyle because of my father's success in business. I lived in Kwa-Zulu Natal in South Africa from birth until the age of thirty-two in an area designated for Indian communities, was schooled in a predominantly Indian school with Indian teachers, and interacted mainly with working-class and lower middle-class Indian peers. The neighbouring communities to my area largely comprised of coloured residents on the one side and African residents on the other. However, because of the apartheid regime, all race groups were segregated in terms of schooling and residence, as highlighted in the literature chapter.

I furthered my education in the late 1980s at an English-medium university, an institution which under apartheid had been created for the university education of people classified Indian. My employment in Kwa-Zulu Natal as an oral hygienist was through a separate House of Delegates structure that planned services for the Indian population in South Africa during the apartheid era. My employment was hence confined to the clinics that

serviced the black population, particularly Indian people. I and most Indians were typically socialized within the confines of black citizen possibilities and limitations as highlighted in chapter two. In 1998, after the political dismantling of the apartheid structures and the first democratic elections in South Africa, I relocated to the Western Cape. This move was significant, especially in terms of the diverse culture to which I now became exposed.

All the people in my residential complex and community were predominantly white residents. There were a small number of coloured residents. The majority of the people in my community spoke Afrikaans. However, my interaction was nothing more than greetings or courtesy conversations. Indians, Hindu people in particular, were very few in number and were quite dispersed. This change had an impact on my ability to keep contact with the Indian culture in which I had grown up. Places of worship and celebrations of religious festivals were indeed rare. Festivals were observed in isolation away from friends and family. My children attended a dual-medium ex-model C school, in which ninety-nine percent were white Afrikaans-speaking learners. It was not uncommon for my family to experience times of alienation and an implicit, and at times, explicit sense of racism and antagonism. It was here that I began to understand the perpetuating nature of apartheid and how its principles of segregation and inequality were an embedded part of life. I also understood then how children of a democratic South Africa could easily become socialized in the old apartheid-like stratum.

In 2002, I was employed as educator at University of the Western Cape (an historically black institution) in the Faculty of Dentistry which was situated in Mitchells Plain at the time. This is an impoverished area created through the relocation of people historically classified as coloured by the apartheid government. It was while working in this environment that my interaction with coloured and black African people increased on a more personal note. My entrance into the faculty positioned me in a slightly familiar terrain because of my being Indian and having experienced segregated institutions and residential locations. The context of the Dental Faculty has been discussed in detail in the contextual chapter.

In 2004, when the School of Dentistry (a predominantly white and Afrikaans populated institution) of the University of Stellenbosch was incorporated into the University of the Western Cape, I moved my offices to the Tygerberg site where the Management and approximately 80% of the staff of the Faculty of Dentistry of the University of the Western Cape were now located. It was at this point that my first close professional contact with white staff was made. All ex-Stellenbosch staff members, most of whom were from the white race group, had their offices at the Tygerberg campus. In my interaction with students, my past experiences and raced location resulted in me recognizing phenomena such as socio-economic challenges (largely because of my working-class background as a child), lack of race interaction and lack of university preparation in the majority of black students. Their experiences were in contrast to those observed among the middle-class white and Indian students. Few *et al* (2003:206) argue that the lens we see through and the “theories we select to explain phenomena findings from our own personal experiences are how we understand our social location and that of others in the world”. To this end, I will position myself in the research context and provide an insight into this position and the challenges and strengths of being both insider and outsider.



4.5.3. Positioning the *insider* role

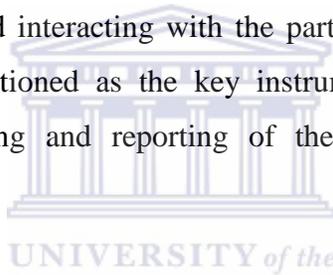
At the time of the research, I was employed as a lecturer in the Department of Oral Hygiene, where I served as the first-year coordinator. The multiple roles I played, such as staff member in the research context, educator to the student cohort, coordinator to the students and the first-year program, and working colleague to the academics of the staff cohort, automatically qualified me for an *insider position*. The insider role in qualitative research is one where the researcher has a direct involvement or connection with the research setting (Robson, 2002), conducting research with populations of which he or she is also a member.

4.5.4. The researcher as *teacher-insider* researcher

The use of *insider* has its roots in ethnography and is a technique used to gain insight by observing, listening and asking questions as an *insider* (emic position) in the context of

sociology and anthropology (LeCompte & Preissle, 2003). This is in contrast to the *outsider* (etic position) that is adopted when there is no research reason to get close to the researched (Ekanem, 2007; LeCompte & Preissle, 2003; Denzin & Lincoln 2000). Research on the reflective practitioner refers to the term “insider researcher” or “practitioner researcher” (Workman, 2007: 147; Robson, 2002:382). It is arguable that, given my intimate association with the context of and participants in the study, I should be understood as an insider researcher. Such a researcher has a dual position, one which has a direct involvement or connection with the research setting (Robson, 2002) and one that engages in research or inquiry relevant to the work he/she does.

In the current study, the process itself required the researcher to be engaged extensively with the setting and cohort. The qualitative research methods that were adopted involved watching, asking, listening and interacting with the participants (Pope & Mays, 1995). The researcher was thus positioned as the key instrument in the coordinating, data capturing, analysing/interpreting and reporting of the research (Borg *et al*, 2012; Creswell, 2007).

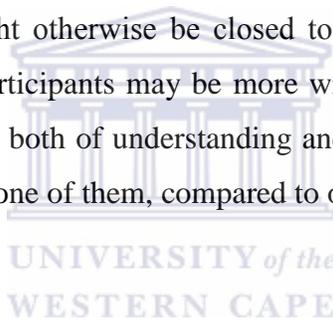


As in the case of most classroom-based, action or case study research, access is regarded as more of an *automatic* process (Rooney, 2005). My entry was not a negotiated one (access was negotiated in terms of ethics with consent forms and Senate permission) as is the tradition in most field studies. In these studies, access is negotiated, not only because of the researcher being completely alien to a setting but also because some ethnographers have no credible reason (or interest) for being in the setting other than for the research purpose (LeCompte & Preissle, 2003). My position in this research differed, in that it was my commitment as educator and staff member that directed my interest in the research inquiry, which was to understand differential performance and the aspects which contribute to shaping clinical competence.

Many advantages have been reported on the insider role in research. It is considered a powerful role in that the insider has practical experience, insider knowledge and greater awareness of certain aspects in comparison to the outsider (Workman, 2007). Insiders

have deep insights and a wealth of knowledge, to which the outsider is not privy (Workman, 2007). As insider to the research context, I possessed knowledge of the routines and institutional culture, as well as insights into the oral health program, which the outsider would not have had.

It is also argued that interviewees may feel more comfortable and freer to talk openly if they are familiar with the researcher (Few et al, 2003). Dwyer (2009) explains that a researcher's insider role as a result of membership of the setting (in this case my role position as staff member) automatically provides a level of trust and openness with the participants that would probably otherwise not have been present. This trust allows the researcher rapid acceptance by their participants, enabling access to data at a greater depth. This position of trust also allows the researcher a "starting point", one that affords access into groups which might otherwise be closed to "outsiders" (Dwyer, 2009:58). Dwyer (2009) explains that participants may be more willing to share their experiences because there is an assumption both of understanding and of shared distinctiveness; it is as if they feel the researcher is one of them, compared to others on the outside who do not understand.



However, this ease of access should not be treated as an automatic entry into the "internal logic" of participants (Ekanem, 2007:105). Dwyer (2009) argues that although insider status facilitates real access and provides common ground, it has the potential to obstruct the research process. Sometimes insider status has to be re/negotiated at different points in the research process, depending on the context at a given time. In this study, this negotiating was done just prior to each data collection phase and was used as an opportunity to remind the research participants about maintaining confidentiality in the data collection phases. It also created opportunities to renew the trust and insider status.

However, Alzbouebi (2007) warns that even though insider researchers seem to gain access and build trust easier than outsider researcher, researchers should develop and maintain an "informed reflexive consciousness" in order to skillfully contextualize their own subjectivity in the way data is interpreted and re/presented. Although there were

many occasions when I had to remind myself to foreground my role as researcher rather than lecturer and year coordinator, there were instances when I felt I needed to respond to the issues raised out of empathy. Alzbouebi (2007) suggests that self-reflexivity enables the insider researcher to articulate his/her motivations for conducting research. The motivation for the present research was to understand aspects influencing student differential performance pertaining to clinical competence from my perspective as educator and year coordinator to the student cohort. This motivation served to delineate the role of the insider researcher and that of lecturer/year coordinator.

Rooney (2005) argues that as an insider researcher the issue of bias becomes more prominent because of the researcher's involvement and familiarity with the research context. However, given the rewards of reflective practice, Fraser (1997:161) defends the issue of bias, claiming that "professional responsibilities" (which in this study was that of an educator/year coordinator understanding a situation) "offset the potential for bias". The following discussion will highlight how researchers have to negotiate their own personal roles as insiders, embedded with discussions about my own role as the *self*.

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4.5.5. Negotiating the self within *insider* researcher status

The previous section clarified my position as insider to the research setting as educator/year coordinator and researcher. The discussion in the following section focuses on the *self* as the insider researcher gains access to the subjective realities of the participants. The challenges and the opportunities in my position as the *self* will be expressed. All qualitative researchers are humans with personalities, life histories, personal experiences and attributes (LeCompte & Preissle, 2003). These characteristics may influence research in different ways, posing different problems.

The first problem is that of familiarity blurring the research setting. LeCompte and Preissle (2003:115) stress that "acute problems" could arise for educational researchers who have spent considerable amounts of time as students, educators or even parents in the research setting. They argue that the all too familiar nuances, ordinariness and regular practices tend to pose difficulties in *looking* at the setting differently. However, it is not

always the case, since qualitative research explicitly focuses on the routine or mundane practices and exchanges which people otherwise tend to take for granted (Barbour, 2000). This position is illustrated in Wittgenstein's philosophizing (1953:501) in which he states that "the aspects of things that are most important for us are hidden because of their simplicity and familiarity". LeCompte and Preissle (2003:115) suggest that one way of overcoming this familiarity is by "making the familiar strange" and looking at all facets as if they were happening in a foreign place. For me, it meant acquiring skills that took a *suspicious* and *curious* approach, yet in a *covert* way to position myself as an outsider to the situation. Another advantage in making the familiar strange was that it allowed me to remove the *chaff from the wheat*, to search beyond the usual and also to recognize when there was no going beyond the data collected.

A second problem that may be encountered is that of researchers using the lens of past experience and contexts to view research settings and their inability to change those lenses to capture reality (Few *et al*, 2003). This inability raises the question of the "psychological and emotional extent" which would legitimize one as an insider (Few *et al*, 2003:206). Few *et al* (2003) in their research on black feminism contend that it is common practice that the lens researchers see through and the way they choose to explain phenomena findings from their own personal experiences influences how they understand their social location and that of others. Alzbouebi (2007) argues that researchers must acknowledge their locations within the social world and that power relations implicit in these roles need to be identified, as no researcher can view research from a completely empty position. As an individual with historically embedded experience of being disadvantaged, I distanced myself from any emotional involvement so as to protect the data and the research participants from any implicit empathy and promises. As a researcher, I did not allow myself to become emotionally entangled in the lives and needs of the students unless aspects arose that pertained to my role as their year coordinator.

A third problem is that insider researchers often think that access to pertinent data will automatically be granted by the research subject if the same race, gender and social status are shared between researcher and participants (Few *et al*, 2003). However, there are

possible barriers to this relationship because commonality of ethnicity, professional status (student-researcher/practitioner relationship), class and race are aspects which must be negotiated with informants throughout the research process (Few *et al*, 2003). However, the sharing of characteristics is not sufficient reason to presume an insider status. Certain dispositions of behaviour may shift between moments of good rapport and at other times vast distance, making access to subjective information difficult (Few *et al*, 2003). However, Few *et al* (2003) argue that racial congruity between informant and researcher can be beneficial in that it facilitates the position of insider status. The congruity between my identity (Indian and classified as black during apartheid and working-class) and that of many of the research participants was beneficial in this research in that sharing historically embedded inequalities with the black students allowed issues of race or social class conflicts to be recognized, something which would probably have been missed had there been no congruent associations between the researcher and the black and working-class research participants.

A fourth and further concern in terms of professional status and student-teacher power relationship is that students as research participants are likely to withhold information because of the power implications (Few *et al*, 2003) between teacher and students. A way to overcome this situation, as was adopted in this research, is by transferring *power* to the students by allowing them to lead the discussion, thus empowering them through self-disclosure (Few *et al*, 2003). The researcher, by adopting a stance as if there is no power or hierarchy (as in student-teacher/researcher), places the research subject on equal footing, thereby encouraging a better rapport.

A fifth problem is where the insider researcher, by revealing little of him/herself and his/her stance to the participants, runs the risk of being mistrusted. I made attempts at creating trust in the relationships I shared as insider researcher by explaining that my interest in the participants' experiences resulted from a genuine need to understand their learning experiences. Few *et al* (2003:210) indicate that being "reflexively attuned" to the undercurrents of the researcher-informant relationship minimizes any form of antagonism which may detract from the research goal.

4.5.6. Conclusion to the section on the researcher as *insider*

This section has highlighted the value an insider researcher can bring to the data collection process, in particular, the interview. This value lies in the ability of the researcher to maintain transparency, confidentiality, authenticity and most importantly, trustworthiness. However an ethical stance in the research process is also important. The following section addresses the ethical considerations in this research.

4.6. Ethical considerations

4.6.1. Introduction

One of the cornerstones of conducting authentic, factual and valid research is the ethical foundation upon which it lies (van der Walt & van Rensburg, 2006; Cohen *et al*, 2000). Arguably all research undertaken should be conducted with an ethic of respect for the research participants, their democratic rights and values, for the knowledge they share (data), the quality of the research and for academic freedom (BERA, 2001). My own stance as researcher was based on searching for and reporting of the truth. My understanding of what constitutes truth has been discussed in section 4.4, where I explained ways in which I ensured truthfulness, rigour and validity in the research. If any valid contribution in the research field is to be made, ethical behaviour and practices needed to be the guidelines governing all activities (Thomson, 2011). Ethical guidelines signal a sense of commitment and obligation by the researcher towards the research participants and the research itself. This position formed the foundation upon which I conducted my research. Based on the principles of *autonomy* and *beneficence*, the following discussion presents how ethical issues of *consent*, *confidentiality*, *respect for the research participants* and *handling of recorded material* were addressed in this study.

4.6.2. Consent

Consent for this research was first gained through the Faculty of Dentistry Higher Degrees and Research Committee. Thereafter ethical clearance was granted and the research was registered with the University of the Western Cape Senate Research Committee as an official project of that institution.

The research participants' involvement in the current research was based on voluntary participation (refer to Appendix 10: consent form). Ensuring participants the right of *autonomy* means that each person should be given the respect, time, and opportunity necessary to make his or her own decisions regarding participation. To ensure autonomy prospective participants are given sufficient information to inform their decision to enter a study or not to participate. As suggested by Corti *et al* (2000), at the start of the current study, both staff and student participants were made aware of their right to refuse to participate in the research at any point. Their right to re-negotiate consent was also explained. In order to make informed decisions regarding their participation they had to be made aware of the nature of the research. Thus the researcher took the responsibility of explaining fully and meaningfully what the research was about, the purpose of the study, and its value to higher education. Furthermore, the researcher explained how the information gathered was to be used in writing up the thesis and how the findings were to be disseminated thereafter. They were informed that only the researcher would have knowledge of their participation/nonparticipation or later withdrawal from the research project. Students were made aware that their decision would not have any negative consequences for them. Involvement in the research was thus based on the participants' informed consent. Consent was secured in the form of signed affidavits which included a take-home outline for the students, explaining the research parameters, the value of the research and the process that would ensure confidentiality.

4.6.3. Confidentiality

Beneficence compels the researcher to secure the well-being of all participants. It is an encompassing principle that involves the responsibility of the researcher to protect participants from harm, as well as ensure that they experience the possible benefits of involvement. Confidentiality is considered the norm in any research project (BERA, 2011). Confidentiality revolves around the privacy awarded to the research participants by the researcher and is under-pinned by respect for the participants' democratic freedom and rights (Corti *et al*, 2000). In the current study, the participants were informed how confidentiality was to be maintained and of the potential uses to which the data might be put (Corti *et al*, 2000). Information accessed through the research was only to be used for

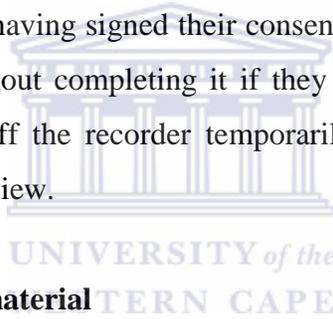
academic purposes, that is, to draw conclusions from the research inquiry and to report the findings to the institution and other researchers. In this case, the complete dissertation will be available in hard copies in the university's library and online repository as well as subsequent articles. The researcher is expected to be ethically responsible for ensuring confidentiality throughout the research process, from data collection to analysis and publication (BERA, 2011).

One way of achieving confidentiality is for the researcher to protect the research participants' identities by using alternatives for names. Furthermore the researcher can substitute any words that may be associated with the research participants that may lead to their identification. If, for example, a public figure or a student was popular in the faculty, detailed descriptions may unveil the students' identity. Changing the name of residence, together with a pseudonym for the subject's name allows that subject to remain anonymous in the public domain. In the current study, the participants were asked to choose their own pseudonyms/code-words for ease of data management. The multi-method technique of collecting data required that the participants write reflective reports and be interviewed at different points in the data collection process. The same pseudonyms/code-words were used for ease of tracking the data to the research subject.

The publication of the thesis for the institution's library and its online repository as well as the first publication arising from a study is signaled as the first time that perceptions, facts or life stories about the participants under study are put into the public domain (Corti *et al*, 2000). The detailed rich nature of qualitative data lends itself to implicit and explicit disclosure of personal information, descriptions of the interviewees, their lives and their surroundings, and as such poses a dilemma to the researcher in how much detail is acceptable to reveal (Corti *et al*, 2000). In this case, disguising the research participants' names, place of residence or other characteristics through using pseudonyms serves to prevent disclosure of the research subject's identity.

4.6.4. Respect for the research participants

Another way of addressing the principle of *beneficence* is through respect for the views of the research participants. Treating them with sensitivity, dignity, and fairness within an ethic of respect is mandatory in the data collection process (BERA, 2011). The interviews in this study generated deep and detailed data. Hence it required sensitivity and respect for the research participants' views. The approach to the interviews, like all the other data collection, included a briefing period prior to the interview, not just to remind each subject about the nature of the research but, as importantly, to ensure that the students and colleagues were fully informed of the context of the interviews. In this way, the participants were given a further opportunity to decline to be interviewed. It served as a way for me to reinforce the ethical foundation upon which the research process was based. Participants could exercise their rights and democratic freedom by refusing to be part of the process, even after having signed their consent. They were informed that they could leave the interview without completing it if they so desired, refuse to be audio-taped, or even elect to turn off the recorder temporarily or permanently at any stage during the observation or interview.



4.6.5. Handling of recorded material

Handling of recorded material was the final issue addressed in response to the principle of *beneficence*. Ethical guidelines and disclosure policies guided the researcher with regards to storage of the transcript material and tapes, as well as disseminating of data in the public domain (BERA, 2011). Audio-tapes and completed transcripts were securely stored in a sealed box in a private area to which no staff or students had access except for the researcher. As highlighted earlier, the transcribing was conducted by a professional transcribing consultant who was accessed through a recruiting firm. The transcriber was unknown to the researcher, the research participants or the researcher's supervisor. The recruitment company ensured that the transcriber did not reside in the same suburb as the university or surrounding areas where students lived. The recruitment company ensured anonymity in managing the transportation of the audio tapes and completed transcripts between the researcher and the transcriber.

The transcribed data will also only be stored until reporting had been completed, that is, until any publications derived from the study have been accepted for publication. The audio tapes, once checked against the transcribing for accuracy and in cases of poor sound quality to verify data, the tapes were stored away. These tapes will be destroyed after the PhD thesis reporting this study has been examined. Hence no long-term storage was considered necessary for the transcripts or audio tapes.

4.6.6. Conclusion: ethical considerations

This section has highlighted the researcher's ethical position in the research process in terms of conduct, ethical obligation to the participants and the research material. The section argued for the significant role of ethical principles such as autonomy and beneficence as well as guidelines in protecting the identity of the research participants and in the management of qualitative research data.

4.7. Conclusion to Chapter Four: research methodology and design

The research methodology and design chapter was seminal to the research study because it explained the approach upon which the whole research was based. The chapter started by locating the research paradigm. A detailed account was then given of the study design, the selection of the research participants, the methods and strategies employed to obtain data and the approach to the data analysis (thematic analysis). Thereafter attention turned to the mechanisms employed for ensuring rigour, the role of the researcher as *insider*, and the ethical considerations for the research. The next three chapters are dedicated to the analysis. The first of these, Chapter Five, presents the student cohort and their performance. It further presents evidence that argues for a relationship between performance, race and social class.

CHAPTER FIVE

ANALYZING STUDENT PERFORMANCE

5.1. Introduction

In this chapter and the following two chapters, the findings of the data analysis are presented in order to assess the influence of diversity and the educational climate in shaping student clinical competence. The research was framed around a particular set of questions: why do some students thrive while others do not; what is the quality of academic life for students from historically disadvantaged and advantaged societies; how and why do certain issues influence them and in what ways; and to what extent does the institutional culture at the University of the Western Cape accommodate all students? During the research, it became necessary to place emphasis the quality of academic life for historically disadvantaged and working-class students and the research context in terms of the extent to which the educational climate at the Faculty of Dentistry accommodates these students.

Drawing on the concepts of *capital* (Bourdieu, 1986) and *integration* (Tinto, 1975) the findings presented in the analysis chapters set out to explain the following: Chapter Five explains the relationship between academic performance, race and social class and how economic and cultural capital contributes to shaping student preparation for higher education. Chapters Six and Seven explain how access to economic and cultural capital in addition to the educational climate shaped students' social and academic integration respectively. Chapter Five begins by introducing the student cohort.

5.2. Introducing the student cohort through performance

5.2.1. Introduction

In order to understand how race and social class contributed to shaping student performance, this chapter begins by introducing the demographic profile of the cohort. It then gives an overview of the performance of the cohort for the period 2007-2009, before placing the students into categories on the basis of their academic performance. The chapter then presents student performance in relation to race. Thereafter attention turns to

students' social class locations with insights that are supported by students' own accounts of their socio-economic contexts. This evidence is used to argue in both the current and later chapters that race and social class influence student preparation for and subsequent integration into university, both of which are understood to shape performance.

5.2.2. Demographic profile

The cohort of students was the full class of 2007 registered in the oral health program either for the diploma or the degree. As highlighted earlier, selection and enrollment was dependent on the following: the student's matriculation performance, the programs' admission requirements, the point scores allocated and the students' preference as in the case of the student who satisfied all degree program criteria but opted to exit with the diploma. Mention was also made that students who were in the diploma program could apply to enter the degree program based on their performance in the program.

Since this study was longitudinal in design all students were tracked for as long as they were registered in the program. All students remained as part of the cohort but reporting on them was based on the information available from the data collection. Although data was collected at various points in the program it was only those students (Keelan, Brandon, Collin and Siriyal) who deregistered in the *first* year that were not included in aspects of the data collection. Since Keelan, Brandon, Collin deregistered in the first six months they were not included in the observations, reflective reports, focus group discussions and one-to-one interviews because data collection only started in July 2007. However, their assessment records of tests before they deregistered were used as performance indicators to place them in a category. These students failed almost all the semester tests and deregistered because of their poor performance. Siriyal on the other hand deregistered after writing the November 2007 examinations. She failed three modules in 2007 which meant her repeating the year. She attributed her deregistration to "financial challenges" (Siriyal). For these four students, their application documents and entrance interview records were used as insights into their residence, family history of university attendance and parent employment to place them in a social class location. Likewise, Colleen and Bianca who also deregistered were only tracked until 2008 and

2009 respectively – reporting on these students was also based on data available until that point of deregistration.

The cohort of students was predominantly South African and diverse in terms of race and social class. Of the twenty-seven students who constituted the cohort, five were international students from mid-Africa (IEASA, 2011). Of the twenty-two South African students, thirteen were in the category classified as coloured, five were white, three were Indian and one was black. Sixteen (73%) out of the twenty-two South African students came from backgrounds that can be described as historically disadvantaged (McKinney & Soudien, 2010; Bond, 2004) – at least eleven of these students at the time of the study were still living in the low socio-economic households and communities in which they had been born. In addition three students from the international group of five were also from working-class backgrounds. The remaining eight students were from middle-class backgrounds (six South African and two international students).

Five students were first enrolled in 2006 in the oral health program; they failed and repeated the first year in 2007. They were included as part of the 2007 cohort. The names of these students are highlighted with a lilac block ADP in the Tables 5.1 to 5.4. All the students who entered the program in 2007 held a Senior Certificate with Endorsement. However their entrance point scores differed. Students Keelan, Brandon and Collin who deregistered in the first six months had scores of 23 and could thus only register in the diploma program. The only other students who had 23 point scores were Lethiwe, Chelsea and Zainub who were part of the five students from 2006. Although all other students were eligible for the degree program, all did not opt to do so. Only Komilla, Taylor, Amanda, Yasaar, Shenay, Gabriella and Alexander pursued the degree. The following Table 5.1 serves as a summary, giving an overview of the demographic profile of the 2007 cohort, as well as a snapshot of their progress from 2007 to 2010. This overview serves to keep hold of the argument being built around performance, race and social class. The section after Table 5.1 focuses on a detailed presentation of student performance. Several blocks are highlighted in specific colours but these will be addressed in subsequent sections in detail.

Table 5.1: Demographic profile and performance - cohort of oral health students (2007-2010). Deregistered Fail Low achiever

		Race	Social class	Gender	Parent employment	Performance category	2007 (1 st year program)	2008 (2 nd year program)	2009 (diploma/ degree completion)	2010 (diploma completion)
1	Amber	Coloured	Working	Female	Casual work	Low	Passed	Passed : completed Diploma		
2	Komilla	International	Middle	Female	Medical doctor	High	Passed	Passed	Completed Degree	
3	Keelan	Coloured	Working	Male	Worked in an office	Low	Deregistered			
4	Monique	Coloured	Working	Female	Teacher	Low	Passed	Fail 2 nd year	Repeating 2 nd year: fail	Repeat 6 mths
5	Bianca	White	Middle	Female	Farm owners, business	Low	Passed	Fail 2 nd year	Fail : Deregistered	
6	Nicole	Coloured	Working	Female	Factory, Paramedic	Low	Fail	Repeating 1 st year program	Passed 2 nd year : Diplo	
7	Taylor	White	Middle	Female	Professional Coach	High	Passed	Passed	Completed Degree	
8	Lethiwe	Black	Working	Female	Domestic worker	Low	1 st year Repeat: passed	Fail 2 nd year	Repeating 2 nd year: fail	Repeat 6 mths
9	Ashley	White	Middle	Female	Owner of Business	High	Passed	Passed : completed Diploma		
10	Emily	White	Middle	Female	Farm owners, Business	High	Passed	Passed : completed Diploma		
11	Amanda	International	Working	Female	Office	Middle	Passed	Passed	Completed Degree	
12	Nasra	Coloured	Working	Female	Office	Low	Passed	Fail 2 nd year	Repeating 2 nd year: Dipl	
13	Chelsea	Coloured	Working	Female	Factory	Low	1 st year Repeat: passed	Fail 2 nd year	Repeating 2 nd year: fail	Repeat 6 mths
14	Brandon	Coloured	Working	Male	Clerical	Low	Deregistered			
15	Colin	Coloured	Working	Male	Clerical	Low	Deregistered			
16	Zubeida	Asian	Middle	Female	Owner of Business	High	Passed	Passed : completed Diploma		
17	Zainub	Asian	Working	Female	Employed in a business	Low	1 st year Repeat: passed	Fail 2 nd year	Repeating 2 nd year: fail	Repeat 6 mths
18	Yasaar	Coloured	Working	Female	Employed in a business	Middle	Passed	Passed	Completed Degree	
19	Shenay	Coloured	Working	Female	Nurse	Middle	Passed	Passed	Completed Degree	
20	Nisha	Asian	Working	Female	Poultry business	Middle	Passed	Passed : completed Diploma		
21	Colleen	Coloured	Working	Female	Lecturer Sports Science	Low	1 st year Repeat: passed	Fail : Deregistered		
22	Gabriella	International	Middle	Female	Owner of Business	High	Passed	Passed	Completed Degree	
23	Amy	White	Middle	Female	Employed in business	High	Passed	Passed : completed Diploma		
24	Alexander	International	Working	Male	Office (unclear)	Middle	Passed	Passed : completed Diploma		
25	Jared	International	Working	Male	Office (unclear)	Middle	Passed	Passed	Completed Degree	
26	Zeta	Coloured	Working	Female	Pensioners	Low	1 st year Repeat: passed	Fail 2 nd year	Repeating 2 nd year: fail	Repeat 6 mths
27	Siriyal	Coloured	Working	Female	Casual employment	Low	Deregistered			

5.2.3. Presenting academic performance of the cohort (2007-2009)

Academic performance at university determines whether a student will succeed and graduate or fail. Marks during an academic year or program give an indication of a student's progress, level of competence and mastery along the trajectory of the degree (Scott, 2009; Scott *et al*, 2007). Marks attained also signal the effect that *student preparation* may have in this process (Wilson-Strydom, 2010; Scott *et al*, 2007).

In the current study, the academic performance of the cohort, as recorded on mark schedules, provided information about individual students' performance and competence at progressive points (November of each year) in the program. These records were marks of theoretical and clinical assessments which assessed knowledge and clinical competence. Tables 5.2, 5.3, 5.4 and 5.5 present an overview of the *summative* assessments for the cohort from 2007 to 2009. The final assessment mark, which was the summative assessment mark was the product of continuous assessment activities during the year and a final year-end assessment. These tables serve as reference for the remainder of the analysis. The following key offers a quick reference to the meaning of the colour codes and specific terms used as a standard in all four tables. Further meanings of these codes and terms follow.

Focus area	Colour	Meaning
Module information		Focuses on assessing clinical theory and skills
		Prepares the student in terms of knowledge and skills that contribute as a theoretical foundation for clinical practice
Assessments		Foregrounds repeated assessments through supplementary or special examinations in modules failed
		Denotes an incomplete course work
Special group		Five students were first enrolled in 2006 in the program; they failed and repeated the first year in 2007
Significant terms in the comments column	“credit”	“credit” refers to modules previously passed based on specific conditions as stipulated in the University Assessment Policy
	Pass	A mark of 50% and over indicated a pass
	Incomplete	Denotes an uncalculated weighted mean or average

In tables 5.2, 5.3, 5.4, and 5.5 the comment column highlights the students who failed, deregistered or attained a reassessment (supplementary or special examination), as well as those who passed. Modules were divided into two categories in order to distinguish those modules that comprised of clinically-associated assessments from those purely theoretical in content but included aspects with a community focus. Focus on assessing clinical theory and skills is denoted by the colour code . The colour code  indicates the modules that prepared the student in terms of theoretical foundation for application in clinical practice. In 2007, for example, these modules pertained to academic literacy skills and health systems knowledge.

To foreground repeated assessments, the colour code yellow  highlights the modules which students failed or for which they wrote supplementary exams or special exams. Supplementary examinations were written in the same examination period. Special examinations were written when a student missed an examination because of medical reasons. The special examinations were granted based on decisions proposed by the Faculty Assessment Committee and finalized by the Senate Assessment Committee. These examinations were written after the November examination period in January of the subsequent year.

A *pass* mark is indicated by 50% and over. *Credit* refers to a module previously passed. In the tables 5.2, 5.3, 5.4 where there are two scores in a block, it denotes a second chance assessment such as the supplementary examinations or special examinations. The colour code  indicates incomplete course work such as clinical quotas and projects. Students consequently did not gain entry into the final assessment and thus failed the module. In some of the blue blocks there are marks, but they still denote incomplete work. *Incomp(lete)* denotes an uncalculated weighted mean and average because of an incomplete coursework mark in a module/s.

Table 5.2 below outlines student performance as per the year-end marks-sheet for 2007, which was the first year of the program. Aspects related to race and social class patterns are reserved for later dedicated sections.

Table 5.2: Mark sheet for the cohort of 1st year oral health students (2007) (Oral Hygiene Department records, 2007)

Clinical theory and skills								Academic Literacy, Health Systems				Weighted	Avg	Category	Comment
Module	ORB101	IPC110	CLP100	ODP110	ADP120	OHP120	RAD123	ALD110	HDP110	HDP111	Xhosa/Afr	Mean			
Credit Value	15	15	20	20	15	15	5	10	5	10	10	140	1100		
Weight %	10.7	10.7	14.3	14.3	10.7	10.7	3.6	7.1	3.6	7.1	7.1	100.0	100		
Amber	63	49/50	61.2	62.5	72.8	60.0	64.0	75.0	65.9	62.1	69	63.9	64.7	Low	Passed sup
Komilla	84	74.1	84.3	82.3	84.7	84.0	92.0	86.4	92.2	83.9	84	83.5	84.7	High	
Monique	56	54.0	58.5	58.0	59.4	56.0	50.0	77.2	65.2	60.6	46	58.0	58.3	Low	Passed special
Bianca	61	50.0	55.7	51.0	60.8	58.0	59.0	76.7	55.3	68.7	14	55.3	55.5	Low	Passed special
Nicole	48	51.8	60.5	57.1	62.1	58.0	50.0	69.1	21.3	64.7	43	55.7	53.4	Low	Failed in 2007
Taylor	89	74.4	77.3	77.2	88.1	82.0	95.0	83.9	78.5	78.9	73	80.8	81.6	High	
Lethiwe	76	73.6	67.9	66.8	Credit	72.0	Credit	Credit	61.3	75.6	76	Credit	51.7	Low	
Ashley	81	65.0	74.0	73.2	78.4	73.0	85.0	83.6	74.0	87.1	70	75.7	76.8	High	
Emily	94	83.4	82.4	89.9	86.7	96.0	93.0	82.7	79.1	67.1	64	84.5	83.5	High	
Amanda	66	50.0	59.2	66.0	72.6	71.0	68.0	63.3	82.4	63.9	70	65.1	66.6	Middle	
Nasra	67	55.0	63.9	58.2	69.2	56.0	60.0	74.4	63.2	69.7	40	61.4	61.5	Low	Passed special
Chelsea	Credit	50.2	51.0	63.9	Credit	Credit	Credit	Credit	Credit	Credit	42	Credit	51.8	Low	Passed sup
Zubeida	90	77.6	76.1	71.9	84.7	79.0	76.0	73.1	80.0	74.0	59	76.9	76.5	High	
Zainub	Credit	Credit	56.0	57.9	Credit	60.0	60.0	Credit	Credit	Credit	43	Credit	55.4	Low	Passed sup
Yasaar	81	59.9	66.1	69.2	69.3	68.0	65.0	84.5	76.8	67.0	74	70.2	71.0	Top	
Shenay	51	50.4	60.1	64.3	75.6	65.0	65.0	66.5	78.1	63.0	41	60.9	61.8	Low	Passed special
Nisha	59	51.6	58.3	56.7	63.0	55.0	51.0	82.6	86.5	61.0	59	60.2	62.2	Low	
Colleen	Credit	53.7	54.0	Credit	Credit	Credit	Credit	Credit	Credit	Credit	56	Credit	54.6	Low	
Gabriella	70	64.1	70.9	76.5	81.6	67.0	79.0	79.5	83.6	72.0	61	72.3	73.2	High	
Amy	82	66.8	69.7	70.7	68.5	71.0	61.0	78.1	66.2	72.0	73	71.3	70.8	High	
Alexander	55	51.6	65.2	58.5	78.4	73.0	73.0	72.1	77.4	73.0	43	64.1	65	Middle	Passed special
Jared	54	53.5	60.9	57.4	64.4	63.0	61.0	77.9	72.3	75.0	30	59.8	60.8	Low	Passed special
Zeta	46/50	Credit	60.8	56.7	Credit	59.0	Credit	Credit	Credit	Credit	26	Credit	50.6	Low	Passed sup
Siriyal	67	43.0	50.1	51.2	56.7	45.0	54.0	77.0	65.0	74.0	39	54.9	56	Low	Deregistered

Key Feature of Table 5.2

Table 5.2 reflects student performance for each module for the first year of the oral health program in 2007. Although twenty seven students were in the cohort, some students were excluded from the November mark sheets if they deregistered before the November 2007 examination. This exclusion does not dismiss them from the cohort. Thus Table 5.2 only captured students who reached the November final assessment stage (this is the assessment that denotes promotion into the second year of the program). For these 2007 final assessments the following should be noted. Three students deregistered *before* this assessment. The five students who started the program in 2006 and who are indicated by the colour code lilac  all passed in 2007. In this examination, one student (Nicole) failed and one student (Siriyal) deregistered after writing the final assessments. A total of four students thus deregistered in the first year. Nicole repeated her first year program in 2008, she passed all modules and ‘re-appears’ in the 2009 mark sheet.

For the module *Xhosa* or *Afrikaans*, there were 11 students who failed. It was a program requirement for students to register for either language in order to gain competence in another language. Students wrote either a supplementary or special examination in this module and promoted to the second year (excluding Nicole and Siriyal who failed other modules).

Table 5.3 presents the summative assessment marks for 2008 for the cohort in the 2nd year of the program. This table is followed by Tables 5.4 and 5.5 which presents the summative marks for 2009 for students who were repeating the 2nd year program and for the group from the cohort that went on to complete the degree program respectively. Key features of these three tables are discussed thereafter.

Table 5.3: Mark sheet for the cohort of students for their 2nd year (2008) (Oral Hygiene Department, 2008)

Clinical theory and skills							Individual, special needs & community based care						Weighted	Average	Category	Comment
Module	OHP200	CLP200	LAS200	RAD200	SPC210	STD210	HTD220	MHD223	PRV212	EPM224	HST211	PDEV	Mean			
Credit value	10	30	10	10	15	15	15	10	5	5	5	5	135	1200		
Weight	7.4	22	7.4	7.4	11.1	11.1	11.1	7.4	3.7	3.7	3.7	3.7	100.0	100.0		
Student																
Amber	45/50*	52	46/50*	47/50*	33/43/50*	52	45/50*	57	52	59	50	69	51	52	Low	*Passed sup
Komilla	77	70	75	71	71	75	75	76	71	76	79	90	74	76	High	
Monique	52	51	35	45/45	43/55*	50	54	57	45/47	65	50	65	51	52	Low	Failed
Bianca	Incomp	Incomp	Incomp	Incomp	Incomp	Incomp	Incomp	61	Incomp	48	Incomp	Incomp	Incomp	Incomp	Low	Failed
Taylor	74	68	73	75	70	75	76	77	73	72	75	87	73	75	High	
Lethiwe	46/47	46/48	38	Incomp	61	58	47/51*	64	55	67	50	63	Incomp	Incomp	Low	Failed
Ashley	75	60	72	64	64	68	75	57	68	72	59	88	67	69	High	
Emily	80	70	82	78	84	80	81	77	79	89	75	87	78	80	High	
Amanda	65	57	53	57	54	58	64	60	59	60	61	66	59	60	Middle	
Nasra	62	45/47	19	45/45	38/43	51	43/53*	66	45/40	63	50	69	Incomp	Incomp	Low	Failed
Chelsea	62	46/47	41	45/47	50	53	44/53*	57	51	74	75	76	53	57	Low	Failed
Zubeida	64	60	69	66	71	65	63	64	65	75	72	72	65	67	High	
Zainub	48/ 50*	45/41	20	Incomp	50	50	49/50*	62	50	63	50	45/45	Incomp	Incomp	Low	Failed
Yasaar	63	55	49/51	53	54	58	66	62	57	60	67	75	59	60	Middle	*Passed sup
Shenay	58	50	50	50	54	62	58	65	56	65	51	62	56	57	Middle	
Nisha	61	50	56	55	50	62	59	71	59	55	57	70	57	59	Middle	
Colleen	69	51	51	45/45	30/45	54	54	69	57	70	58	82	56	59	Low	Deregistered
Gabriella	71	58	60	63	68	65	70	71	68	73	67	77	66	68	High	
Amy	67	62	60	56	70	62	66	58	70	74	72	77	64	66	High	
Alexander	65	52	58	60	55	58	57	72	60	76	63	83	60	63	Middle	
Jared	60	50	47 /50*	54	51	52	47/50 *	75	57	70	55	68	55	57	Middle	*Passed sup
Zeta	45/47	46/47	46/47	Incomp	54	47/52	42/50*	59	51	54	53	62	Incomp	Incomp	Low	Failed

Table 5.4: Mark sheet for the cohort of students repeating 2nd year (2009) (Oral Hygiene Department, 2009)

Clinical theory and skills							Individual, special needs & community based care						Weighted	Aver	Cate-	Comment
Module	OHP200	CLP200	LAS200	RAD200	SPC210	STD210	HTD220	MHD223	PRV212	EPM224	HST211	PDEV	Mean	%	gory	
Credit value	10	30	10	10	15	15	15	10	5	5	5	5	135	Total /12		
Weight	7.4	22	7.4	7.4	11.1	11.1	11.1	7.4	3.7	3.7	3.7	3.7	100.0	100.0		
Student																
Monique	52	54	57	49 /50	55	50	54	57	66	65	50	65	55		Low	Repeat 6mnt
Bianca	Incomp	35	Incomp	35	53	45	46	61	65	50	23	21	Incomplete		Low	Deregistered
Nicole	58	54	52	48 /50	50	51	61	56	66	60	58	54	55		Low	Repeat 6mn
Lethiwe	51	48	70	50 /57	61	67	70	64	55	67	50	63	59		Low	Repeat 6mn
Nashra	62	56	55	57	50	51	53	66	61	63	50	69	57		Low	Diploma
Chelsea	62	56	55	50 /56	50	53	53	57	51	74	75	76	57		Low	Repeat 6mn
Zainub	50	58	66	50 /61	50	66	75	62	50	63	50	60	60		Low	Repeat 6mn
Zeta	51	58	50/61	50 /53	54	61	70	59	51	54	53	62	58		Low	Repeat 6mn

Table 5.5: Mark sheet for the cohort students: 3rd -year degree program (2009) (Oral Hygiene Department, 2009)

Clinical theory and skills				Research	Behaviour Science	Weighted	Average	Category	Comments
Module	CL PR III	OHP III	ODP III	ARS	PSY	Mean	%	Taken from 2008	
Credit Value	40	20	25	20	15	120	Total		
Student									
Komilla	70	71	71	59	75	70		High	Graduated
Taylor	72	75	70	72	78	73		High	Graduated
Amanda	61	65	62	59	64	62		Middle	Graduated
Yasaar	57	57	58	63	57	58		Middle	Graduated
Shenay	54	58	55	54	60	56		Middle	Graduated
Gabriella	68	75	75	68	69	71		High	Graduated
Alexander	70	70	75	63	70	70		Middle	Graduated

Key features of Table 5.3

Table 5.3 reflects student performance in each module for the second year of the oral health program in 2008. Of significance is the number of reassessments or supplementary examinations for this cohort particularly for the clinical modules. The table also shows that seven students failed the year program and one student deregistered. Of the seven students that failed the year program, four were from the group of five students (indicated by the colour code) that failed their first year in 2006. The one student (Colleen) who deregistered was the fifth student of the group of five students who failed in 2006.

Key features of Table 5.4

Table 5.4 presents summative assessments for the group that repeated the second year program in 2009. Nicole reappears on the mark sheet of 2009 after failing in 2007 and repeating first year in 2008. Her entrance in the second year program brought the class of 2009 to eight students. The mark-sheet now indicates that of these eight students, six students failed and one student (Bianca) deregistered, while one student was promoted and exited with a diploma. Of the six students who failed, four (indicated by the colour code) were again those who had failed the first-year program in 2006 and the second year program in 2008. By the end of 2009, at the time that this result sheet was prepared, these students had already spent four years in the 2-year diploma program.

The six students who failed in 2009 had to repeat the module/s in 2010. These students failed modules with significant clinical components. Hence students who failed clinical module/s had to repeat the theoretical and clinical work over a six month period in 2010. The second mark in the yellow block indicates a pass after the six additional months after which, students attained the diploma.

Key features of Table 5.5

Table 5.5 shows that seven students from the 2007 cohort entered the *degree program* and that all were successful.

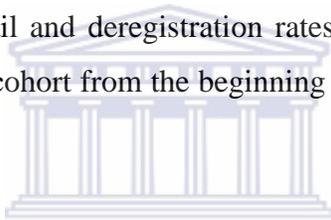
An overview of the students' performance scores for 2007-2009 reveals differential performance across the cohort. There were students who performed consistently better than the others. Some performed at an average level, but also failed assessments at certain points in the program. Other students seemed to struggle throughout the program, as was evidenced by their failure in more than one module and having to repeat a year/s in the program. Based on the summative assessments marks in 2007 and 2008, performance of individual students within the cohort was categorized. This categorization is discussed next.

5.2.4. Categorizing student performance

The analysis of student marks for 2007 and 2008 suggests that student performance, which included clinical assessments, might be classified into three categories – high, middle and low performance categories. It is important to note that in categorizing students in gradations such as middle-class and working-class and low, middle and high performance there are disadvantages in that further possibility of gradation is omitted, particularly if there is fine overlap of characteristics used in the delineating process. It can also leave room for stereotyping, as well as for silencing any grey areas. Importantly, it can overlook pertinent aspects of individuals of a more personal nature. Hence in categorizing students and their performance it can be viewed as a limitation in this study. The following section discusses how student performance was categorized followed by an introduction to the three categories.

Specific documents and criteria guided this process of categorizing student performance. Categories were finalized through an analysis of the 2007 and 2008 summative marks sheets. The formulated weighted mean for each student was already calculated in the Department of Oral Hygiene.

These weighted means were based on the credit value of each module in the program for each study level (or year) and presented as a percentage. These scores allowed comparison between student performances using the weighting of each module for accuracy. Average scores, which were pre-calculated, also served as a guide to establishing the most fitting categories. The scores were calculated taking the total marks of each student across all modules for each year and dividing by the number of modules. Refer to Tables 5.2 and 5.3 for the 2007 and 2008 mark sheets respectively, with particular reference to the *weighted mean* and *average* scores. These averages and weighted means were added for each student for the 1st and 2nd year (2007 and 2008) in order to guide the development of the performance categories. The weighted mean and average marks for each student were then analysed further and subsequently used to place the student performance within one of three performance categories. It should be noted that all calculations of pass, fail and deregistration rates are based on the full cohort – every student who were in the cohort from the beginning of the study remained as part of the cohort.



The terms *low*, *middle* and *high* served to describe the levels at which a student could be performing. *Low* performance referred to weighted mean or average scores in the region of 50-59%. In this category, student performance was defined as two or more modules and/or the year failed. *Middle* performance referred to weighted mean or average scores of 50-64%. Further criteria for this category included no modules failed in the entire program, as well as completion within a minimum time. Supplementary or special exam up to a maximum of two modules served as a concession for inclusion on condition that these were passed and the student was promoted to the next level without failing. *High* performance referred to weighted mean or average scores of 65% and over. The criteria for this category included no failed modules throughout the enrollment period and completion within the minimum time allocated to the diploma or degree.

Refer to Table 5.6 below for a summary of the criteria in the categorization process.

Table 5.6: Performance categories and criteria for student placement

Low performance	Middle performance	High performance
50-59%	50-64%	65% and over
Two or more modules and/or the year failed.	<u>No</u> modules/year failed. Allowed supplementary or two special examinations, but must have passed these for the year concerned. Program must be completed within minimum time.	<u>No</u> modules/year failed. Program must be completed within minimum time.

5.2.5. Introducing the three performance categories

The three performance categories are introduced, first through a description of who the students are that were placed in these categories based on their performance scores. Secondly the overall performance of students in each category is discussed. It should be noted that students who deregistered were still considered part of the cohort total even though some students deregistered as early as six months into the program. This discussion is followed by presenting the staff members' perceptions about the students' performance.

Comments from some of the lecturers (Johan, Anna, Carmen, Janet, Julianne and Hennie) were used to show how lecturers perceived the students differently in each performance category, with the 2007 and 2008 mark-sheets as reference. Anna, Carmen, Janet, Julianne were lecturers based in the Department of Oral Hygiene. Apart from other qualifications, they were qualified oral hygienists. Johan was a dentist whilst Hennie was a specialist dentist. Although they primarily taught in the dentistry program, part of their teaching was in the oral health program.

5.2.5.1. The seven students in the high performance category

The assessment results, as reflected in the mark-sheets (refer to Tables 5.1 and 5.2), positioned the academic performance of seven students in the *high performance* category: Taylor, Ashley, Emily, Zubeida, Gabriella, Amy and Komilla. Academic performance for

this group of students, as depicted in the weighted mean and average scores, was over 65%. These students completed their programs in minimum time, which was two years for a diploma and three for a degree. Clinical assessment results ranged between 65% and 80%. Three of the seven high achievers, Taylor, Gabriella and Komilla, pursued the three-year degree program. Ashley, Emily, Zubeida and Amy exited at the diploma level. Family commitments such as marriage (Ashley, Zubeida and Emily) and the desire to start a career immediately (Amy) were the reasons these students gave for not pursuing the degree program. Students in this group performed with weighted mean and average scores of over 70% in the first year and over 65% in both the second year and third years. Taylor, Emily and Komilla had scores of 70% and over throughout their programs.

These students were described by their lecturers as “quite capable” (Carmen). It was perceived that they “sailed through their course” and consequently were not a group about which lecturers needed to be concerned: “They were the least of our worries” (Anna). Implicit in Anna’s comment are assumptions that this group of students coped well with the curricula demands and expectations, worked independently, and did not require the attention that struggling students generally needed (Angelil-Carter, 1998).

Lecturers also perceived the high performing students as having the skills to support them through their educational journey, as indicated by the lecturers Johan, Anna and Carmen. According to these lecturers, they perceived students in this group as having displayed “confidence” (Johan) and “independence and motivation” (Anna). They were further perceived by a lecturer, Carmen, as students who “participated actively in classroom discussions and often led the work in group activities”. These students were also known to have leadership roles at the time of the study – Taylor, Zubeida and Emily had class representative roles, while Taylor was also on the Dental Student Association Committee.

5.2.5.2. The six students in the middle performance category

Performance marks placed six students in the middle performance group: Alexander, Jared, Amanda, Nisha, Yasaar and Shenay (refer to Tables 5.2 and 5.3). Student performance, as depicted in the weighted mean and average scores, was between 50%

and 64%. The mark sheets also recorded failure in assessments at some time during the first and second year. Jared, for example, in the 2008 mark sheet, indicated a supplementary examination – because this examination was passed, it was not considered as criteria to interfere with the categorization. Completion of the diploma or degree, for these students, took place within the minimum time allocated for the program. The clinical assessments of this group indicated scores averaging between 50% and 60%. Four of the six students proceeded to register for their third year towards the completion of a degree, while the other two students exited on the two-year diploma program. Nisha exited with a diploma because of her marriage plans, while Jared wanted to be closer to home with his family and to start his career.

Lecturers Janet and Johan perceived of this group as having the potential to succeed with some support: “They are students who need a little bit of support and they will be fine” (Janet). This view was echoed by Johan who felt that these students, because of their commitment and persistence, had the potential to complete even the Bachelor in Oral Health program. Johan perceived them to have a sense of dedication to their studies: “Commitment to persist in a challenging program” (Johan). However, analysis of the mark schedules revealed that student performance across the two or three years of their studies remained below that of the high performance category of students. Students in the middle performance group attained 60% or below (except for Alexander at 63%), compared to the students in the high performance category, whose weighted mean or average percentage was 65% and over.

5.2.5.3. The fourteen students in the low performance category

Assessment marks placed fourteen students in the low performance group. Student performance, as depicted in the weighted mean and average scores over the two years combined, was in the range of 50% to 59%. Six students from this group of fourteen deregistered by 2009: Keelan, Brandon, Colin, Siriyal, Bianca, and Colleen, while eight students persisted: Amber, Monique, Nicole, Lethiwe, Nasra, Chelsea, Zainub and Zeta. Of those who deregistered, three students (Keelan, Brandon, Colin) left the program before the mid-year June assessments of their first year and were therefore not included

in the November 2007 mark sheets but were still considered part of the cohort of twenty seven students. Those students that persisted failed two modules and/or the year, despite having opportunities of passing through reassessments¹⁶. Although Amber seemed to have performed well in first year, her repeated assessments in first year and increasingly more reassessments in second year resulted in her performance being placed in the low performance category.

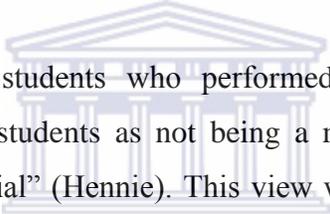
At the start of the research in 2007, five students (Lethiwe, Chelsea, Colleen, Zainub and Zeta) from the 2006 enrollment in the oral health program were repeating their first year. These students were included as part of the cohort. As highlighted in Table 5.2 they passed on their second attempt at the first academic year of the program in 2007, were promoted to second year in 2008, but all failed the second academic year in 2008. Of these five students, Colleen decided to discontinue and deregistered from the program at the end of 2008. In 2009, the remaining four students persisted and repeated the second year program. By 2009, they had already spent four years in the two-year diploma program. In 2009, they failed either one or two clinical modules, which they repeated in the first semester in 2010. They were assessed at the end of the six month first semester period and passed. These four students had eventually enrolled five times to complete the two-year diploma program.

The mark sheets indicated that students in the low performance category experienced failure at some point in the program, either through failing modules (Amber) or the full year. This level of performance was the case for ten of the fourteen students who failed a year or in some cases two years. Of the group of fourteen students in the low performance category, four students deregistered in the first year of study, while two further students deregistered after failing their first year and then once again failing their second year of the program. The eight remaining students who persisted, graduated, but seven of these failed twice in the diploma program, taking four up to four and a half years to complete (five students from 2006 enrollment took an additional six months in 2010 to

¹⁶ Students first had to qualify to write a final examination by attaining a minimum of 40% in the Continuous Assessment Mark. After writing the final examination, a pass between 45 and 49% allowed them an opportunity of being reassessed in that module.

complete their studies).

Amber, Monique, Nicole, Lethiwe, Nasra, Chelsea, Zainub and Zeta, who had already failed a year in the program, remained at risk of failing, even in the years in which they passed. The risk of further failing was indicated by their border-line pass rates in modules and repeated attempts at the final exams. These students passed after several attempts at the final assessments through opportunities such as the final, supplementary and also a special examination. Amber was the only student to have passed her first and second year without failing the year and to exit in the minimum time for the diploma. The core clinical practice module (CLP200) for 2008, which marks the exit year for the diploma program, shows performance scores of an average of 50% and below for students placed in this performance category.



Lecturers' perceptions about students who performed poorly were framed around opinions that related to these students as not being a match for university education: "They are not university material" (Hennie). This view was echoed by Johan and Anna respectively: "They are a little bunch of laggards at the bottom of the class" and "they are not of standard". Students Zeta, Chelsea, Nashra and Amber were perceived by lecturer Anna as lacking in classroom engagement: "They did not participate actively during lecture sessions". This perception may relate to Carmen's experience when she mentioned: "They just look at you blank". Lecturer Julienne perceived students Zeta, Chelsea, Nashra, Lethiwe and Amber as needing to be supported significantly in the program: "They need a lot of support".

During interviews with the lecturers, it was common for them to state their opinions of students using pejorative language, such as when Anna referred to Zeta as "not up to scratch" with regard to her clinical skills, or when Hennie remarked that the poorly performing students were "just doff (stupid)" or that "they don't belong here ... they are not university material". Comments by these particular lecturers were in response to their perception of students who they believed lacked clinical skills and theoretical understanding of oral health conditions that these students were expected to have.

Anna's concern was with the low levels of competence when she reflected on the performance scores of the cohort. Her concern also extended to how students performed after graduation explaining the kind of feedback she received about past graduates: "We get feedback from dentists employing our students ... I'm afraid it's not very positive for the ones that barely coped with the curriculum". Anna, Carmen and Johan offered further perceptions about the employability of graduate oral hygienists who exit with low levels of competence. Anna perceived that those students with poor academic performance who do go on to graduate generally "struggled to find employment". Carmen perceived that these students often had to accept any employment offer that was made even if it was unsuitable: "They settle for any job and salary if offered one" (Carmen). Johan expressed that he knew of students that did not practice as oral hygienists after they graduated: "I have heard that some graduates switch careers" (Johan).

5.2.5.4. Discussion on introducing the three performance categories

The performance scores of the 2007 cohort of oral health students reflected the differential performance rates in the program in the period between 2007 and 2009. These scores showed that 48% (n=13) of the total cohort (including those students who deregistered) failed at least one year in the program. Of this group of 48% (n=13), almost half (n=6) of the students deregistered (refer to Tables 5.2, 5.3). Of this group of 13 students, only seven students persisted – five of the seven students took four years to complete the two-year diploma program. The analysis of students' performance suggest that the cumulative effect of failure in the first year may result in further failure in the senior years of undergraduate study (Scott, 2009), as was evident in the performances of Colleen, Amber, Monique, Nicole, Lethiwe, Nasra, Chelsea, Zainub and Zeta.

Lecturers' comments on students in all three categories are significant in that they presented the perceived characteristics of individual students or groups of students with regard to their performance. In the high performance category, characteristics such as confidence, independence, motivation, leadership, commitment and engagement are implied. These are the kinds of behaviours which are usually the result of particular kinds of cultural capital and since these behaviours are expected by university and lecturers,

they are the ones which are rewarded. Reay *et al* (2005) argue that students who are better prepared and who perform well do so because they have the “appropriate cultural capital” which is valued at university.

On the other hand, students who did not achieve high performance scores and who were characterized as unintelligent, unengaged, inadequately prepared or in need of support were also described as those that “do not belong here” (Hennie). They were perceived as being “under-prepared” (Hennie). While it was evident from lecturers’ comments that the better performing students were favoured, they described struggling students in less favourable terms. It is evident from their comments that the lecturers saw these latter students as lacking the skills needed for success at university. Scott (2009) argues that appropriate preparation is essential – not only does it help the student to transcend the first year of higher education but also offers a sound basis for the senior academic years to come. The high failure rates and retention time to graduation for students in the lower performance group confirms that students struggled throughout the program. For some students (Monique, Nicole, Lethiwe, Nasra, Chelsea, Zainub and Zeta) the low performance scores in the first year was also shown to be low in the second year and even up to the point when these students eventually exited the program.

5.2.6. Conclusion to introducing the student cohort through performance

In this section, student performance was discussed. Student performance was categorized on three levels – high performance, middle performance and low performance categories. The section highlighted lecturers’ perceptions of students and their performance, and contributed to framing an understanding of the characteristics of students that are favoured and that arguably contribute to student success. The following section turns attention to the patterns which emerged when race was mapped against performance.

5.3. Academic performance and race patterns

5.3.1. Introduction

Thus far, the performance patterns of the oral health student cohort have been presented using three categories which described how the students performed. In the section that follows the focus is on the cohort in terms of the numbers of each race group in each performance category, as well as on their promotion in the program between 2007 and 2009.

5.3.2. Student performance categories in relation to race

Understanding the association between academic performance and race is central to this research. Race, as a concept, is necessary as a point of departure because it is within the context of race that social class and capital are nested in the South African context (McKinney & Soudien, 2010; Soudien, 1996). Race has been foregrounded as playing a significant role in academic performance in South Africa because of the impact that the legacy of race apartheid has had on access to resources and privileges (Bond, 2004) particularly in terms of educational opportunities (Scott *et al*, 2007). Differential access to these educational opportunities was shown to impact on school and higher education performance (Scott *et al*, 2007). Hence considering the association between race and performance in this study would have contributed to understanding the social aspects shaping clinical competence.

In Chapter Three, Table 3.8 summarized the first-time university enrolment patterns according to different race groups in the oral health program for the period 2002 to 2009. The following Table 5.7 gives the numbers of students from each race group, as well as the numbers within each category of student performance. These figures make up the full 2007 cohort and include all those repeating the year and as well as the international students. Note that Table 3.8 excluded international and repeat students. However, international students were classified as separate from the South African race categories because race classification used in South Africa was based on an apartheid system which cannot account for the social class structure in other countries as such.

Table 5.7: Student performance categories in relation race: n=27

Performance category	White	Coloured	Indian	Black	International
High (n=7)	4		1		2
Middle (n=6)		2	1		3
Low (n=14)	1	11	1	1	
Total (n=27)	5	13	3	1	5

Table 5.7 records that white students were predominant in the high performance group. However, Bianca (white) was in the low performance group. Her academic performance was difficult to categorize because her modules were incomplete. Her psychological and emotional issues and family problems interfered with her focus on her studies. These problems impacted on her completing assessments, which led to her deregistration. Although she was from a wealthy background with private schooling, her attendance from first year was erratic, resulting in repeated formative assessments. In 2008, she missed multiple summative assessments (refer to Table 5.3).

Just more than half of the students in the 2007 first year program (fourteen out of twenty-seven) were in the low performance group. Among these students, the coloured students featured as the largest race group (12 students). There was only one black African student in the cohort, and her performance resulted in her inclusion in the low performance group.

Table 5.8 below gives a more detailed picture of access, retention and attrition rates of the student cohort from 2007-2010. The table is presented according to race groups. The comment column explains pertinent points for consideration which further illustrate the academic status of the cohort.

Table 5.8: Overview of access, retention and attrition rates of the cohort (2007- 2010)

Access			Retention				Attrition		Comments
Year of Study	Total Registered	Race	Passed		Failed		Deregistered		
			N	%	N	%	N	%	
1 st Year 2007	4 1 12 5 5	Indian African Coloured White Internat	4 1 7 5 5		1		4		5 students have been in this program since 2006. * 1 student failed – re-registered for 1 st year in 2008, completed Dip in 2009. Deregistration: 3 students failed initial assessments and deregistered before 2 nd semester. 1 student deregistered after failing the final November assessment
Total (n)	27		22	81	1*	4	4	15	
2 nd Year 2008	4 1 7 5 5	Indian African Coloured White Internat	2 0 3 4 5		2 1 3 1		1		* The student failing in 2007 passed 1 st year in 2008 (not included here). ** 7 students failed (of the 7 students 5 were from the 2006 repeat group). One of the 5 students deregistered. The 7 students that failed re-registered 2009. From 14 passes, 7 students exited with a Diploma and 7 students enrolled for the degree.
Total (n)	22		14	62	7**	34	1	4	
3 rd Year 2009 Diploma	1 1 5 1	Indian African Coloured White			1 1 3			1	* The one student who failed in 2007 passed 1 st year in 2008, completed Diploma in 2009. ***5 students failed (4 started in 2006). 1 student deregistered. 5 re-registered in 2010 and passed.
Total (n)	8 (7+1*)		2	25	5***	62.5	1	12.5	
3 rd Year 2009 Degree Program	0 0 2 1 4	Indian African Coloured White Internat	0 0 2 1 4						7 students who were successful throughout the program registered to complete the degree program. All students were successful at the end of 2009.
Total (n)	7		7	100					

* Note the one student who failed her 1st year in 2007 reappears in 2009 to complete her 2nd year, completes Diploma. For 2010 as denoted by ***, the five students who failed in 2009 repeated in 2010 because of specific clinical competences not being achieved. These students completed the 2-year Diploma program in 2010. Four of these students started in 2006 in the program, taking four and a half years to complete the 2-year Diploma, while the one student completed the program in four years.

With reference to Table 5.8 above, coloured students made up the highest proportion of the cohort. They achieved poorer results compared to Indian and white students. The poor performance is illustrated by the failure and retention rates between 2007-2009 (notes are recorded below Table 5.8 for 2010 performance). Of the six students in the cohort deregistering from the program, five were coloured. The highest failure and lowest retention rates also came from the coloured group. These rates are also illustrated in Tables 5.1 and 5.8 of the seven coloured students who persisted, six had failed a year or two in the program. Five of whom were repeating since 2006. When taking into account both the coloured students' deregistration and failures rates, 92 % of the coloured cohort failed at some point in the program. Conclusions about the black African race group were difficult to make because of having one black African student in the cohort. It should be noted from earlier discussions on race apartheid and the impact on society that the black population was the greatest affected through disadvantage. Lethiwe's performance indicates she struggled. She failed the first year (she started in 2006) and the second year twice. She completed the two-year program in 2010, four and a half years later. Amongst the Indian group of students, two of the four students failed at some point in the program. Among the white group, one student (Bianca) out of the five deregistered, again largely because of incomplete assessments stemming from her personal lifestyle problems.

5.3.3. Discussion on student performance categories in relation to race

This section has provided evidence of a relationship between race and academic performance. The student performance categories were characterized by clusters of students with similarly raced backgrounds. In the low performance group, the coloured students appeared as the largest group. This finding is compared to the white students, who featured mainly in the high performance category. The poor performance of the coloured, Indian and black students in the current study aligns with the conclusions of McKinney and Soudien (2010), Scott *et al* (2007), Scott (2009) and van der Berg (2002), who hold that the performance rates of black and white students remain polarized.

The differential performance portrayed in the current study may be influenced by multiple aspects. As highlighted in the studies by Cross and Johnson (2008), Scott *et al*

(2007) and Breier *et al* (2007) past disparities in resource allocation and education feature as the primary contributory elements influencing student learning. Access to money (economic capital) and to cultural dispositions and skills obtained through schooling and embedded family values (cultural capital) is recognized as important elements that facilitate educational experiences (Scott *et al*, 2007). The differential performance between students from particular race groups in the current study suggests that students have unequal access to both economic and cultural capital resulting in a lack of the preparation necessary to meet the demands of higher education (Cross & Johnson, 2008; Scott *et al*, 2008; Breier *et al*, 2007).

5.3.4. Conclusion to academic performance and race patterns

Thus far the performance patterns of the oral health student cohort were first presented using three performance categories. Thereafter, performance was mapped against race. The analysis showed that performance patterns are related to student race groups and are in line with current literature of the post-apartheid South Africa suggesting that black students perform less well than white students.

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The following section provides insight into student lifestyles. These descriptions will illustrate how economic capital shapes material access. Here the students within the different performance categories offer insights into their social class and economic locations. However, the research does not intend a comparison between the different race and social class groups, but instead sets out to understand the common patterns within each performance category or between groups of individuals within each performance category. While evidence is drawn from all social class groups, the experiences of the working-class students are foregrounded because of the level of detail these students provided during the interview process. Where possible, comparisons will be made between middle-class and working-class students to illustrate the relative advantages or disadvantages between the groups. However, generalized and conclusive judgments beyond the scope of the research in terms of race and social class will not be made.

5.4. Academic performance and socio-economic backgrounds

5.4.1. Introduction

Research has indicated that students who struggle at university or deregister do so for a range of reasons which are associated with the ways in which they are prepared for university (Scott, 2009) and the kinds of capital they bring with them (Archer *et al*, 2003). In this section, I draw on students' accounts of their socio-economic backgrounds to illustrate ways in which capital, particularly economic and cultural capital, manifests differently for students from the three performance categories.

Understanding the student's socio-economic backgrounds allows insight into multiple aspects. Firstly, it reflects on the kinds of lifestyle experienced, such as the neighbourhood from which a student comes. This information is an important element in locating the social class of the student. Secondly, understanding the student's socio-economic backgrounds reflects on the kinds of access a student may have had to resources such as financial and cultural support from the family, as well as the quality of schooling – these are important aspects that shape university preparation.

5.4.2. Students' socio-economic locations

One of the interview focus points was on students' socio-economic backgrounds. This insight allowed for conclusions to be made about students' social class locations. The students in the three performance groups described their backgrounds in terms of where they lived, their parents' employment, and the kinds of access they had to money and other forms of resources such as housing and transport. Further elaboration of their *living conditions* in relation to preparation for university is included later in the chapter. Middle-class and working-class are the two social class groups implicit in the following discussions. The two social class groups were set up as lenses in the theoretical chapter.

5.4.2.1. The students in the high performance category

(Taylor, Ashley, Emily, Zubeida, Gabriella, Amy and Komilla)

Taylor's description of her middle-class background provides an apt summary of characteristics that were common to other students in the high performance category:

I stay in the southern suburbs in Oakridge, Bergvliet ... I would say it is more up-market. It is not like Constantia but it is definitely up-market. We have a beautiful 3-bedroomed home, actually 4-bedroomed. We are definitely not poor ... but we have to work hard for our money ... that has been my lifestyle.

Examples of where students lived are as follows: Taylor's residential area bordered the elite area of Constantia and was home to middle-class families, while Ashley lived in middle-class area of Somerset West, Zubeida in the middle-class suburb of Wynberg, and Emily in Ceres, on a farm estate belonging to her family for many generations. Further testimonies from these students highlighted aspects such as their accommodation and travel arrangements. All these students lived at home with their parents, except for the two international students Zubeida and Gabriella and local student Emily, who lived in their own apartments during the course of their program. Students' further testimony included being "financially secure" (Gabriella, Komilla, Ashley and Zubeida), having "good schooling" (Taylor, Komilla, Gabriella and Ashley), and being in possession of their "own car" (Taylor, Ashley, Emily, Zubeida, Gabriella, Amy and Komilla) and "apartment" (Emily, Zubeida and Gabriella), as among the additional resources they had from their parents. None of the students were on the National Student Financial Aid Scheme of South Africa (NSFAS¹⁷) – their fees were fully covered by their parents. All the students in this category, except Emily, had family members who had attended university. Having parents or older siblings with university experience signals the cultural capital present within the family (Reay *et al*, 2005). The parents of students in this category also had high-income employment. Taylor's father was a professional sports scientist, while Komilla's father was a medical doctor. Ashley, Gabriella and Amy's parents were business owners/managers. Emily's parents were farm owners. She was the only child and thus did not have exposure to university through siblings, but she had cousins who went to university. She explained that she had gained insight into university from her cousins. Taylor, Zubeida and Gabriella had parents and siblings who had been

¹⁷ The National Student Financial Aid Scheme of South Africa (NSFAS) allows students access to loans that serve to fund their tuition, books, accommodation and food. NSFAS loans required a guarantor to safeguard the loan being repaid if the student failed to complete their study program. Furthermore, the loan was withdrawn if the student failed a year.

to university. Gabriella's sister, for example, was studying dentistry and was still in the university system at the time of the interviews.

5.4.2.2. The students in the middle performance category

(Alexander, Jared and Amanda, Nisha, Yasaar and Shenay)

Students from the middle performance category described characteristics of their home background which signaled that these students were from working-class backgrounds. Alexander, Jared and Amanda were foreigners from a neighbouring country, but recorded similar experiences to the other students in this performance category in terms of lifestyle. The areas in which students in this performance group lived were described in terms of being low socio-economic. Alexander explained that he was not from the "rich suburbs". Nisha declared she was from an "area where Indians lived", but that the houses were not "big" and that the area also had low-cost housing subsidized by the Government. Yasaar and Shenay indicated they were from local "coloured" areas that were described as not "posh" (Shenay). Nisha, Yasaar and Shenay descriptions signaled the legacy of the separate areas allocated for race groups during the apartheid era.

Nisha, in her testimony, indicated that her family was "average" and that her father was their sole support through his "small poultry sales business", signaling her social class location as working-class. Shenay, echoing all the others in this performance category, indicated that her parents were earning "average". In this student performance category, only Amanda and Nisha's parents had no tertiary education experience. Yasaar, Shenay, Jared, and Alexander's parents had post-matriculation study experience. Shenay's mother was a nurse and Yasaar, Jared and Alexander indicated that their parents had completed "college". Yasaar's mother was still studying a short course at the time of this study. The students placed in this performance category were the first amongst their siblings to pursue higher education. Shenay, Jared, Alexander, Nisha and Yasaar said that, although their families supported them partially in paying for their fees, access to the remaining funding was the students' own concern. Jared and Alexander's parents had made initial provision for funding through loans taken, for example, from their parents' employment company and family members. Likewise Nisha, in addition to her father taking a bank

loan, had other family members who supported her studies. Yasaar and Shenay had NSFAS loans as an additional source of funding. Nisha, Amanda, Jared and Alexander lived at the university hostel. All these students relied on public transport.

5.4.2.3. The students in the low performance category

(Colleen, Keelan, Brandon, Colin, Siriyal, Bianca, Amber, Monique, Nicole, Lethiwe, Nasra, Chelsea, Zainub, Zeta)

Keelan, Brandon, Colin, and Siriyal were not part of the main interview process, since they had deregistered in their first year. However, their selection process entrance interviews, and faculty documents were used to gain insight into aspects of their lives. Thirteen of the fourteen students resided in residential areas that signaled working-class communities. Eleven coloured students lived in what was described by the students themselves as “coloured areas”. Of the eleven students, Zeta and Chelsea came from *rural* coloured townships in Worcester, near Cape Town, while the other nine students came from impoverished townships in the Cape Flats¹⁸ in Cape Town. Nicole’s testimony summarized what a “coloured” community meant: “I live in a coloured community ... there are no blacks, or whites in our community. We are just a plain coloured community”. Monique highlighted that, although she had grown up in a coloured area, she had recently moved into a “white” middle-class area. Lethiwe was from a “black township” in the Eastern Cape, while Zainub lived in an area she described as being a mix of different race groups but mostly “coloured Muslims”. Of this performance group, only Zeta, Chelsea and Lethiwe stayed at the university hostel, while all the other students stayed with their families. Zeta obtained a car in 2008 when she was in the second year of the program, but all the other students used the public transport to travel.

Bianca (white), on the other hand, was from a white middle-class background. Her family owned farmland in the prestigious wine-lands in the Western Cape, in addition to other land and houses in several areas. Her family was well established financially because of their investments in land and wineries. Her father and brothers were also university

¹⁸ The Cape Flat area during the apartheid era was home to black citizens. The houses were at the time largely government-subsidized homes with the area later expanding as home to much of the population of Cape Town.

graduates and recognized for their contribution to South African culture. Bianca travelled to university in her own car from the start of her studies.

All of the students in this performance category, except for Bianca, Colleen and Monique, were first-generation students in higher education. Parental employment¹⁹ was described by students in the following ways: Bianca's family were owners of land and wine farms²⁰. Her father, brothers, uncles and many other family members were also university graduates. Lethiwe's mother was a domestic worker. Zeta's parents were pensioners, and Monique's and Colleen's fathers were school teachers, while the parents of Nasra, Zainub and were employed in "offices", holding clerical positions in business companies. Chelsea and Nicole's fathers worked in factories. Nicole's father also worked as a part-time paramedic. Amber's father had casual employment. All the students except for Bianca were on the NSFAS loan scheme.

5.4.3. Discussion: the impact of socio-economic locations on students

The data presented above signal a relationship between students from the three performance groups and their socio-economic locations (Archer *et al*, 2003). This relationship was extrapolated from analyzing the students' descriptions of where they lived, their family employment and education, and the kinds of access they had to material resources. In the following discussion, economic and cultural capital are foregrounded, explaining the extent to which access to money, living conditions and access to resources impacted on students' preparation for university.

While the middle-class students in the high performance category did not comment significantly on their home environments, the working-class students from the middle and low performance groups raised multiple issues around access to money, access to resources and community support. Middle-class students did not comment expressly because when both "economic and social capital are in good supply" (Reay *et al*, 2005: 136), there was no need to face issues about funding or to work in term time, since it was

¹⁹ Several descriptions of employment were changed to those of an equivalent status in order to protect the identities of the students.

²⁰ In the Western Cape, wine farming is associated with both cultural capital and extreme affluence.

not expected and was strongly discouraged by parents (Reay *et al*, 2005). These students would have experienced a match between what they took for granted, such as access to funding and transport, and the university as an expected trajectory. They would also have insight to what university life would entail through the cultural capital available to them through the home and school (Reay *et al*, 2005). For these reasons, only occasional reference is made in the discussion below to middle-class students where appropriate arguments are relevant or where suitable data was available. The following discussions focus on economic challenges, the influence of the home environment, and the role of the school in shaping culture towards education.

5.4.3.1. Economic challenges

Lack of access to finance is a universal learning barrier among working-class students and is also a primary reason for such students' early withdrawal from higher education (McCoy *et al*, 2010; Jones *et al*, 2008; Breier *et al*, 2007). In the current study, access to money was a common problem about which students from working-class backgrounds expressed concern and which affected their studies. Financial pressures influenced them in two ways: in terms of the quality of life at home and in terms of whether they would be deregistered because of being in debt or being unable to pay their fees (Norris, 2011:3). Students' experiences of being in debt and the ways that their fear of debt influenced their learning will be illustrated through the voices of Jared and Nicole. Zeta's account, on the other hand, reveals how part-time employment intended to alleviate financial difficulties can inadvertently impinge on academic performance.

All the students across both the middle and low performance categories, except for Bianca, relied significantly on loans. This contrasted with the parent-funded education in the high performance category. Loan-bearing students perceived lack of finances as a barrier to their concentration, characterizing it as an obstacle to their academic progress. Jared's testimony highlights how the loan that his parents had arranged for him with their place of employment was a source of concern, to the extent that it interfered with his studies:

It does interfere with my studies ... like last year I only got a loan towards the end of the year, but before that I would always get like reminders that I need to pay my studies ... I was worried, “am I going to write exams, am I not going to write exams, are they going to tell me that I can’t write because I didn’t pay yet²¹?”

McCoy *et al* (2010) argue that financial challenges affect student aspirations to complete their qualification successfully because of the hurdles they experience. These hurdles begin as early as the point of entry into the program. In Jared’s case, the loan for which he applied at the beginning of his first year only materialized “towards the end of the year”. His position was always threatened by the possibility of the loan not being granted or delayed in terms of payout – this meant the debt burden had to be managed by the family at intermittent periods. McCoy *et al* (2010) highlight that financial challenges also impact on the transition process, because the student can never be sure if there will be sufficient funds for his or her stay at university. Lack of finance can result in a delay in the student registration and enrolment process. This delay can further compromise the student’s sense of belonging and integration into the program. These feelings persist if there is continued uncertainty about securing funding for the remainder of the program.

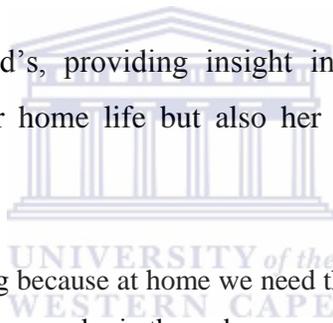
It is arguable that when transition is impeded, the student’s level of *engagement* is also affected. Jared’s account gives an example of this. For Jared, being dependent on financial aid meant leading a life based on uncertainty. This uncertainty affected his ability to give his full attention to his work because of his debt situation, which he claimed “interfered” with his studies. His unpaid fees “worried” him because of never knowing whether he was “going to write exams” and never being quite sure if he would be staying or withdrawing from the program. Similar findings were echoed in studies by McCoy *et al* (2010) and Breier *et al* (2007). His anxiety was further aggravated because of the delays he experienced with loan pay-out. A delay in loan repayments has repercussions for the student. Default in repayment places students at risk of having their

²¹ It is not common practice for universities to prevent a student from writing an examination because they are debt with the university. However, it was common practice for the University of the Western Cape to hold back graduation if students were in arrears with their fee payments. There was also an occasion when the institution threatened not to allow students who were in arrears since May to write the examinations on November.

exam results delayed, promotion to the following year delayed or graduation being withheld, further increasing their anxiety and uncertainty.

Yasaar, Zeta, Zainub and Nicole echoed Jared's experience of financial challenges when they described how the delay in receiving their NSFAS loans posed practical problems. These problems included "lack of money for transport to university" (Yasaar), "food purchases" (Zeta), and "meeting the deadlines for university tuition fees" (Zainub). With NSFAS loan payments, there was often a lag between applying for a loan and being told that it had been granted, or between applying and being told how much they would receive (Breier *et al*, 2007). This loan operated under the policy of supporting more students through smaller loans, rather than a few students with bigger loans (Breier *et al*, 2007).

Nicole's account echoed Jared's, providing insight into how her family's financial situation affected not only her home life but also her attendance and performance at university:



Yes, it affects my studying because at home we need the money. Like maybe my mother won't speak to my dad because he is the only one working and he doesn't have money and then everyone is in a bad mood, so I will just sit there and also be in that mood ... I don't want to study my work because there isn't money and I am worried if am I going to have train fare for tomorrow. Is there going to be food in the house?

Nicole's account emphasizes that academic experience is not independent of home experience. Her financial situation, in which basic necessities such as food and transport were threatened, was further exacerbated by her university debt. Archer and Hutchings (2000: 562) and Reay *et al* (2005:84) refer to students in these positions as "being at risk" and constantly having to mediate the costs and benefits of persisting. Such students usually weigh the burden of challenges against the goal of attaining a university education. This situation is a common occurrence, because many students from low socio-economic backgrounds depend on loans to sustain them at university. Financial

challenges thus have a negative influence on student retention and are a common cause of early drop-out (Breier, 2010; Breier *et al*, 2007; McCoy *et al*, 2010).

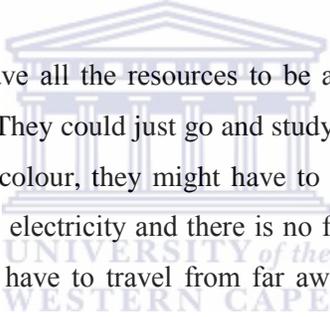
Jared's and Nicole's accounts included the impact of psychological and emotional barriers to their learning. The debt burden they carried meant that their enrollment in the program was uncertain, destabilizing their ability to engage with their studies. While circumstances within the home may have prevented some students from changing their debt situations, students like Zeta, Alexander, Yasaar, Zainub and Chelsea offered insights into how part-time employment helped toward fee payment.

Zeta, Alexander, Yasaar, Zainub and Chelsea all held part-time jobs which they saw as being a barrier to study, especially with regard to time for studying: "When my NSFAS loan was cut, I had to find work to support myself ... it's just that there's not enough time" (Zeta). Zeta's financial challenges were present even before her enrollment in the program. Coming from a family where her "parents are pensioners", applying to university to study straight after her matriculation was not an option: "I always wanted to study and get a degree, but there wasn't money ... we didn't have the economic means, but the idea that I would study further was there ... I worked hard for many years to save money".

Zeta's testimony reflects the challenges students experience when economic capital is not available to the family to support educational trajectories beyond schooling. Zeta had applied for a NSFAS loan to provide her with the additional financial support that she needed to attain a qualification, because her family was unable to support her in this regard. This loan arrangement was withdrawn because Zeta failed in 2006. One of the criteria for further funding through NSFAS was that the student must promote to the following year in the program. Zeta explained that as a result of her needing to repeat her first year she had to resort to working part-time to sustain her enrollment in the program. In Zeta's case, two aspects reciprocally influenced her extended period in the program: the consequences of lack of economic capital and poor performance. Although access to capital played a pivotal role in shaping Zeta's access to university, her eventual

enrollment history was shaped by her poor performance. Her circumstances set in motion a cycle of disadvantage when her poor performance was affected by her lack of study time, which in turn influenced her access to loans (refer to Tables 5.2, 5.3 and 5.4 for Zeta's performance). The following discussion further elaborates how access to material resources has a seminal influence on the way that students experience university.

The analysis thus far has highlighted how students who performed better lived in “upmarket” (Taylor) middle-class locations and had access to resources such as money and cars that are understood to facilitate a higher education experience. Alexander (international student) in his testimony felt that a lack of capital which restricted access to resources could pose barriers to learning. Drawing on his experiences and perceptions based on his own observations he said:



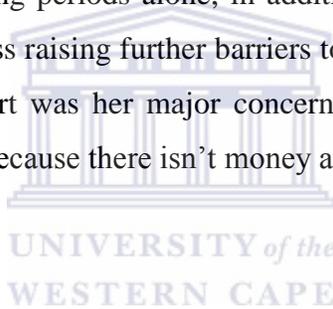
People of colour don't have all the resources to be able to gain all the marks that the white people are gaining. They could just go and study because that is what they are here to do, whereas people of colour, they might have to work to support the fees to get to class or maybe there is no electricity and there is no finance for electricity so they can't study at night ... or they have to travel from far away and they don't have their own transport.

In positioning “people of colour” (meaning blacks, coloureds and Indians) as disadvantaged in comparison to “white” students, Alexander argued that *black* students experience material deficits which impact on their learning. Intermittent electricity cuts because of lack of payment by the household, part-time jobs and reliance on public transport are examples of such resource deficits reduced students' time and opportunities to study. Students who rely on public transport to and from university, for example, are deprived of study time because traveling on public transport is time-consuming. Reay *et al* (2005) argue that working-class students typically stay at home instead of at a university residence to minimize travel and residence costs. These students also work during university term time to earn towards university costs (Reay *et al*, 2005).

Nicole, echoing comments by Chelsea and Amber, explained how traveling with public transport influenced her day:

I wake up at 4:00am to start the day ... I have to take a taxi first ... the train only come once like in two hours where someone else's one could come twice in one hour ... people get home early, like I get home at six in the evening - they get home at five and they get to study a lot more than me.

Nicole and Chelsea indicated that because they lived far from train or taxi ranks, they relied on multiple modes of transport. Amber often had to “walk distances to reach a station”. Students had to walk at least 2km to take a train to and from the Tygerberg Oral Health Centre, Faculty of Dentistry teaching site. Other traveling problems raised were train delays, having to wait long periods alone, in addition to the dangers posed²². The factors contributed to their stress raising further barriers to their university attendance. As for Nicole, money for transport was her major concern, besides the transport itself as highlighted in quote earlier: “Because there isn't money and I am worried if am I going to have train fare for tomorrow”.



In the above discussion, financial challenges were shown to impact on academic performance through uncertainty, anxiety, and reduced time available for study. However, financial challenges on their own may not be the only reason for poor performance and therefore should not be viewed in isolation from academic and socio-cultural factors (Jones *et al*, 2008:29). While economic capital facilitates students' integration at university, the environmental conditions under which they live and study are also important. The ensuing discussion focuses on the living conditions of middle-class and working-class students. It is here that economic capital is shown to translate into cultural capital through the norms, values and insights regarding education. The discussion will illustrate education as an expected trajectory in middle-class families, in contrast to working-class communities where the “community expects you to fail” (Amber).

²² South Africa has high crime statistics, which include theft, rape, and murder.

5.4.3.2. *The home environment and culture towards education*

“You have no idea what it takes for us to be here” (Amber)

The home background of school learners is argued to be the single most important factor influencing later educational outcomes (van der Berg, 2008; Bourdieu, 1986). In this section, middle-class students are shown to have the cultural capital needed to steer them into higher educational trajectories. This support is attributed largely to the cultural capital in the family and the value that is placed on education (Bourdieu, 1986). Such support is in contrast with that described by working-class students for whom educational trajectories were presented as a challenge because of the lack of appropriate cultural capital in the family.

5.4.3.2.1. *Middle-class students – family and community support*

Gabriella (high performance category) described the role of her family in shaping her choices and preparing her and her siblings for higher education. Going to university was “something automatic” and something she knew she had to do “to become independent”. Her sister was studying dentistry and advised her on careers in the field of dentistry. Gabriella’s experience echoed Reay *et al* (2005:136) who argue that entering university is a “natural progression” for students from second-generation university literate middle-class families. Students from these backgrounds already have an understanding of what is expected of them by their families and what they need to do to be successful at university.

Archer and Hutchings (2000) note that students who come from families where members have attended university make informed choices and are better orientated around the expectations of university because of the guidance received from their families. Taylor recalled how her transition into a career involved the support of a family member: “My aunt is an oral hygienist ... she convinced me that this was a good career if I want to start a family and still work”. Advice such as that received by Taylor stems from the fact that many middle-class parents and families have themselves done very well at school and university and so use their own positive experience of academic competence to guide

their children. Thus in middle-class families, parents use their cultural capital in the form of experience and knowledge of education and careers to provide their children with such advice (Norris, 2011:9). Middle-class parents are also able to harness their networks to support the progression of their children from school to university and later to employment (Perry & Francis, 2011:9). For these parents, educational trajectories for their children are taken for granted, so their children too take the trajectory to university for granted. McCoy *et al* (2008:165) in their study found that for middle-class children there was no “moment of decision” at which point they made that choice – it was always there as an embedded process throughout the life of the child. It was taken for granted and assumed that they would pursue higher education study. The crucial questions were only about where they would go and what they would study.

The following discussion turns attention to working-class students, who reported having less access to guidance about education from friends, the community and family. The discussion will show how the community through a shortage of role models, the social conditions and the attitudes within the community, creates conditions which contribute to the low value placed on education. The insights in this argument offer a nuanced understanding of the role of cultural capital in differentially shaping the educational pathways and experiences of middle-class and working-class students.

5.4.3.2.2. Working-class students – family and community support

Amber (echoing Nicole) reflected on the educational culture in her community explaining that she was the first in her family and community to attend university: “I am the only one at University of the Western Cape, out of my whole matric year. The others are at college but not a lot”. Amber’s comment highlights that higher education is not a frequent or first choice for the young generation in working-class families. Students who were first in their families or communities to attend university often made educational choices with minimal support and guidance. Thus making choices over education and the path to success is often a challenge to the working-class student (Reay *et al*, 2005).

One of the primary contributing factors is that working-class children often have little access to role models (van der Berg, 2008). A lack of role models has the potential to lead to a cultural practice of non-attendance to university because there are no role models in the community that show university attendance. Those who are graduates themselves or who are students at a university can serve as mediators in preparing and supporting other students for university. When making educational choices, young people often depend on their families or parents for advice. As role models, parents indirectly influence their children through demonstration of both motivation and interest in their children's educational endeavours, or by directly influencing their decisions through giving them appropriate advice (Norris, 2011). Working-class families however, lack the cultural capital inherent in middle-class families and thus lack knowledge of how to help their children make informed decisions about higher education (Wolf, 2011). Furthermore, the shortage of role models in such communities results in children experiencing negative peer group effects through constant association with children who do not have significant educational interests (van der Berg, 2008).

Chelsea's comment indicates the marginal role of studying among women in her community: "The coloured women in my community... it's a small portion of them that really wants to study further". The reasons for their non-attendance are highlighted in her following testimony:

Coloured women traditionally drop out of school early, stay at home or marry and start a family ... or fall prey to teenage pregnancy ... money-wise they can't afford and they would rather work ... and work as cashiers or in the factories.

Chelsea, in her perceptions of why coloured women do not study further, noted the low value placed on educational attainment for working-class women in her community (McCoy *et al*, 2008). Her further comment showed how deeply embedded she believed the decisions were in her community not to attend university: "They still have that mindset that, I don't want to study ... I am not going to gain from that". McCoy *et al* (2008) suggest that in poorer communities, because of the need for economic capital, there is a strong attraction towards the labour market. Therefore many of the younger

generation do not pursue any kind of post-basic schooling study. Even if they do, there is a great chance that they may drop out of tertiary education and look for employment (McCoy *et al*, 2008).

McCoy *et al* (2008) further argue that it is important that this need for employment is not taken as a deficit in aspiration among certain individuals and their families, but rather as reflecting broader processes of societal inequality. The authors explain that these educational aspirations which exclude higher education are shaped by the social context and structural opportunities, which in turn are constructed through issues such as poverty. Thus, it is not uncommon for young men and women to aspire to employment rather than study (McCoy *et al*, 2008). However, cultural views on educational attainment do have an impact on the lives of those students who do wish to study. Students like Chelsea, Nicole and Amber felt that they had to defy the cultural practices in their communities to “become someone” (Nicole). Students who believe that education is not for the likes of us (Reay *et al*, 2010; Archer *et al*, 2003; Reay *et al*, 2005) often carry such implicit attitudes into the classroom, where they are perceived as being “fragile”, “unconfident” and displaying characteristics of “self-doubt and anxiety” (Reay *et al*, 2010:11).

Students coming from poorer backgrounds tend not to aspire towards higher education because of the low value placed on education generally in the community. This lack of cultural valuing of, and emphasis placed on, education and university attendance in particular by some working-class youth has the potential to limit other young people’s interests to attend university. Demie and Lewis (2010) explain that the tendency not to aspire towards higher education may originate from a lack of knowledge and understanding of the world beyond their home and school. Working-class families are not accustomed to the kind of benefits which are achieved by an investment in studying (Bourdieu, 1986). A primary benefit is earning an income which will allow access to a range of privileges. Affording a house, a car or going on holidays are the kinds of returns that are earned by an investment in studying.

Although an educational culture is primarily shaped by the family, educational attainment is made more accessible if the community shows an interest in supporting its members (van der Berg, 2008). In poor neighbourhoods, children are often insufficiently motivated by those around them to do well at school (van der Berg, 2008). Community and family members who offer supportive networks and positive value systems to guide learners from a young age will benefit them in terms of the trajectories which these young people choose after schooling (van der Berg, 2008). This may have much to do with the perception by some community members that education will not bring them its full benefits (van der Berg, 2008).

Community attitudes and expectations regarding young people who strived to become educated were described by Amber, Monique and Chelsea. Amber's account gave insights into how communities contributed to the way a student's expectations about attending university were shaped. Amber perceived that her community was negative towards people who studied. The negativity was arguably associated to the perceptions that if people studied they were deviating from the norm in working-class communities, as was evident in her testimony: "The community expects you to fail". She further elaborated on how her vision of becoming an oral hygienist was opposed through the cultural views of the community: "If you study it is almost as if you seem to think that you are better than the others ... they want to know the reason why you don't want to mix with them". Monique's perception echoed Amber's explanation that "there are people who are supportive and proud of you", but that there were others who were "always trying to get you down or say negative things and try and persuade you not to go and study". The negativity around education in Amber's community aroused feelings of despondence in her and was evident in her statement: "I will just do this (study) and go work somewhere". Her own vision of educational attainment and her perseverance were often swayed by the negative expectations the community had of her and other young adults: "Even if you don't want to fail, you will fall into that hole and just never get up". Amber's testimony reflects the kinds of tension that can arise when a student's own aspirations differ from those of some members in the community.

Monique, Chelsea and Amber explained that apart from their communities, their family members were not open to changing their views about further education for females. Chelsea recalled her experience of the negativity she had encountered: “Since I come to high school everyone like they started like saying bad things about me ... even some of my family say things and that I want to be this and that”. Amber echoed Chelsea, describing her frustration at the cultural practices within her community: “You want to show them, but at the end you also feel you don’t want to prove yourself anymore”. Implicit in Amber’s comment was the challenge students attending university experienced in going against the norms of her community. She realized she had to prove to the community that her decision to study was not wrong, that there was value in what she is doing. Her comment also signaled how the cultural norms and values in a community have the potential to influence students’ attitudes concerning their education. These attitudes may be undermined by feelings of demotivation and a loss of will to persevere. These feelings are expressed in Amber’s testimony, “Even if you don’t want to fail, you will fail”, and in Chelsea’s comment that failure is how “it is supposed to be”. Reay *et al* (2005:106) argue that working-class students often face challenges because they “lack the necessary capitals to cope and respond successfully” to the transition to higher education. In the same way, Amber and Chelsea’s perception of the lack of support from the community and its lack of valuing of higher education led them to experience educational aspirations as negative. Archer (2003:8) argues that there are many talented students from working-class backgrounds who eventually enter higher education and “do so on their own merit”. But for the majority of working-class students, multiple societal challenges affect their decision both to enter university and to stay until completion (Reay *et al*, 2005). The next section addresses the ways in which students’ living conditions can affect their educational aspirations.

5.4.3.2.3. The influence of living conditions on working-class students’ aspirations

The environmental conditions under which many of the working-class students lived were perceived by them as having a negative influence on their educational aspirations. Implicit in the following students’ accounts was an uneasiness about living in environments that were not conducive to supporting their educational goals. For many

working-class students, poor living conditions were seen as a barrier to their ability to focus on their studies. To illustrate the kinds of learning barriers faced by students living in a “coloured neighbourhood” (Nicole). I draw on the voices of Nicole, Amber, Chelsea, Zeta, Monique and Shenay. Echoing Amber, Monique, Zeta and Shenay, Nicole framed her “coloured neighbourhood” in terms of quality of life and the socio-economic challenges she experienced, describing it as “very violent, I am afraid”. She explained how her neighbourhood was steeped in drugs: “They mainly influenced by drugs ... alcohol and that sort of stuff”. She further described her neighbourhood as “disruptive” in its effect on her engagement with her studies. Her testimony further elaborated on the kind of disruptions she encountered: “It is noisy, with people making the noise, neighbours’ loud music, or the dogs”. In the townships where some of the coloured working-class students lived, the area was described as being plagued by the consequences of poverty, including high unemployment (Johnson, 2007) and crime (Sass, 2005).

Amber’s testimony about how she did not cope with studying in a disruptive neighbourhood was shown to influence how she perceived herself in the presence of people from other race or social class groups. Her comment foregrounds feelings of stigmatization and lack of self-confidence: “You have a bad self-image that your family contributed to and your community”. Amber’s poor self-image stemmed from her experience of living in a low socio-economic area, where crime, violence and drugs were common occurrences. Part of her feeling this way was related to her perceptions she had of coloured people: “It’s coloureds all the way, they mess up”. She also assumed that the image other people held of coloured people was one of negativity. In seeing herself as representative of her community, she also viewed herself negatively because she perceived the behaviour of some people in her community as negative. Inevitably she translated these feelings into meanings about herself and manifested these self-attributed meanings as low self-worth. When students feel low self-worth and negative about themselves, it can arguably lead to perceptions of negativity in the way that they feel about their academic ability, as will be highlighted in a later section.

Amber's further testimony highlights that although she perceived her community to have significant social problems these did not interfere with her goals. She experienced a "degree of difference" in the way she was raised, compared to other youth in her community. The following discussion focuses on how Amber and other students managed the challenges of the environment they lived in to follow their aspirations to study further. The role of the parent is central to this theme.

5.4.3.2.4. The role of parents in helping students achieve their educational goals

Amber's ambition to study was supported by her family. She explained that while some members of her community "experienced the extreme end of the violence and crime", she herself was "better off" because, she claimed, she had been raised differently: "The way that I grew up was not as bad as the others in the street". She saw her own experience to be in contrast to what she claimed to witness in her community members.

Amber attributed the successful completion of her diploma in the minimum time to the support she received from her parents. Although her parents were not university graduates themselves, despite their limited experience of the education system, they were her "source of motivation". As a result of her not having parents experienced in matters of higher education, Amber had to navigate her way through university by herself. Although her journey was a challenge, evidenced by her repeated assessments and average marks, she transcended the social problems which she had highlighted earlier and persevered. Echoing Chelsea and Nicole, Amber's further testimony elaborated on her challenge to remain focused: "I just ignore the things happening in my community" and "I don't let it get to me". For Amber, achieving this level of distancing "was not easy", but was made possible through the "support of my family".

Redding (2005) argues that a supportive environment in the home can help overcome difficult socio-economic circumstances. He explains that the "curriculum of the home" (Redding, 2000:5), which includes the family's relationships, behaviour, practices and patterns of life, is a more powerful predictor of academic learning outcomes than the family's socio-economic status. Yosso (2005) maintains that, contrary to the common

perception that students enter university without the normative cultural knowledge or skills, and that working-class parents neither value nor support their child's education, many parents do value their children's endeavours. Parents, no matter their socio-economic circumstances, still want the best for their children but many lack knowledge about how to guide or help them (Wolf, 2011). Yosso's (2005) position on working-class parents as caring no less than middle-class parents is illustrated in the current study through working-class student Yasaar's comment:

They are always there to support me, especially my mother because she always tells me ... you should never stop studying, you are never too old to study, and she is like my role model because she is in her fifties and she is still studying. To me it is like I want to study more and more.

Although Yasaar was in the middle performance category, in her first year she performed well. Her good start academically may be attributed to the family support she had received. Along with family support, the other common characteristic that Chelsea, Nicole and Amber highlighted as a force behind their persistence in their studies was the self-discipline they had to develop to surpass the social norms in their neighbourhoods. Amber's support from her parents and her own motivation to study would have resulted in her instilling behaviours that would have facilitated her goal attainment. Being self-disciplined would have been one of the behaviours. Chelsea, echoing Nicole and Amber, reflected on how she had to change her mindset from her school days in order to surpass the cultural norms in her community and to attain her goal of furthering her education:

It was a challenge ... most of my peers my age have one or two children ... therefore I had to discipline myself into just going to school – other than my parents supporting me to go to school, I had to tell myself that I want to finish school and I have to do this and that ... that is how I got here.

Implicit in the above statement is the way in which such students continually experienced a mismatch between the embedded culture in their working-class backgrounds and the need to fulfill their own aspirations. Further testimony from Nicole shows how she drew

on her assumptions about what the norm was in her community to shape her attitude towards her studies. Nicole's mismatch resulted from taking on some of the cultural norms of her community, which did not recognize higher education as important. Her testimony framed her attitude in terms of her lack of motivation: "I am not motivated because it is my culture not to study but that is not an excuse ... I would say, yes, it is just the way I am". Nicole's attitude could be explained by several factors: the lack of guidance, role modelling and support from people in her community, her failure to persevere despite of the norms in her society and her own lack of faith in her ability to overcome the environmental and economic challenges with which she was faced. Amber's testimonies, on the other hand, although she claimed to ignore the circumstances in her neighbourhood, indicated that even with her family's support she was in fact overwhelmed by the challenges she encountered. Her emotional outburst during her interview signaled a deeper reality which Amber and many of her peers (Shenay, Zeta, Chelsea and Nicole) shared: "You have no idea what it takes for us to be here".

In the above discussions, economic and cultural capital was described through the lens of working-class students' experiences in their homes and in their communities. These capitals were shown to relate to what their parents were able to afford or what their parents valued and promoted. In addition, students' experiences were partly shaped by the values, attitudes and behaviours of the communities in which they lived. McCoy *et al* (2008) argue that students whose parents and siblings do not have experience of higher education are far more reliant on the support and encouragement available from their school. The experience of the students is shown next in terms of the role their schools played in developing their educational interests. It will be shown that the school plays a significant role in shaping students' preparation for higher education.

5.4.3.3. Building cultural capital: the role of the school

The expectation at university is of independent, unsupervised, and self-motivated learning (Roff & McAleer, 2001). This prerequisite calls for certain approaches to learning and for the necessary knowledge and skills to have already been developed through the schooling experience (Roff & McAleer, 2001). However, for these skills to

be developed, various resources, such as access to computers and books, in addition to appropriate teaching approaches and academic support, need to be in place (Lupton, 2004). These resources are essential in shaping the linguistic competences, and dispositions that will in turn facilitate students' entrance into university and academic life (Wilson-Strydom, 2010; McMillan, 2005a). In this discussion, the focus will be on the school environment, resources, career guidance and teaching approaches. These aspects of schooling are important determinants of an appropriate preparation for university (McMillan, 2005a, 2007b; Archer *et al*, 2003). The middle-class students' schooling experience will be looked at first, followed by a discussion of the working-class students' experience of schooling.

5.4.3.3.1. Middle-class students' experience of schooling

All the students from middle-class backgrounds had been to either private (Komilla and Gabriella) or well-resourced, good quality schools located in middle-class suburbs (Taylor Ashley, Amy, Emily, Zubeida). Ashley, echoing Taylor, Amy, Emily and Zubeida, described her school, saying that: "There are good resources" and that it was a "very good school (with) a very high standard". In her study, McMillan (2007b) highlighted that middle-class students experienced good quality schooling. They had access to multiple resources, such as school libraries, computers and science laboratories but that these were not readily available to students from working-class backgrounds. These resources McMillan (2007b) considers important for academic success since they allow the development of the literacy and linguistic skills which are valued and rewarded at university.

The following testimonies of Taylor and Komilla highlight some of the extra-mural curricular activities that they engaged in their schools that enriched their learning experiences. Taylor had been exposed to "public speaking" and the "debating team", while Komilla engaged in compulsory "community service" as part of her curriculum. Engagement in these activities would have developed dispositions and competences like confidence and skills such as communication, the ability to work in teams, analyzing and critiquing information. These disposition and skills are the kind valued in higher

education because they foster interpersonal competence and raise educational expectations (Mahoney *et al.*, 2003).

Komilla's experience of the school was also described in terms of having a strong academic focus and which learners had to manage and be diligent about. Her testimonies included descriptions, such as, "hard work", "heavy work-load" and "working under pressure". Work was driven by an abundance of tasks which had strict deadlines, as Komilla recalled with "deadlines, deadlines, deadlines ... all the time". In Komilla's case, her schooling exuded an ethos of hard work, testing her ability to work under pressure to meet the demands placed on her. Managing time and working under pressure further built Komilla's academic cultural capital. This cultural capital partly manifested as the rewards she experienced such as good marks. The experiences at school, skills and values which students developed as a result also led students to having consequent expectations of others. Taylor expected that lecturers would have to be organized: "I am very organized and I expect the same ... ultimately we are the client and the lecturer is the service provider, so that lecturer should be taking into account for what the client is paying". Two significant points are foregrounded in the above testimonies: these students entered university with certain dispositions and skills which matched those expected of the university itself. In-turn they also had expectations about the university they attended.

As has been illustrated, middle-class students exhibit the following dispositions and competences which help build the cultural capital with which they enter university: critical thinking, good linguistic skills, the ability to work under pressure, and being organized. Their success in the program affirms that these dispositions and competences are appropriate manifestations of the kinds of cultural capital valued in higher education, simply because these skills and dispositions equip the student to cope with the demands of such education. Further, these students had equal expectations of the university. Hard work was understood as inevitable and accepted as part of the process, but they also expected institutional organization and responsiveness from the lecturers to ensure that they, as learners, achieved their goals. These expectations may have stemmed from their

being accustomed to certain standards, for example, the ethos and learning approaches valued in middle-class schools (SAIRR, 2011).

Middle-class students were also well-informed about their career choices, seeing their schools as pivotal in this process and supplementing information received from their families. It is argued that schools which provide information on careers better prepare students, both academically and psychologically, to meet the demands of the transition into university (Angelil-Carter, 1998; Reay *et al*, 2005). Komilla's comment reveals how her school's extra-mural curriculum supported her career choice: "During my school career I served two hundred hours of community service at a hospital ... it influenced my decision to study oral health". In Ashley's school there was significant emphasis on careers awareness events: "In our school, many times and in Grade 11, they had people come to our school from all different institutions to inform us about all different ways that you can go and study". Being orientated about career and university options, together with having set goals, shaped the way in which these middle-class students were prepared for higher education. The goals, with regard to career, which middle-class students set for themselves, were made possible because they had people to inform them about their possibilities. Being fully informed about the career choice, having set goals and being academically prepared with dispositions and competences to meet the demands of university are an investment made in terms of accruing cultural capital. This investment, as argued by Bourdieu (1986) ensures a return of investment when the student uses these insights and competences and eventually graduates.

All the students placed in this performance category saw their progression to university as being largely shaped by the positive encouragement received from the school. Komilla's testimony alludes to the school system that offered good support, which Komilla and the other students in this performance group believed prepared them well for university: "I think my schooling prepared me very well for university and compared to like the other matrices in this class ... I'm coping quite well". As a feature of her middle-class schooling, this preparation contributed to her academic performance for the full duration of enrollment in the oral health program and was reflected in her perception of

“coping well” (Komilla). In addition, the ability of these students to cope was connected with their feelings of confidence. Taylor, for example, echoing Ashley and Komilla, expressed her confidence in her comment, “I am the best”. Reay *et al* (2005) argue that middle-class students from better-resourced schools exhibit higher confidence levels than students from schools and environments in lower socio-economic areas. Their confidence was a consequence of the support, encouragement and stimulation found both in the home and at school (Reay, 2006). How this display of confidence plays out in the classroom at university is discussed further in the following two chapters which focus on social and academic integration.

Reay’s (2006) position on middle-class schools is echoed by lecturer Johan, who felt that middle-class students who had attended Model C schools were at an advantage: “The students coming from the good schools like ex-Model C schools always perform better ... they have a huge, huge advantage and that comes out in their performance ... these students have just have what it takes”. Johan had observed that for these students their schooling had played an important role “in terms of their preparation”. He perceived that this type of school was seminal in shaping particular dispositions and competences of the students that prepared them for the demands and expectations of university: “I believe that if we look at those particular schools and how sophisticated they are and how well run they are, anyone who comes out of a school like that has an advantage – head and shoulders above”.

In many middle-class families, university compatible forms of cultural capital are made available to children from an early age. These parents support the school educational initiatives by engaging their children in educationally enhancing activities at home. Examples of these activities include instilling a habit of reading, encouraging the child to have study timetables and engaging with their child during homework (Lee & Bowen, 2006). The educational support from the school and parents thus lay a foundation which will help the child later at university. The same demands are made of a student at university, with study times allocated, deadlines to be met, and reading skills to be developed and honed (Wilson-Strydom, 2010; McMillan, 2005a). These skills are

inherent in the assumptions that middle-class students have about how they should behave at university, hence their ability to cope and be successful.

The following section turns attention to working-class students. The students who were placed in the middle performance and the low performance categories came from working-class backgrounds (except for Bianca). They shared fairly common experiences of schooling. Hence these two performance categories will be discussed through the lens of their shared working-class backgrounds. This offers a way of understanding their experiences just as being middle-class was used to explore the experiences of the high performing students.

5.4.3.3.2. Working-class schooling experiences

Yasaar, Nisha, Shenay (middle performance category) and Colleen, Keelan, Brandon, Colin, Siriyal, Amber, Nicole, Lethiwe, Chelsea, Zainub, Zeta (low performance category) attended State schools. Bianca, Monique and Nasra went to ex-Model C schools. Jared, Alexander and Amanda (international students) attended public schools in their home countries. The following discussion reviews the shared schooling experiences of Yasaar, Nisha Amber, Chelsea, Shenay, and Colleen, revealed through what their testimonies allude to as a series of disadvantage. Yasaar described her working-class schooling as adequate yet still insufficient: “It was a good school... but it was not the best school”. Nisha described her school as under-resourced: “not very privileged ... it still being developed ... we did not have computers, it is only now that the school is getting new computers”. Amber’s school, on the other hand, did have computers, but only a limited number; as Amber recalled: “The computer laboratories as inaccessible ... we had one computer lab in school ... we didn’t get to use that”.

The general ethos of the schools the working-class students attended was highlighted in the insights from Amber, Chelsea and Colleen. Amber explained: “It is not like other schools ... ours is lacking discipline ... so people do their own thing ... sometimes they don’t listen to the teacher ... some teachers are afraid of the students”. The teaching and learning ethos of these schools was described as “laid back” (Amber). Colleen echoed

Amber's experience: "It is not hard-driven work effort ... if you didn't study every day it was like still okay". Chelsea felt that her school was a place where there was minimal support given to the learners: "In my school, it's like you do your own thing ... no one cared if you passed or not". These testimonies of Amber, Chelsea and Colleen show their working-class school as lacking both discipline and a culture of hard work. The school staff and school management neglected to inculcate a positive learning ethos in the school to the disadvantage of their working-class students. This left the students under-prepared for the educational demands of university and may have contributed to the challenges they faced in the oral health program.

Chelsea perceived her teachers as responsible for the poor quality schooling she received. Her statement referred to her teachers in terms of being disengaged and uninterested in her performance: "The teachers did not have any influence on you, because they would just sit there and you can carry on and do whatever you want. If you don't want to study or to learn they don't care". Chelsea's comments suggest that she experienced school as a place which neither supported nor motivated those students who struggled academically. As a result, she assumed that learning and the motivation associated with it had become her own responsibility. Amber, however, recalled that not all the teachers were disinterested. In her school, there were a few teachers who gave her the support she needed: "There were a handful of good educators ... if you ask them for extra classes, they would help you ... like Saturday classes for those who wanted to come".

The lack of support from teachers was further elaborated by Colleen. Her testimony also highlighted the disadvantage some working-class students experienced. Students who were perceived by teachers as being intelligent and who showed inspiration were favoured in contrast to those who struggled academically:

If you don't want to be there, you are not there. No, there isn't any motivation and support ... even if you failed, you just failed ... You were left to fail. It is your own problem ... and if you wanted to study, then you studied. If you are clever, they give everything to you, that is if you want to study and you want to become something in life. They are more on you then only than on the other person that needs attention.

The bias by teachers towards more academically able students, as described by Colleen, reveals the ways in which teachers in her school reinforced disadvantage for herself and her working-class peers. Students who struggled academically were already disadvantaged by their poor performance thus when struggling students are ignored in the class, opportunities to improve their academic abilities are further diminished (Reay, 2006). Reay (2006:302) describes such classrooms as “alienating, dis-affectionate and disengaging” for working-class students. Alienated from the learning opportunities in the school classroom, less cultural capital is accrued to the working-class students.

Apart from the lack of academic support from teachers, the working-class students in the current study perceived that they had received minimal guidance around career choice. Amber explains how the school she attended did not arrange occasions where guidance around careers could be made available: “I never like got anyone or like students from university to come and tell us what it was like ... there was nothing”. Lack of emphasis on career guidance in working-class schools is not uncommon (Archer *et al*, 2003). When there is lack of support from the school regarding career choice, students are unable to make appropriate and informed choices about accessing higher education. This shortcoming can manifest as a loss of interest and engagement and eventually lead to dropping out of higher education (Archer *et al*, 2003).

Another area in which working-class students appeared at a disadvantage was in the approaches to teaching and learning which were adopted in the classrooms of the schools which they attended. Students felt that the methods used by the teachers under-prepared them for exploratory and critical thinking forms of studying expected and valued at university. In the schools that working-class students in the cohort attended, study was mainly through rote learning. Amber’s comment aptly captures how this teaching and learning approach was carried out: “You get your book and the work is on the board and you write that down and that is how it is ... you study from your book ... you didn’t make your own notes, only when making summaries to study”. Chelsea echoed Amber, elaborating on how she prepared for assessments:

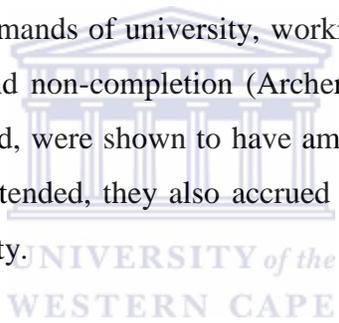
They say you study from chapter that to chapter that, and you have the whole scope. You know what is going to come in the exams ... the teachers actually gave you the work, and you just have to give back what they gave you.

Furthermore, projects were not used as a method of teaching, as in Chelsea's school: "There wasn't even a thought how to actually do assignments or research or to try to write up something". Projects as a teaching and learning tool encourage students to access information using various methods, such as the internet and books. The student critically analyses this material for relevance and credibility and to solve problems. For students like Amber and Chelsea who experienced rote methods of learning were arguably disadvantaged in that these methods impacted on their academic preparation for university. Their testimonies suggest that they were not given opportunities to develop to their critical thinking capabilities through the work assigned nor were they encouraged to be independent thinkers and workers. In this way, working-class schools, through the limited teaching and learning strategies which they adopted, implicitly under-prepared students like Amber and Chelsea for the academic demands of university. When students enter university having had only rote learning at school, they experience a sense of mismatch with the university's learning expectations. Independent, unsupervised and self-motivated learning is a central feature of university studies (Conley, 2007).

The international students, Alexander, Amber and Jared, had experienced a school system different to that in South Africa. They had a "British education system" of schooling which was regarded as of a high standard, in that these schools had "excellent resources" and a "stringent syllabus" (Alexander). Breier *et al* (2007: 90), reporting on studies at the University of the Western Cape, supported this claim, indicating that academic experience with students from this particular country was very positive, including their preparedness for university. This insight may explain the preparedness of these three students and their ability to complete the program in the minimal time.

5.4.4. Conclusion to academic performance and socio-economic backgrounds

The above testimonies of middle-class and working-class students revealed differences in terms of access to family/community support, quality schooling, resources, approaches to teaching methods, and expectations. From the above testimonies and associations between performance, race and social class, it is arguable that it is not race per se which defines performance; it is social class – because social class determines access to resources, including cultural capital. The relevance of the legacy of apartheid in this study was that students historically classified black were shown to still struggle to access the kinds of resources that would have facilitated their experiences at university (such as, quality schooling, money for university fees, the study time made available when not having to work part-time. Coming from communities in which less emphasis was placed on higher education, where social problems were common and where schools under-prepared its learners for the demands of university, working-class students are argued to be at greater risk of failure and non-completion (Archer & Hutchings, 2000). Middle-class students on the other hand, were shown to have ample access to economic capital. Through the quality schools attended, they also accrued cultural capital which matched the expectations of the university.



5.5. Conclusion to Chapter Five: analyzing student performance

In this chapter, the performance scores of the cohort for their enrolment period were presented. Student performance was categorized on three levels. Further patterns indicating a relationship between performance levels, race and social class was highlighted. Analysis of data on student's home and schooling backgrounds showed how differential access to economic and cultural capital prepared students for university in contrasting ways, reinforcing the association between social class and performance. In the next chapter of the analysis, focus is on students' social integration into the educational climate. Considering the socio-economic, family and schooling experiences of middle-class and working-class students, Chapter Six focuses on how these experiences influenced students' transition and integration in the university, the Faculty of Dentistry and the profession from a *social perspective*.

CHAPTER SIX

SOCIAL INTEGRATION: “Traversing the chasm”(Wilson-Strydom, 2010:3)

6.1. Introduction

This chapter is the second of the three analysis chapters. It focuses on students’ integration into the university from a *social* perspective (Tinto, 2006; 2004; 1998). Embedded in the discussions that follow is an assumption that social integration leads to better academic integration and so influences student success (Tinto 2010; 1975). As discussed in Chapter Two, in order for students to achieve full *integration*, they need to successfully negotiate three phases: *separation* (from their previous environment), *transition* (their fitting into or adjustment to new environments and communities) and *incorporation* which, is the point at which they become *integrated* (Tinto, 1988).

In this study, transition to university was shown to have salient meanings to the cohort and was experienced at multiple levels: geographic transition, transition into the university climate, transition in the classroom with peers, transition into professional roles, transition into an inter-professional context and that which will be addressed in Chapter Seven, academic transition. These different transition experiences are a precursor for adaptation to the educational climate and signaled whether a student made progress or not towards being fully integrated socially and hence academically.

This chapter in addressing social integration presents and discusses students’ accounts of their experiences as they transitioned from home to university and then into the Faculty of Dentistry with particular focus on classroom experiences. This discussion is followed by an exposition of student experiences of their professional transition and integration.

Given that the students came from different socio-economic locations, this chapter assumes that the experiences of transition and integration into the university educational climate were different for each group. The following discussions are thus presented from both middle-class and working-class students’ perspectives. For this and subsequent

sections in this chapter, the middle-class and working-class students' perceived experiences will be presented first, followed by a discussion.

Embedded in this chapter (as well as the next) evidence is presented in response to understanding the following: what is the quality of academic life for students from both historically disadvantaged and advantaged societies; how and why do certain issues influence them and in what ways; to what extent does the institutional culture at the University of the Western Cape accommodate all students and the extent to which the educational climate at the Faculty of Dentistry accommodates these students.

6.2. Transition from home to university

“I thought everything was going to be nice and then I started to panic” (Amanda).

6.2.1. Introduction

Transition to university, or, as Wilson-Strydom (2010:3) refers to this process, “traversing the chasm between school and university”, is considered to be one of the greatest challenges a student may encounter (Strahn-Koller, 2012; Briggs *et al*, 2012; Scott, 2009; McMillan, 2005a), and often results in students being displaced socially (Briggs *et al*, 2012). For many students entry into university is often laden with fear, apprehension and disorientation. It is usually complicated further when there is a history of poor academic performance (Scott *et al*, 2007), when students have raced/classed assumptions about their ability (Reay, 2006; Archer *et al*, 2003), when they lack of the kind of cultural capital that is valued in higher education (Reay *et al*, 2005) and when they are inadequately prepared for higher education (Wilson-Strydom, 2010; Scott, 2009; Archer *et al*, 2003). These challenges are arguably greater for students who are first in their families to attend university.

In the following section middle-class and working-class students' early transition experiences are discussed with particular focus on the stage between separation and transition to the new environment. In this section, student experiences of geographic transition into new living environments, communities and university residences is

described as well as their first experiences with the university environment. These aspects are significant in that they foreground some of the social as opposed to the academic challenges often reported (Wilson-Strydom, 2010; McMillan, 2005a).

6.2.2. Geographic transition

For some students in the cohort, attending university involved a “physical” (Tinto, 1988:443) or “geographic” transition (Whittaker, 2008:20). This was particularly relevant for students who were living away from home and coping with adjustments to new living arrangements, a new city or a new country and new communities (Whittaker, 2008; Tinto, 1988). For some students their experiences of transition were not just a physical move but a social displacement (Briggs *et al*, 2012). For those leaving home it meant separation from the familiar (Tinto, 1988). The failure to cope with this separation from the familiar to transition into an unfamiliar context has been argued to impact on how students integrate into the new environment (Tinto, 1988).

6.2.2.1. Middle-class students’ experiences of geographic transition: home away from home

Taylor, Ashley, Amy and Zubeida lived with their parents and commuted from their family home to university. Komilla, Gabriella (both international students) and Emily relocated to live close to the university. Even when asked explicitly about their experiences of moving into a new physical environment, students placed minimal emphasis regarding this transition. Komilla indicated that she did not feel challenges in moving into a new home environment nor in being significantly displaced: “There were no challenges, I haven’t experienced or felt any of them”. This perception was echoed by Emily: “I did not have any of these problems,” and Gabriella: “I just miss my parents, but there was nothing that I can recall that was a challenge”.

For students Emily, Komilla and Gabriella, their move from home was a direct transition into a place similar to home, because they lived in private apartments which were not shared with other students. Only Gabriella lived in an apartment that she shared with her elder sister, who was also studying in the same faculty. For Gabriella, her new living

environment was described as home away from home: “My move into Cape Town was fine ... it was like home, I did not experience challenges because I did not need to adjust to the residence – my parents set us up in an apartment ... we had everything there”. Gabriella also claimed that she quickly became familiar with her surroundings: “I have a car and so got to see Cape Town, I knew my way around ... my sister and I, in that sense, we’re quite independent”. For students Emily, Komilla and Gabriella, their physical move into new environments was not characterized by significant displacement.

6.2.2.2. Working-class students’ experiences of geographic transition

“You begin to feel out of place” (Chelsea)

For working-class students, on the other hand, their experiences of geographic transition were described in terms of a significant adjustment and social displacement (Whittaker, 2008). Zeta’s and Chelsea’s initial transition adjustments related to their move into an unfamiliar place where they needed to adjust, and create a new space to call home (Daniel, 2010). Embedded in their testimonies was the way in which they felt socially displaced.

Zeta and Chelsea both indicated they were from “rural” areas. Zeta explained that she came from an area that had a “small town”. Chelsea (echoing Zeta) highlighted the differences between the environment from which she came and the one to which she had to adapt: “Coming here was huge adjustment. When I came here to the big city, it was different ... there were more facilities than what we had ... but you begin to feel out of place ... and you don’t know anyone”. Zeta expressed her concern over the cultural difference in her new environment: “The lifestyle is a bit faster than home ... it takes getting used to”. Her initial perception of how she felt when she first came to university suggests that her challenges included both, moving home and as an addition, issues with the curriculum which exacerbated her transition and eventual integration: “It was a huge adjustment ... I was not prepared for this ... the move ... and then the work-load ... this was too much”. Amanda, an international student, because of her unfamiliarity both with

the university and the country, experienced increased apprehension when she entered the university and its residence:

I was lost ... I did not know anything ... I did not even know where I was coming to ... I didn't know what to do and my first time to the city and I thought everything was going to be nice and then I started to panic.

Part of the separation and transition process, is the experience of students parting from old communities and their encountering of multiple new communities. Alexander, also an international student, found the transition to be increasingly complex not only because of his move physically away from home to live in a hostel but also because of the multiple communities to which he had to adjust that resulted in his social displacement: "I wouldn't say it was easy to adjust. I had to come here and then I had the community at the hostel and adjust there to hostel life, and then I had to adjust to the class community and then the dental faculty community".

However, Alexander's further testimony suggests that living away from home had its benefits by bringing him social and academic rewards (Tinto, 1988):

I live in the hostel, so I am independent by myself. It influences my learning in a positive way because at home I wouldn't be studying, and I would lie around watching television and so on, but because I am here independently I make time to study, because my parents are depending on me to study and not waste their money.

Although for Alexander his geographical move was arguably stressful, his challenges were only "temporarily disorientating" (Tinto, 1988:443). As indicated above, he benefited by living in the hostel arguably because of the culture of studying associated with living amongst the university community (Tinto, 1988).

From the above testimonies it is clear that the experience of geographical transition was different for middle-class students and working-class students in that the experiences of

the latter were characterized as a significant social displacement. The significance of this difference is discussed next.

6.2.2.3. Discussion on geographic transition

The entry of students into university is argued to be a “personal investment” or spending of cultural capital accrued through the home and school (Briggs *et al*, 2012:1). The kind of cultural capital students have available is significant to this investment because it influences how students cope with their transition. The testimonies of the middle-class students Komilla, Gabriella and Emily showed how investment of economic capital accumulated through the family allowed access to privileges such as having an apartment and car – resources which facilitated their transition into a new physical environment. These privileges are the kind to which middle-class students are accustomed. Access to these kinds of privileges facilitated these students’ geographical transition. As a result, these students experienced few challenges in this aspect of the transition.

The middle-class students also had access to the kinds of cultural capital expected at university and so felt socially connected to the experience of transition (Briggs *et al*, 2012). Their schools had prepared them well in terms of independence, confidence and knowledge about university life. Family members who had been associated with the higher education experience would also have prepared them about where they would be living, how they would travel and what university life would be like. Such pre-arrangements and planning around university entrance would have started early in the life of such middle-class students and they therefore entered university feeling less displaced than working-class students.

In contrast, working-class students perceived the geographic transition as a significant social displacement. Whilst all students have to adjust (Strahn-Koller, 2012), the degree of the adjustment was more significant and of a different nature for working-class students. Most of the working-class participants “traversing this chasm” (Wilson-Strydom, 2010:3) in the current study were the first in their family to attend university (see Chapter Five). For these students, because of their lack of insight into university,

whether through their families or through the schools they had attended, experienced their transition as a significant “adjustment” (Briggs *et al*, 2012:4; Daniel; 2010:15) and hence a social displacement (Briggs *et al*, 2012). This adjustment is reflected in Zeta’s testimony: “It takes getting used to,” and Alexander’s experience of “adjust[ing]” to different communities. For students like Amanda, Zeta and Chelsea their *separation from the familiar* (Tinto, 1993; 1988) as they left behind their physical environments, family and friends, to which they were accustomed (Tinto, 1993; 1988) created the disjuncture they found to be stressful.

Alexander’s perception of his challenges reflected the complexity of transition, as he encountered multiple physical and social settings, each with different rules, regulations, and possibly climates and cultures. His challenge was to adjust to these various settings – this sense of a difficult adjustment is not uncommon for working-class students, especially when their “membership in the communities of the institution is so tenuous” (Tinto, 2010:4). Tinto (2010) argues that, while integration may present as a challenge to such students, achieving membership of the communities in the institution is critical to their subsequent retention and completion. However, there is a strength that lies in student communities because these communities support retention and so contribute to student completion. Such retention and completion are enhanced when, for example, students form study groups within these communities. Being part of these communities at the university residence arguably worked in Alexander’s favour.

Alexander’s testimony of the long-term benefits of living in the university residence echoed lessons of persistence and successful completion highlighted in Daniel’s study (2010:73). In Daniel’s study students staying at residence at university showed positive signs of later adjustments. Staying in a residence eventually worked to their advantage in that they became integrated into the university community and thus did not feel “isolated from campus life” (Daniel, 2010:73). Daniel highlighted how some working-class students who lived at home and travelled to university daily often had difficulties connecting to the social environment of the campus because of the limited time they spent at the university (Daniel, 2010:73). In the current study, some working-class

students who commuted from home (like Nicole and Amber) struggled to cope in environments that they lived because of the lack of support in the way of educational emphasis – this lack of support added to the challenges of their integration in the university.

Thus far, students have been discussed in terms of their experiences of separation from past environments and communities in relation to their transition geographically or physically into new living environments. An embedded aspect in this transition was their encounters with new communities. Whilst for middle-class students this transition was not experienced as overwhelming, for working-class students it was a social displacement. In the following section, attention is turned to the students' experiences of their first interactions with the university community. The university community, in particular the faculty community, forms part of the institutional structure and contributes to the culture and ethos of an educational climate. Cultural capital plays a significant role in shaping students' initial encounters and experiences of interaction with the university and therefore influences the way in which they experience the educational climate. Embedded in the discussion that follows is the extent to which the educational climate at the Faculty of Dentistry accommodates students.

6.2.3. First encounters with the university

An institution is considered to play a fundamental role in shaping the early transitional experiences of the student (Tinto, 2010; 2006; 2004). The process of transition into the university can be equated to a “geographic” transition because entering the university climate involves moving from one community to another (Whittaker, 2008:20), as students must leave the familiar and begin an association in an unfamiliar environment (Tinto, 1988). The following testimonies of both middle-class and working-class students are presented with regards to their first experiences of the university.

6.2.3.1. Middle-class students' first encounters with the university

When the middle-class students were asked to reflect on their enrolment process and their experiences of the university in their first few days, they responded with comments such

as: “My experience was fine” (Gabiella) and “Coming to this university was good ... I had no major issues” (Taylor). These students did not offer insights that could suggest that they faced any challenges in their early interactions with the university.

6.2.3.2. Working-class students’ first encounters with the university

For the working-class student Amanda, an international student, the perceived lack of administrative support was her most significant transition experience. Her testimony implicated the university in failing to support her transition. Amanda’s testimony in capturing her feelings of disorientation and panic highlights her perceptions of geographical displacement, lecturers' quality of engagement and how the climate felt alienating at the point of entry:

In my first year, I entered here a few days late, but when I got here ... I didn’t know where to go ... they told me to come here ... firstly, I didn’t know Tygerberg Faculty was here ... I didn’t know anybody here and I met some Indian students in the passage here and I said, “I am Amanda, can you help me, I don’t know where to go”. The one lecturer, she was like nasty to me ... when I asked for help. All she said was, “You’re late”. She did not even tell me anything else, nor did she tell me what I needed to do.

Amanda explained how her encounters during her initial transition impacted on how she experienced a negative interaction with a lecturer who she perceived as unsupportive. The lack of support she claimed to experience was further attested as having an influence her initial experiences in the classroom:

I had to find out everything for myself, because the lecturer who I met that first day happened to teach me, but still did not help me ... I did not like being taught by her ... It took me a long time to adjust because even in the classes ... the lecturer was replying in Afrikaans, so it takes me a long time to understand.

Amanda further elaborated on her perception of the educational climate as having changed slowing as she spent more time in the institution: “Last year it was not so good ... it wasn’t a very supportive environment ... I’m getting used to it now”. These

testimonies on students' first encounters with the university climate are discussed in depth next.

6.2.3.3. Discussion on students' first encounters with the university

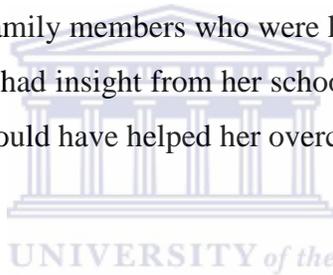
Students' testimonies of their first encounters with the university suggest that middle-class and working-class students experienced the transition differently. When asked explicitly to describe their first few days of entering university middle-class students did not have anything to discuss whilst the working-class students seemingly had more to deliberate on. The difference between these two groups experiences of their initial days at university may be explained by the cultural capital, the skills and dispositions that middle-class students bring with to the university experience. Middle-class students who came from families who were associated with university education, who came from schools that provided significant insights and who as a result of their own inquiries, knew what to expect and how to capitalize on every aspect being told and shown to them. As a consequence they navigated their educational journey with ease.

Working-class students, in the absence of family guidance and insights, are often unable to understand what lies ahead and so must construct their own understanding of the unknown university world (Wilson-Strydom, 2010). Those with no prior insight into the university processes and what is expected of them before transition have difficulty envisaging university life and accurately predicting their own experiences (Smith & Hopkins, 2005). This situation argues a mismatch between Amanda's pre-transit aspirations and the reality of their first year at university, resulting in their difficulty in adapting to the educational climate (Daniel, 2010; Smith & Hopkins, 2005).

Working-class student Amanda's testimony suggests that the *quality* of her first experiences of the institution contributed to her initial adjustment challenges (Tinto, 1988). The positive quality of the experience is significant in that it is vital for ensuring that students become fully integrated, since quality is accepted as an essential ingredient in developing engagement and hence integration (Mori, 2008; Tinto, 2006; 1975). There were three aspects that shaped the quality of Amanda's experiences in a negative way.

The first was her own geographic transition challenges, the second was the university administration orientation process and the third was the attitude of the staff member with whom she interacted. Both the administration process and the staff represented the institutional culture as part of the educational climate. Her testimony signals the potential that these aspects may have on the development of an alienating climate (Reay *et al*, 2010; 2009).

Amanda's late registration for the program after the official registration had closed was the result of a late acceptance by the university and the administrative processes in her own country. Her experiences were thus amplified – not only did she arrive late but she was also new both to the institution and the country and arrived without family or friends to support her. Her testimony foregrounded her lack of preparation, which was partly attributable to her not having family members who were knowledgeable about university. It could be argued that had she had insight from her school or family about the university and its processes, the insight would have helped her overcome the initial practical hurdles she encountered.



Amanda's late arrival and subsequent lack of support from the institution impacted on her transition into the *institutional structure* and the campus community in several ways. Her testimonies suggest that she was unprepared for what lay ahead. As a consequence of her lack confidence and independence she did not know how to navigate her way in university resulting in her initial days of transition being a series of negative experiences.

Her late arrival meant that she missed the opportunity to attend the faculty's orientation program for new students in addition to a number of introductory lectures. Her absence from the orientation program meant that she missed vital opportunities to meet fellow students and lecturers. She also lost the chance to be part of a newly formed group of potential friends who would have been a source of support during her transition (Harvey *et al*, 2006). The students entering the program also received a large amount of information at induction which focused on areas considered to be of importance in orientating them socially and academically. This information included aspects on the

university calendar and faculty year-book, guidance on university processes, orientation in the curriculum structure, timetables, university facilities and support services, accommodation, useful contacts, sports and recreation, personal safety, access to health care, and information about the locality. As Harvey *et al* (2006) highlighted and similarly in this study, during this time first-year students also received information about individual modules which would have enhanced her orientation around the academic program ahead.

Her lack of exposure to the induction process thus put Amanda at a disadvantage as she embarked on the program, leading to disorientation, disillusionment and “panic”. Campus orientation is regarded as pivotal to the student’s integration at both social and academic levels (Swail *et al*, 2003). When first-generation students are not properly informed about the academic and social environment of the university, they are more likely to have difficulty in adjusting to the environment and so struggle with integrating (Daniel, 2010). Given the importance of introducing students to the university’s educational climate, it is arguable that, when there is a lack of initial support, the institution itself becomes implicated in the integration challenges which students face.

6.2.4. Conclusion: transition from home to university

In this section, students’ geographic transition and their first encounters with the university’s educational climate was highlighted. Embedded in these discussions was an interpretation of the way in which economic and cultural capital influenced students’ sense of geographic displacement and their perceptions of preparation for university. The next section highlights students’ perceptions of their classroom experiences. Focus is on particular aspects relating to student interaction, the manner in which particular students were included or excluded in these interactions, and the impact that experiences of inclusion and exclusion has had on individual students’ integration into the educational climate.

6.3. Students' social interaction experiences with peers in the classroom

It's not just about a transition, it's also about "fitting in" (Zeta)

6.3.1. Introduction

Classroom interaction and engagement between students are crucial to their integration (Tinto, 2012a; 2010; 2006). Tinto (1975) stresses that in the classroom greater social integration leads to greater academic integration and subsequent success. According to Tinto (2012a; 1998; 1993; 1988) many students experience institutional isolation – institutional isolation occurs when students lack engagement with the institution and its members and is a result of their not connecting with the social environment or gaining membership to the classroom community. However, integration is only possible when the student feels included and fits in with classroom members socially (Tinto, 2012a; 1988; 1975).

Testimonies of middle-class and working-class students' experiences of their integration into the classroom community are presented and discussed. The participants were asked to respond to the question: *Describe your experiences of classroom interaction with peers*. The factors which influenced their interaction and engagement with peers and which form the basis of the following discussions were race, socio-economic differences, and culture and language barriers. Embedded in their responses were issues around fitting in, forms of alienation, stigmatization and issues of power.

6.3.2. How race and social class shaped students' classroom interactions

Interaction among the students in this cohort was largely orientated around the formation of groups which is not an uncommon practice in classrooms (Lueck & Steffen, 2011). Although groups were likely to provide the much-needed support through which first-year students could share their experiences of the academic and social agenda (Tinto, 1975), the basis on which they were formed was shown to create divisions, resulting in the alienation of some students.

Based on the researcher's own observations as well as insights from discussions with lecturers about student interactions in the classroom, it was noted that students sat in particular patterns, not only in terms of with whom they grouped, but also where in the classroom they chose to sit. Firstly students sat largely in groups that were racial/social class in nature and secondly, these groupings sat in particular places in the classroom. Two of the lecturers, Hennie (echoing Anna), commented specifically on this pattern observed: "The coloured students sit together at the back and white students up front". Student testimonies will be used to show how these groupings were not just about how students chose to interact in the classroom but how this interaction (or lack of it) was about how power operated.

Students were questioned about who they were close friends with in the classroom and who they sat next to and why. The following testimonies relating to race and social class locations were perceived by the students as best describing how they *arranged* themselves and who sat with whom in the classroom. These testimonies reflected on the ethos of the educational climate which students contributed to because of their race and class assumptions about peers. These testimonies also highlighted how their preconceived notions of other race groups translated into the way that student interaction played out in the classroom.

6.3.2.1. Middle-class students: how race and social class shaped students' classroom interactions

Apart from two of the white students Ashley and Taylor, none of the other middle-class students inferred that aspects of race or social class had influenced their integration into the classroom. Ashley's testimony suggests that she perceived that students chose to sit in groups that reflected the centrality of race and that informed the friendships in their classroom: "You get the blacks and then you get the whites that sit together". Taylor uses her race unfamiliarity as an explanation for why raced groupings still manifested. She explained that her interaction with other race groups had been limited prior to her entrance into the university, making this a new experience for her:

I interacted mainly with whites before ... if there is a black person in the area it would be a domestic or somebody working in the garden ... We never had anyone who walked around with a doek on their head like here ... I had never obviously seen it.

However she recognized that race similarities were also about access to resources and that classroom groupings were therefore about social class locations:

The coloured students, they stick together, they all come from the same families, like level of economic status ... all the same category ... they also seem to relate to each other better because they know the background where they have come from. Emily and all of them, they also form another part of the economic status ... and they sit with people like themselves.

Taylor's further testimony suggests that she had race and classed assumptions of black people that may have influenced her interactions with black students in her classroom. Her lack of insight about poverty and social class as nested concepts of race led to her assume that redress²³ of apartheid inequality played out in the university system and impacted on her chances of obtaining a bursary:

Lethiwe upsets me terribly, and I feel like she treats me like a rich white little girl I need a bursary ... I think it is because of her colour that she's receiving that bursary and what upsets me even more is the fact that she is allowed to slack off, she fails a year, she still gets a bursary, this year she is just like bunking and does whatever she likes and she still gets this bursary. Whereas me as a white person ... I am not allowed to get a bursary and I think it is very unfair. She is allowed to prance around and act like she is underprivileged ... like she came from a very bad squatter camp kind of family, and that is not the deal ... That upsets me.

²³ The African National Congress (ANC) Government restructuring and development plan was aimed at reducing past inequalities between the different population groups by relocating budgets and increasing spending on social matters, health and education (Bertelsmann, 2010). Refer to section 2.2.3. and 2.2.6.2. for further explanation on government initiatives to increase participation in tertiary institutions for groups of students previously denied access. Increase in funding for university was part of the redress.

6.3.2.2. Working-class students: how race and social class shaped students' classroom interactions

“That is why groups stay the way they are ... it is less complicated” (Nisha)

In the following testimonies, Zeta and Nisha expressed their perceptions of the ways in which they experienced race as having an influence on classroom interaction and integration. For Zeta, a coloured student, there was a relationship between the ways in which her peers socialized and the extent to which she felt an insider in her own class of peers. Zeta's testimonies highlighted her perception that some students were race-conscious, and that this consciousness translated attitudes about race into actions:

It's what they think about the people and that carries through in their actions. I have observed ... certain students and the way they treat other races ... in terms of segregating themselves from other races. The coloured students ... they just stick to themselves. There is no interaction between anyone. In the classroom, it can create a certain atmosphere ... and in the clinic too.

Zeta offered further insight into how her first interaction with differently raced people had only occurred when she arrived at university: “I did not have a lot of contact with other races before this”. Her testimony suggests that her past experiences of race segregation likely influenced her current interaction in the classroom: “I don't really mix with the whites ... I don't belong to any group ... at times I join some of the coloured girls and black girls”.

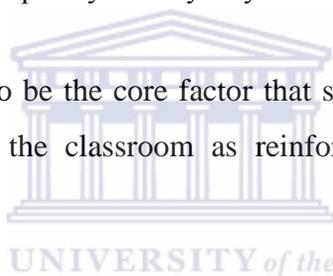
Nisha in her testimony seemed unsurprised that racial groupings existed. She felt that race grouping was not an uncommon phenomenon. She assumed a somewhat Darwinian view (Archer *et al*, 2003) which suggested that students had preconceived notions of how they grouped themselves in the classroom. She saw race as a factor but added academic performance as a further dimension that influenced grouping and student interaction:

It's natural, you just come to a decision of who you want to be with socially ... but it's also intellectually too ... you get the white Afrikaans people sitting together, then English-speaking, Indian and coloured ... from your first year, the people will just group themselves ... but there's like the whole black thing and then there's the coloured thing and the white thing ... people think it doesn't happen, but it's still there. It is seen in the comments and the jokes that are passed in class.

In her testimony, Nisha also claimed that race groupings, because of shared culture and an implicit social class were good to have because they were *convenient*:

You feel when you are with another group, then you have to act like them and speak the way they speak, whereas if you are with a group that you familiar with, then you are just yourself ... that is why groups stay the way they are ... it is less complicated.

Although race was perceived to be the core factor that shaped student social groupings, Zeta saw race differences in the classroom as reinforced by historically embedded prejudices and attitudes:



You can see an after-effect of the apartheid era, because everybody has preconceived ideas about certain races and cultures, and they have certain prejudices and it influences their attitudes and how they treat other people different.

From the above students' testimonies it was clear that race and social class were central elements operating in the classroom in terms of student interaction. The following discussion is framed around these testimonies in order to create an understanding of how student groupings impacted on student interaction and hence on their integration.

6.3.2.3. Discussion on how race and social class shaped students' classroom interactions

The above testimonies, from both middle-class and working-class students suggest that student interaction occurred at a level in which race and social class informed social groupings within the cohort. These testimonies also foregrounded the students' own

consciousness of the way that race and social class played out in the classroom. Taylor's account revealed an assumption that some race groups, for example coloured people, were associated with low socio-economic locations. This perception was reflected in the way that she framed coloureds as being from "the same level ... same category" and that "Emily and all of them" were *different*. Taylor thus saw race and social class as having a logical connection. It was apparent that she took it for granted that this was the way it was supposed to be.

From both the middle-class and the working-class students' testimonies, it could be argued that the race and social class structures which arose from the legacy of apartheid had an influence on student interaction in the context of this study. In her testimony, working-class student Zeta recalled the past segregation of the apartheid era. She felt that apartheid perceptions about race (and thus implicitly about social class) continued to manifest in the way in which social groupings emerged in her classroom (Jansen, 2005).

The challenges of fitting in and feeling alien or outcast were not uncommon for working-class students such as Zeta (Reay *et al*, 2010; Archer *et al*, 2003). It was clear from her statement that Zeta was selective about whom she joined and that her choices were informed by her own perceptions about race and having to fit in. Such negotiations around social integration often accompany adjustment during transition into university (Tinto, 1988). However, as has been indicated, very often it is the working-class student, lacking the capitals valued at university and not meeting the norms and cultures of the institution, who either has to adjust and fit in (Archer *et al*, 2003) or opt out (Tinto, 1975). Particularly when there has been of legacy of *othering*, as was the case under apartheid, fitting in for students has the potential to be more complex when race is involved. The testimonies of Ashley, Taylor, Zeta and Nisha supported this assertion in that the class leaned more towards *clique* forming whereby race played a seminal role in these groupings (Lueck & Steffen, 2011; Smith & Moore, 2000). In this study, students who felt excluded joined cliques or social groupings as a mechanism to secure support from peers with whom they identified in order to navigate unfamiliar surroundings (Tinto, 1975) and to reinforce their identities (Lueck & Steffen, 2011; Smith & Moore, 2000).

In this study, the comments of students suggest the kind of situations reported by Swail *et al* (2003) such as alienation and exclusion. Swail *et al* (2003:58) argue that the consequences of the discriminatory treatment can foster rude and unfair treatment. Students who are accused of “acting white”, or students that doubt others’ ability to succeed offer non-academic challenges which for some students may lead to culture shock (Swail *et al*, 2003:58). However, these acts can be avoided if the institution makes efforts to encourage increased interaction both inside and outside the classroom (Tinto, 2012a; Swail *et al*, 2003). In the absence of timely interventions, it is argued that poor classroom relations can threaten not only students’ social experiences and integration but their academic performance as well (Tinto, 2012a).

Embedded in the discussions of student interaction in the classroom were also insights that particular factors informed *where* in classroom students actually chose to sit. The following section highlights students’ testimonies that foreground these factors.

6.3.3. Factors shaping students’ seating choice in the classroom

The above discussions highlighted students’ choices of *who* they sat with framed in terms of race and social class. The following testimonies of middle-class and working-class students presents interpretations of their own seating locations in terms of *where* they sat and how they perceived the general seating locations in the classroom. Their testimonies described their seating choices in terms of several factors: the first was actual and perceived *academic performance*, the second was related to classroom *engagement* and the third factor signaled the continuing effect of the apartheid legacy on the *stigmatization* of some students that created a culture where stigma allowed some students to fit in but excluded others (Jansen 2009; 2005).

6.3.3.1. Middle-class students: factors shaping seating choice in the classroom

Middle-class students, as understood from Chapter Five, were the high achieving students. Their testimonies indicated that they all sat in the front of their class: “We usually sit up front” (Gabriella echoing, Komilla, Ashley and Taylor, Zubeida and Emily). They also highlighted that these choices were deliberate. Taylor’s testimony

captures their perspectives by describing where she chose to sit and her reasons for her choice. In addition, her testimony shared insights about her own interpretation of where students who did not perform as well chose to sit:

We sit in front ... students who really want to be there and who want to focus on things sit at the front and the guys who want to kind of cruise through, they will sit at the back. You never find the guys getting straight A's sitting at the back.

Whilst Taylor's testimony summarizes middle-class students' reasons for where they chose to sit in the classroom as being academic in nature, working students' testimonies foregrounded engagement and stigmatization as the reasons behind their choice of not sitting up front.

6.3.3.2. Working-class students: factors shaping seating choice in the classroom

Working-class students Alexander, Monique and Chelsea, in their testimonies of *where* they chose to sit in the classroom, were related to their fear of engagement. Their testimonies suggest that these students needed to protect themselves from the embarrassment of not being able to pose or answer questions.

Working-class student Alexander echoed Taylor's (middle-class students' testimonies above) assumptions about who sits where in relation to their perceived academic performance: "The intelligent students, they are all like one group ... they all sit in front and those who achieve like average sit in the middle and at the back". Monique's account on the other hand, suggests that both race and academic potential were implicit in the choices she made about where she sat in the class:

It's not like I'm coloured that I must sit at the back ... it is like the white students always sit in the front. It is not about that they want to be more academically wise, or learn more, but it is just where we prefer to be – in the background. You're safe in the background.

Monique offered insight into her reasons for wanting to be in the "background" but put forth a notion of stigma she perceived to be attached to potential (ability). Her following

testimony takes the argument of her perceived potential and stigma further by implicitly highlighting her abilities in terms of her *actual* performance. She also drew on the perceptions of one of her lecturers who casually warned that their performance was closely related to where they sat.

In the front I feel that is where they start asking you questions. Mr Johan, he told us, don't sit in the middle row because we are always the ones who don't do good and always the ones that fail. Most of us sit in the middle and now we thinking, is this him jinxing us or is it real?

Implicit in Monique's reporting of Mr Johan's perception around "jinxing", is the underlying issue of *engagement*. Monique's testimony suggests that Mr Johan believed that *where* in the classroom students sat impacted on their engagement and so influenced how they performed. Students who sat away from the lecturer and at a distance from the active discussions that transpired with the high performing students who sat up front, would have missed on vital information being shared. His perceived comment served a warning to students who performed poorly that if they continued to sit where they normally did (at the back and middle), that it would have continued to influence their performance. It is arguable in the case of students who performed poorly and who sat at the back of the classroom that their performance was attributable to their lack of engagement.

Chelsea, echoing Monique, summed up her perceptions of the students who sat in the front rows of the class, hinting that they knew their work whereas she was not as confident:

Usually the people who sit in front know their work, will always ask the question and they, the whites ask a lot of questions ... I am afraid I will get asked questions because you don't usually know if it is a simple question or what the other people is going to say because you never ask a question or you don't usually ask a question ... so the whites, they sit in front in the classroom ... you don't sit with them because you feel inferior towards them.

So as not to lose out on the opportunity to learn and at the same time to protect themselves from the embarrassment of not being able to pose or answer questions, working-class students adopted a strategy, as illustrated by Chelsea when she described how she chose to *sit on the outside looking in*: “When they start to ask questions, you think, let me rather sit in the middle, then I have a better view over the lecturer and I will still hear the lecturer and I will hear everything, so I won’t be too far back”.

Whilst some testimonies showed working-class students as having to negotiate the way they engaged in class, other testimonies amongst this group highlighted how as a consequence of their not engaging and asking questions it stigmatized them. Because they performed poorly, it led to a stigmatization that working-class black students generally do not engage and so do not produce good results. Zainub (Indian student) perceived that working-class students had to defend their academic performance to white students if they performed well. Zainub’s testimony presented her own interpretations of this classroom situation around stigma highlighting that in cases where black African students performed well academically they were seen by white students as cheaters:

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The people in the class say the African people are either cheating or something if they are trying to do well, because they are supposed to have been the ones who are struggling ... emotionally it could affect these people.

The implication for poor performing students culminated in their having to defend themselves not only against their white peers as indicated above but also among their black peers. Zainub’s further testimony highlighted her experiences amongst black working-class students (coloured, black African and Indian students):

If we do well in something, a lot of the students in the class they call us coconuts. This means you’re black on the outside but you think you’re white on the inside. In other words, they call people who are black who are now educated they at times refer to as coconuts, because it’s not that you want to be white, or you speak English well ... and that’s what happens in our class all the time. At times it’s a joke, but at times it’s more than a joke.

The contribution of historical patterns of poor performance, race and social class in South Africa together with the current perceptions that working-class students lack engagement (for example, distancing themselves and avoiding asking or answering questions) and their poor performance, arguably set up the potential for stigmatization being attached by those students who did engage and who did perform well.

The following discussion focuses on understanding how students' seating choices affected student interaction and so shaped students' social integration.

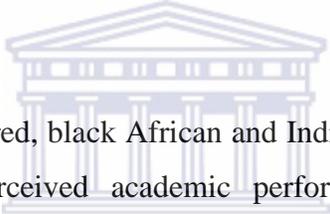
6.3.3.3. Discussion on factors shaping students' seating choice in the classroom

The above testimonies suggest that seating locations in the classroom was segregated and that it was related to several perceived factors. Race, social class and academic performance were central to these factors. In the previous chapter, academic performance of the cohort was shown to be related to race and social class. In this section, this relationship was further expounded on and was shown to influence student interactions with fellow peers, their engagement in the classroom and their social integration.

Middle-class student Taylor perceived that “students who were diligent sat in the front”. Embedded in her testimony was the notion that the seats at the back of the class were not valued by high performing students because these seats belonged to those who were constructed as *other* – those who wanted to “cruise” (as Taylor put it) or as working-class student Alexander testified: “Those who achieve like average”. Taylor’s attitude to non-participation signaled a stereotyping associated with low-performing students – a stigma that framed them in terms of whether they “really want to be there”. Middle-class students thus recognized that sitting in front was both valuable and rewarding to them; it mattered because engagement mattered (Tinto, 1975). In the front rows, they stayed “focused” (Taylor) and asked questions (Chelsea), arguably because it enhanced their learning experience.

Students in the high performance category, who were mainly white students, also happened to come from schools where engagement was valued and rewarded through

positive gestures and support from the teacher (Reay, 2006). So at university they asked questions because they were confident and unafraid to engage in a practice to which they were accustomed (Anyon, 1980). At university, educators privilege a classroom culture which assumes that students will engage, answer questions and also ask questions of their own (Conley, 2007). Students who choose to answer questions and engage in discussions are generally considered better able to integrate (Tinto, 1975). Engagement in the classroom facilitates success because it is pivotal to generating interest and understanding of subject matter (Tinto, 2012a; 2004; 1975). It is not surprising then that middle-class students in this study chose to engage, especially when they received the rewards of their engagement – their good performance scores. Their engagement was thus reinforced because of their rewards, and in this way their confidence and independence continued to be reinforced. They knew when and how to access help and support from the lecturers when these were needed.



Working-class students, (coloured, black African and Indian) had embedded assumptions about their potential and perceived academic performance, which informed their decisions around engagement in the class. A significant aspect of the working-class students' testimonies was the taken-for-granted perception among themselves that working-class students generally did not ask questions in class. It is arguable that Monique and Chelsea's lack of confidence about their ability to answer questions was shaped by their previous experiences: Firstly their lack of confidence was shaped by their history of educational disadvantage, second by their academic failure at university and consequent lack of confidence in themselves (Breier *et al*, 2007) (refer to Chapter Five) and third by their fear stemming from their perceptions of being embarrassed or *othered* should they fail to give the correct answer. These experiences arguably prevented them from participating in class or asking questions. Chelsea's testimony also suggests that she experienced a form of exclusion in that she felt that the front rows were reserved for high performing students and so were inaccessible to those who were only average or poor performers.

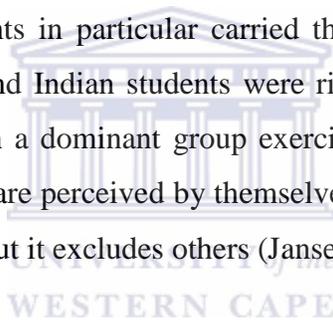
Furthermore, the working-class students in this study had largely been accustomed to rote methods of teaching at school (Anyon, 1996). This approach did not allow for exploration of disciplinary knowledge or active engagement in learning. As a result, in the university classroom these students did not know how to conduct a discussion around the given subject matter and inadvertently remained passive learners (Anyon, 1996; 1980). Their engagement with their teachers or with the middle-class peers was infrequent. This lack of frequency was demonstrated in Chelsea's testimony that the perception created by others about working-class students and amongst their own group was that it was not expected of them to ask questions: "Because you never ask a question or you don't usually ask a question". This lack of engagement was also related to their fear of being embarrassed: "What people is (sic) going to say" (Chelsea). Thus when confronted with questions in a university classroom, they tried to move physically away by distancing themselves, reinforcing the assumption that those who sat at the back wanted to remain ignorant, as reflected in Taylor's comment: "They want to cruise".

It is a debatable point whether working-class students would have realized how much they were missing out on by distancing themselves. Not only would they have lost out on what was being taught, since one cannot always see and hear from the back, but also would have lost on what was discussed with the students sitting in the front rows. In this way they would have been doubly disadvantaged.

In contrast, the middle-class students, while they might not have known all the answers, had been taught by parents and teachers to explore, ask questions and engage in the learning process (Calarco, 2011). Their engagement led to greater social and academic integration and was reflected in their performance. As a result, these students did not have to negotiate their transition into the classroom because they knew what needed to be done to do well. Confident and independent, they knew how to navigate the classroom and the university, easily achieving both social and academic integration.

Because working-class children often find themselves in situations where they or their opinions are ignored or where they do not feel valued, they choose to remain silent

(Calarco, 2011; Reay, 2006). Such students also tend to withdraw from any form of classroom interaction, feeling that any engagement on their part is likely to be interpreted as a wish to aspire to middle-class values, which are assumed to be the only correct ways of knowing or doing (Heller, 2011). So their desire not to engage conflicts with the consequences if they do engage; they are *othered*, both when they do not conform to the mainstream culture and when they do (coconuts). These working-class students lose out either way – they aren't accepted by the middle-class students and they aren't accepted by their working-class peers when they do try. Zainub, for instance, felt that her aspirations to reach beyond the boundaries of the working-class were seen by her working-class peers as wanting to act “white”. Monique, Chelsea and Zainub's testimonies described how this tension between wanting to engage and the fear of being othered was further fuelled because of the stigma attached to working-class and black students. Black African students in particular carried the stigma of underperformance, and black African, coloured and Indian students were ridiculed for aspiring to perform better. Stigma, occurring when a dominant group exercises power through the labeling and stereotyping of those who are perceived by themselves to be different (Heller, 2011), allows some students to fit in but it excludes others (Jansen 2009; 2005).



Much of the tension that the working-class students in this study experienced could be linked to the way that middle-class students seemed to take their cultural capital for granted as the only correct way of knowing and doing, and how any attempts by the working-class students to aspire to perform better were seen as substandard (Heller, 2011). Zainub's earlier testimony describing how she perceived white students to behave towards black students suggests that middle-class students can't conceive of working-class students doing as well as they do so they assume that working-class students must be cheating. Her testimony suggests that the white students assumed that black students were neither meant to study at university nor were meant to perform well. She perceived these “devalued” judgments as expressing a middle-class bias, as was noted in the discomfort and disapproval recorded by the working-class students in their testimonies (Heller, 2011:19). The notion of white students being better and black students being weaker in terms of performance was historically embedded through the legacy of South

African apartheid. As a consequence of these perceptions, black students carried a stigma of poor performance. When a targeted group is labeled in a stigmatized way, the result is usually that they internalize the images that are imposed on them, finding it “difficult to believe in their own ability” (Tatum, 2003:23). Such internalized images, appearing in the working-class students’ testimonies, explained their lack of confidence and their reluctance to engage in the classroom. These derogatory judgments created a climate which was alienating for the working-class and black students. But a further consequence is signaled by Tinto (1975). He highlights that, beyond alienation, limiting assumptions about black people has the potential to influence their actual performance.

Another factor which influenced the students’ social integration was differences in language. As highlighted in Chapter Two, section 2.2.2., there are eleven official languages in South Africa and not all the students in the class had English as their first language. Apart from language difference between race groups subtle differences existed in dialect or vernacular within a language. These differences were shown to create potential problems between students in the way that it affected their interaction and engagement. The issue of language as a barrier is described next.

6.3.4. The influence of language on students’ interaction

An important aspect of student interaction was the way in which language differences affected the choices the students made when negotiating their transition and hence their social integration. Language was a common factor for some of the social tensions that influenced the educational climate. The following testimonies captured how Language differences were implicated in shaping student interactions in the classroom.

6.3.4.1. Middle-class students’ experiences of language as an influence on interaction

For middle-class student Taylor (white student), language was positioned as a site of conflict to sort out personal differences between herself and another white student. Her testimony highlighted how interaction was affected within her race group:

I find that one specific Afrikaans girl picks on me ... she refuses to speak English to me ... even though her English is fine ... she knows I have a problem with Afrikaans and I don't hate the subject ... this drives me up the wall.

For the rest of the middle-class students language was not mentioned as an issue although the group presented with students who spoke either Afrikaans or English.

6.3.4.2. Working-class students' experiences of language as an influence on interaction

For working-class students, although language served as a form of social barrier in some instances, it largely served to inform social groupings. Race was again foregrounded as seminal to the choices students made about their interactions. In her testimony, Nicole (coloured), echoing her friends Monique, Chelsea and Amber, highlighted how having friends who shared a similar language and race brought a degree of social reassurance for her in the classroom:

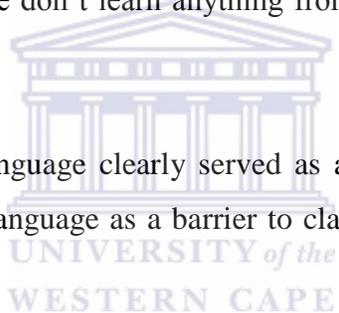
Yasaar was my friend first, and she is coloured, and then she was friends with a white, and one day I just sat with Amber, and so we just lost contact and I just felt like that because Yasaar was with the other people. Like Amber is coloured, she is my friend, so I am fine. Yasaar, she sat with whites and she sticks to them, even though she is coloured and they spoke English, and I was not comfortable speaking English.

Nicole's further testimony highlighted how she used the Afrikaans language as a tool to help her interact and integrate into a group of coloured friends. However, she claimed that she used her dialect as a tool to retaliate against her white peers in the classroom. The latter process suggests that Nicole may unintentionally have alienated herself from white students. The use of language in this manner has the potential to alienate peers as was evident above when a white student used exclusionary language on another white student and now where Nicole used language to retaliate against her white peer:

I sit with the coloureds because of the language. I hate speaking English because I am not good at English and with the coloureds you can speak Afrikaans with them how you want to ... our Cape slang. I get to do that with my coloured friends, and I love to do that with these people. Like the one white girl was also Afrikaans and I spoke Cape slang with her and she didn't even understand me.

Amanda, an international student, highlighted how language differences became a contentious issue for her when students and lecturers engaged in a discussion in a language different from the institution's medium of instruction. Her home language was Tswana and her second language was English. She experienced problems when the Afrikaans language was used by particular lecturers in their interactions with Afrikaans speaking students: "Sometimes students asked questions in Afrikaans and the lecturer answered in Afrikaans, then we don't learn anything from the question ... it happens in the clinics too".

For working-class students, language clearly served as a mechanism for inclusion and exclusion. The discussion on language as a barrier to classroom interaction is discussed next.



6.3.4.3. Discussion on students' experiences of language influence on interaction

The testimonies from both middle-class and working-class students highlighted several ways in which language influenced interactions between the students. It served either to include people in a group or to exclude them, while insensitivity to language differences from either students or teachers interfered with some students' learning.

The above testimonies make it clear that language differences created tensions, not only between middle-class and working-class students but also within the middle-class student cohort. Language was described as being used in different ways for particular purposes. For Nicole, her social integration among the students in her classroom was eased because she interacted with or befriended those who shared a similar dialect, race and culture to herself, giving her insider status to the group. As was the case in the study by Hardaway and McLoyd (2008), the findings in this study suggest that working-class students who

differed culturally, linguistically, or in other ways from peers in the classroom, faced significant challenges in establishing relationships, especially with those considered to have more power and higher status, for example with white students.

Nicole's testimony suggests that it was not only middle-class or white students who discriminated against black or working-class students through the mechanism of language. Nicole retaliated to the white students using her dialect to do so. In Nicole's testimony, there was a sense of negativity towards white students. Her use of the term "other people", in addition to her statement about her friend who "sticks to the whites ... even though she is coloured," reflected her own antagonism. While deriving comfort from consorting with students who had similar a language, her choice to speak in her cultural vernacular, using slang and in a colloquial manner, inadvertently served as a significant divider between herself and other students in her classroom (Heller, 2011).

Tatum's (2003) view on how subordinates channel their suppressed experiences of dominance or past oppression in covert ways is relevant in understanding the responses of the working-class black African, coloured and Indian members of the cohort, who displayed similar responses. When students hold a subordinate position in relation to a dominant group, for example black students in relation to white students, the subordinates often develop covert ways of resisting or undermining the power of the dominant group (Tatum, 2003). Their retaliation can take the form of folk tales or jokes about "outwitting" the dominant group (Tatum, 2003:23). Although language facilitated interaction in Nicole's case, she also used language in such a way that it created barriers against successful interaction.

The findings discussed reinforce the relationship of insiders and outsiders. They also remind us of how race and social class remain entrenched in the nature and structure of South African society. This conclusion echoes the views of Jansen (2009), who questioned how the younger generation could display antagonistic behaviour, attitudes or perceptions of other race groups without having being born into or experiencing an apartheid society.

The discussions thus far have described how the students' classroom interactions were embedded by an interplay of race, social class and performance. While students did not overtly display antagonistic forms of behaviour and interaction, there was an underlying tension between middle-class and working-class students, in particular between white students and black African, coloured and Indian students, which contributed to a negative climate in the classroom. This tension influenced how individual students eventually integrated at a social level. Further forms of conflict are examined in the following section on how decision-making practices in the classroom excluded and included students.

6.3.5. Students' experiences of decision-making amongst peers

It is argued that integration in the classroom is enhanced when the students are valued (Tinto, 1975). The participants in the cohort were asked to describe the aspects which influenced their interaction and engagement with their peers in the classroom. Among their other concerns around transition, such as adjusting and fitting in, being *valued* featured prominently, in particular for working-class students.

The following testimonies show how the students experienced being either valued or undervalued in the decision-making process, and as a result either felt included or excluded in the classroom. The decisions referred to here were those made by the students about the academic and social aspects which affected the class as a whole. Examples include changing test dates, project planning, setting dates for events, and swapping lecture times. In a democratic group process such decisions would be made in consultation with peers in a representative manner.

Students' perceptions of academic performance were found to be a primary factor in deciding which voices were heard and which were not heard when decisions had to be made. However, given the close association of academic performance with race and social class in this study, these aspects were also implicated in the ways in which power differentials played out in decision-making. The following perspectives of both middle-

class and working-class students are presented in terms of how they saw themselves as participating in the classroom decision-making.

6.3.5.1. Middle-class students' experiences of decision-making

Ashley, a white student, believed that those who chose not to participate in the decision-making processes did so either because they lacked confidence or because they did not care: "They don't have a very big self-esteem to talk loud ... and they don't care about things happening around them or in the class". Komilla echoed Ashley perceived the coloured and black students as choosing to be passive:

They just sit back and take everybody else's decision ... they have to basically work their way around it, doesn't matter if it's in their favour or not, they will just go ahead and do it, they don't object, normally they don't object to anything.

However, Komilla (international student) also believed that the non-involvement of coloured and black students in decision-making in the class stemmed from the fact that the white students behaved in ways which did not allow or invite consultation.

I feel the whites have a problem with giving someone respect when they're speaking, they will just carry on speaking ... between themselves, not even softly, as normal, regardless of the lecturer or whoever it may be. I have never noticed that with people of any other race group.

While middle-class student Komilla perceived the working-class students as lacking in initiative and being laid back in terms of decision-making, the working-class students themselves saw the challenges they encountered during decision-making as obstacles to their engagement. Their perspectives are discussed next.

6.3.5.2. Working-class students' experiences of decision-making

The following testimonies suggest that working-class students were not only physically removed from decision-making but were socially excluded as well. Monique, echoing Alexander, Nicole, Nasra, Jared and Amber (coloured students), felt they were excluded

from making decisions: “We don’t really have decision-making rights in the class”. Amber believed that academic performance played a major role in their being excluded: “The clever students, they only make the decisions”. Monique felt that academic performance determined whose voice was heard, but she was also explicit on how race was nested with academic performance and power and how these aspects played a role in their exclusion:

The clever people ... mainly the white people in our class, they are always the ones that have the strongest say and who think of something like changing test dates and they put it towards the class ... Me and my group of friends who are mostly coloured and if we say something, it doesn’t get heard ... it’s like, “What did you say?” ... we fail to say anything or decide against them [whites] so we just keep quiet.

The common response of the working-class students to situations in which they felt undervalued, as Jared noted, was to remain silent: “We choose not to speak ... we choose not to give our opinion ... we don’t feel that we need to give our opinion ... the coloureds are always in between and that is where we will stay”. Lethiwe’s testimony reinforced this tendency of the working-class students to withdraw physically from the situation, as they did when avoiding being questioned. She maintained that when students felt excluded from the decisions of the classroom, they became passive or helpless, acceding to the decisions that were taken, even when these were to their disadvantage: “So we will all go, ‘Okay, whatever’... as long as the decision is made we can adjust”. The above testimonies signal how race, social class and academic performance were all implicated in the way students were valued or devalued, included or excluded during decision-making in the classroom. The following discussion further explains how the dynamics of decision-making in the classroom impacted on students’ social integration.

6.3.5.3. Discussion of students’ experiences of decision-making

The middle-class students’ testimonies suggest that the working-class students lacked the insight, confidence and leadership needed to make decisions that affected the class, as implied in the comments made about their academic performance and passivity. The middle-class students constructed their working-class counterparts as also lacking in

accountability because they seemingly did not care about things happening around them. These perceptions signal how certain forms of cultural capital were valued by middle-class students, for example being confident, intelligent, and assuming leadership roles. As Reay *et al* (2005:21) observe: “The salience of confidence, certainty and sense of entitlement is generated through having high levels of cultural capital”. Reay’s *et al* (2005) view may explain why middle-class students perceived themselves as being better positioned to make decisions. But in doing so, they intuitively ignored the working-class students whom they saw as lacking the skills, knowledge and dispositions to contribute.

Although Komilla, as a middle-class student, reasoned that working-class students were not proactive, she blamed the white middle-class students for contributing to their exclusion. She felt that they excluded working-class students through their attitude of disrespect, suggesting that they devalued their working-class peers. The disempowerment felt by working-class students, as seen in their reluctance either to contribute to or to challenge decisions may have worked to their disadvantage and impacted on decisions regarding their academic work. Since some decisions involved curricula issues, their non-participation arguably placed them at a further disadvantage academically.

For working-class students, the lack of acceptance by their peers, their own reluctance to adjust, as well as the cumulative feelings of passivity, helplessness and hopelessness, would have contributed to their being devalued. Such feelings would have amplified their own perceptions of exclusion, as well as influenced their decisions and attitudes to engage in the classroom. Their withdrawal from participation would have militated against their social integration, with a consequent effect on their academic integration and potentially on their academic performance. Positive student interactions can enhance academic outcomes, but in an unhealthy environment, students either individually or in groups, often feel isolated, marginalized and undervalued. In this kind of climate, they are less likely to adjust academically or to develop a sense of belonging in the institution.

6.3.6. Conclusion: student social interaction with peers in the classroom

This section on student social integration highlighted the role of social class locations, cultural capital and academic performance in contributing to the way that students interacted, engaged and integrated socially in the classroom. In particular, working-class black students were shown to feel undervalued and as having experienced forms of alienation, exclusion and disrespect.

The following section examines the students' experiences of *professional* interaction and integration. Particular attention is paid to their transition into the professional roles which are central to the clinical competences expected of an oral hygienist (UWC, 2008a; SAQA, 2006a; 2006b).

6.4. Professional transition and integration

6.4.1. Introduction

Professional integration involves the student making the transition to professional status through increased knowledge, appropriate behaviour, the possession of specific dispositions and skills, as well as by internalizing his or her role as a professional. These aspects are significant in the process of "shaping the professional" (Koltz & Champe, 2010:5). The faculty through its structure, culture and pedagogy, facilitates the induction of students into the profession of oral hygiene (UWC, 2008a; 2008b) suggesting that the educational climate assumes a central role in ensuring this transition.

In the current study, two particular challenges were foregrounded by the students themselves as having an impact on the social aspects of their professional transition. The first was the shift from being a novice student to assuming a professional role. While this did not affect all the students, some did report facing significant challenges in making the transition. A second aspect was the degree to which inter-professional interaction shaped the ways students felt included in the faculty. These challenges form the core of the testimonies and discussions which follow. The section begins by highlighting the students' perceptions of the faculty environment as a setting for their induction into the profession, then expounds on the specific challenges encountered.

6.4.2. The role of the educational climate in facilitating professional transition

“You have to act like a professional and dress like one and talk like one and walk like one”
(Komilla)

During interviews with the students, part of the focus was on their perceived experiences of transition into their professional roles and the factors which facilitated or deterred such a transition. The *culture* and *structure* of the faculty featured prominently in this regard. Two conceptions of *educational climate* were drawn on to explain how the culture and structure of an institution shaped the students’ transition into professional roles. The first was the *institutional culture* (signifying social aspects such as atmosphere or ethos, and the expectations, attitudes and behaviour of students and staff) while the second was the *institutional structure* (signifying the institution in terms of demographics and general rules and regulations). The voices of both middle-class and working-class students are used to illustrate how the culture and structure of the faculty shaped their experiences and perceptions of the transition into the profession and its professional roles.

6.4.2.1. Middle-class students’ perceptions of the role of the educational climate in facilitating professional transition

Komilla, echoing Taylor and Gabriella, described the Faculty of Dentistry in terms which suggested that it was grounded in a professional ethos and a positive educational climate. She felt that the faculty’s location in a *hospital* setting contributed to the educational climate in a positive way, particularly in shaping the students’ attitudes to becoming professionals: “It is ideally located in a hospital setting ... it contributes to professionalism and our training”. She saw this ethos of the faculty as being positive for their adjustment because of the presence of academics and clinical staff: “With the doctors and professors around you ... I feel it gives us a lot of, like, positive vibe, it makes us feel like we’re worth it ... it motivates you”. The views of the middle-class students signaled the importance of the structure of an institution and the culture within it in promoting the behaviours and attitudes expected within both the institution and the profession. The views expressed by the middle-class students were not unique to them, but were also shared by working-class students, as will be highlighted next.

6.4.2.2. Working-class students' perceptions of the role of the educational climate in facilitating professional transition

For Chelsea, the professional ethos of the Faculty of Dentistry served as an inspiration: “The vibe of this thing is serious. For me, the faculty is quite strict enough and for me to go into an environment like that ... I had to discipline myself”. Zainub echoed Chelsea, further elaborating on the environment and the professionalism she encountered:

Being on main campus²⁴ and being here, there is a big difference. It's almost as though we've got our own sayings and rules and we follow by it ... when we walk into the faculty itself, it's almost as though our attitude changes as well ... there is a certain way in which we have to carry ourselves ... it helps us to learn and you become so aware of the way you have to behave here ... for us, we are so used to it ... we know our places.

The overall perception about the faculty, as expressed by both middle-class and working-class students, suggests that the educational climate played a central role in shaping them as professionals (Koltz & Champe, 2010). The discussion that follows focuses on explaining how the structure and culture of an institution can assume a central importance in students' professional transition.

6.4.2.3. Discussion on the role of the educational climate in facilitating professional transition

Middle-class and working-class students shared similar perceptions of the faculty as being positive for their transition. The location of the faculty in a hospital setting, its rules and regulations, the ethos, discipline, attitudes and behaviour of the staff all contributed to the climate that students experienced as positive for their transition. This shared perception about faculty being positive was enhanced by the students' knowledge that transition into professional roles was something they all had to do. They knew that they had to behave in particular ways in order to become professional. Having a common goal and a common pathway of becoming an oral hygienist, they arguably perceived and experienced this pathway in similar ways: “We are so used to it ... we know our places”

²⁴ 'Main campus' refers to the main body of the University of the Western Cape, situated in Bellville. The Faculty of Dentistry is located approximately seven kilometres away.

(Zainub). In addition, both middle-class and working-class students claimed that their learning benefited from this climate in a positive way, feeling that it was facilitated in this kind of setting: “Helps us to learn” (Zainub). It further motivated them and made them feel worthy (Komilla).

The fact that the faculty had in place certain structures and cultures arguably served as source of support for the novice students during their transition into professional roles. The location of the institution in a hospital setting (structure) was in itself a significant catalyst in shaping such roles. Chelsea’s perception of the institution as “serious” further signaled the kind of climate that was manifested as a consequence of the rules and regulations. Her comment showed that the students were cognizant that their hospital-based learning environment required them to behave in particular ways.

The culture that was also set up by the academic and clinical staff and senior students by way of their work, their dress and dispositions, would have modelled and inculcated the practices, behaviours and attitudes expected of the novice students in developing as professionals. The faculty had in place rules and regulations and subtle cues, such as the dress code, for example, which would have reminded the students every time they walked in (Jainub) of the professional codes and conduct required of them. In so doing the faculty facilitated the acquisition of the competences expected of oral health students. In reflecting actual practice, it set in motion an enabling climate for this professional transition, not only through the curriculum but also through its structure and culture.

From the testimonies and discussion above it could be argued that it is not so much the institution *per se* but the educational climate generated from the culture and structure of the institution which serves as a catalyst in shaping students’ professional transition. The intangible aspects of the educational environment, such as the dispositions, behaviours and attitudes of staff and students, the rules, regulations and general ethos generated from these aspects, shape the climate in a favourable way. However, while the overall findings indicated that the educational climate was a positive for student transition into professional roles, there were aspects within this climate which for some students posed

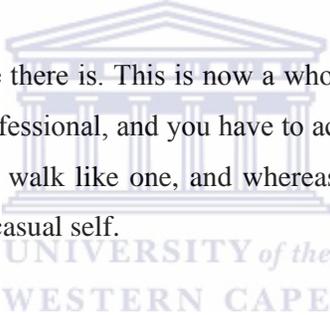
as barriers to their integration. The following section turns attention towards the students' perceived experiences of professional transition.

6.4.3. Students' experiences of transitioning into professional roles

Taking into account that students enter university with access to varying cultural capital, it is arguable that they will experience professional transition in different ways. The following testimonies are presented from the perspectives of middle-class and working-class students respectively in order to highlight their contrasting experiences.

6.4.3.1. Middle-class students' experiences of transitioning into professional roles

Komilla summed up the middle-class students' experiences of the transition they had to make into professional roles:



There is a jump, of course there is. This is now a whole new way, everything's on a big scale and everything's professional, and you have to act like a professional and dress like one and talk like one and walk like one, and whereas in a classroom you just be, like, yourself, you know, your casual self.

Komilla saw the transition as challenging because of the fast pace at which it took place: "We didn't even realize what was happening and we were like seeing patients already". She described the experience as a life-changing one: "For me, it is a whole change in life". However, she felt that her transition had been easier compared to some students in her class. Her list of names in the following testimony suggests that the working-class students struggled more with their transition:

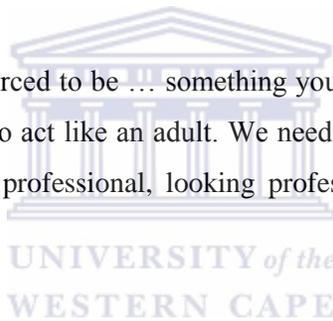
A lot of people are stressing, like Taylor is stressing ... Ashley is stressing, but we're all coping well ... but some students, like Jared, Nicole and them, they are finding it difficult; it didn't show too much last year but they're suffering this year with their professionalism ... they're just tired of it, they can't carry in that professional way. Like in the beginning, it was just a whole new novelty ... but now they're stuck with it ... now it's almost like the novelty's wearing off.

Komilla's claim that the transition was a "huge jump" and a life-changing experience for her, and that Taylor and Ashley (both middle-class students) also faced transitional challenges, suggests that all the students had to adjust in making the transition. However, she felt that "Jared, Nicole and them", who incidentally were working-class students, experienced the shift in a more significant way. The following testimonies from working-class students provide insights into their transitional experience offering a nuanced understanding of the ways that it differed from that of middle-class students.

6.4.3.2. Working-class students' experiences of transitioning into professional roles

The working-class students confirmed Komilla's view of them struggling with making the shift into professional roles. For Chelsea, this was especially challenging since she felt it was something to which she had been forced to conform to:

It is something you are forced to be ... something you just have to adapt to ... I am still young, only nineteen ... to act like an adult. We need to every morning wake up and go into that mode of being professional, looking professional ... but the professionalism hasn't kicked in yet.



One of the features of transition in this study was that the students were expected by the institution to take on a new role as professionals. Although this was seen by working-class students as a challenge, some students, such as Monique (and Alexander, Jared and Chelsea) seemed to accept that there was a rationale for expecting them to behave in professional ways and that it was something which they had to adapt to and take on: "Faculty expects you to be like academics because you are working with people ... you have to be confident and what you do must be the right way" (Monique).

The testimonies of some working-class students however, suggest that there was lack of the institutional understanding of the kinds of support they needed in their transition into a new kind of department. Unlike in the section above where the faculty was portrayed positively in terms of its structure and culture and as supporting student transition, working-class student Lethiwe felt that they were not accommodated in practical ways to

make the transition easier, for example, in allowing them to make mistakes. Making mistakes was conceptualized by Lethiwe as part of the new learning environment into which they had to transit. She felt that room for error should have been accommodated as part of the learning process: “The faculty is still a learning environment ... students should be allowed to make mistakes”.

Among the working-class students there were also subtle signs of resistance to changing completely from their usual ways of being and doing. While most students in their earlier testimonies showed an understanding of why the rules and regulations were necessary to shape a professional, Amber claimed she did not conform to all the changes expected of her: “I can see that I am not the same like in dress code. I just do my own thing”. The resistance to change signaled that Amber and other students who felt and behaved this way were creating barriers to their own transition.

In summary, the perceptions of working-class students foregrounded several issues they had about taking on a professional role: they felt it had been forced on them, that the faculty did not support their transition in practical ways, and that they did not need to comply totally. These aspects are discussed next. CAPE

6.4.3.3. Discussion on students’ experiences of transitioning into professional roles

As middle-class institutions, universities have certain expectations about how their students will fit in with the rules, regulations and ways of the institution. In health sciences programs there are further expectations of how students should dress, speak and conduct themselves. These more formal dispositions and behaviours are aimed at strengthening professional roles, establishing relationships of trust with lay people, and enhancing persuasiveness and credibility with patients and colleagues in the field (Omede, 2011).

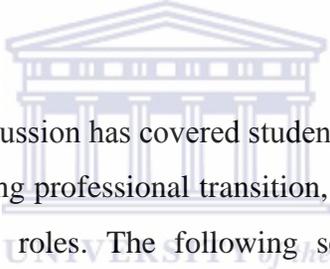
The transition into the ways of the faculty was experienced as new and challenging for all the students in the cohort, but the degree to which it impacted on each student was shown to vary widely. Middle-class student Komilla’s comment suggests that professional

transition was a significant “jump” in that it influenced the core of her primary everyday activities, including habits and forms such as dressing and speaking. However, there was an implicit acceptance by her that this expectation by the faculty and the profession was important in shaping her role as an oral hygienist. Like other middle-class students in the cohort, Komilla had the advantage of access to role models who would have been her source of guidance before entering university and a source of support during her transition. Through the kinds of cultural capital embedded in the school and family, she was prepared for the specific expectations relating to her career choice. Having such prior insight, she would have known about the kind of professional she would be expected to grow into. Thus for Komilla and other middle-class students their preparation for university in terms of knowing what to expect and what they needed to do to reach their goals of becoming an oral hygienist arguably shaped their attitudes and behaviours. They knew that change was part of the process and so they adapted and coped, as seen in their high academic performance.

Komilla’s preparation was a contrast to that of students from working-class backgrounds. For many of these students oral hygiene as a profession was an unplanned choice. Both the university and the profession were unfamiliar to most of them. Some reacted to this unfamiliarity with bewilderment and uncertainty, others with resistance. Though they may have understood why they needed to change, they struggled to adopt the expected behaviours and attitudes. Therefore adapting to a professional role became a challenge. Having had no access to appropriate role models either at home or school or access to information about how to behave in particular ways, they entered university under-prepared for the changes that lay ahead. These reasons may explain why for working-class student Chelsea “the professionalism hasn’t kicked in yet”.

Change, as Tinto (1977) argued, is inevitable during a transitional phase. However, moving from the familiar to the unfamiliar in order to integrate into a new context can place stress on the individual involved (Tinto, 1997). This was evident in the testimonies of Chelsea and Amber and signaled the challenges they faced in making the change into a professional mode and may account for their sense of resistance. As part of the

curriculum design, induction into professional roles requires certain dispositions and behaviours, such as speaking and dressing, to be adopted within the first weeks of entry into the program, when the students are introduced to the clinical arena. The short time lapse between being a novice student and taking on a professional role may have contributed to the contrasting experiences of middle-class and working-class students. The students did not enter the university and its educational climate from equal platforms; working-class students needed additional support in making the transition, as indicated by Lethiwe and Amber. The structure and culture of the institution are implicated in such students' transitional challenges. Lethiwe's and Amber's testimonies suggests a lack of recognition by the institution that students have differing practical needs and that working-class students in particular need support in making the transition into professional roles. It is arguable therefore that the institution does not accommodate all students.



Thus far in this section, the discussion has covered students' perceptions of the role of the educational climate in facilitating professional transition, in addition to their experiences of transition into professional roles. The following section turns attention to their experiences of inter-professional integration. Part of what constitutes the educational climate in the faculty is the staff and student structure and the kind of impact that relationships between these members have on the overall ethos of the faculty. In the Faculty of Dentistry, students in the oral health program work alongside dentistry students. The students in this study maintained that part of their transitional challenge was in relating with other dental professionals. The section that follows highlights how inter-professional interaction not only influenced the professional transition but also contributed to shaping the students' roles as professionals and as a consequence influenced their social integration.

6.4.4. The impact of inter-professional interaction on professional integration

“It is like you there, but you are not there (sic)” (Chelsea)

Professional integration in the Faculty of Dentistry involves interaction between students in the oral health program and those in the dentistry undergraduate and post-graduate program, as well as with dentists as lecturers. In this study, the lack of recognition of students in the oral health program was foregrounded by members of the cohort who claimed to have experienced dominance, disregard, inferiority and a lack of inter-professional awareness of their roles. Both middle-class and working-class testimonies are used to present an argument about the way in which inter-professional interaction impacted on the climate of the institution, which in turn shaped the students’ decisions around integration.

6.4.4.1. Middle-class students’ experiences of inter-professional interaction

In her testimony, middle-class student Taylor raised the question of professional dominance (Rudland & Mires, 2005): “You are kind of looked down upon quite a bit ... as soon as you walk in the door you can feel like ‘we are dentists’ ... so you kind of like, just stay where you are”. Middle-class students reported minimal problems with their inter-professional interaction and integration. The working-class students echoed middle-class sentiments, but in much more depth, detail and frequency.

6.4.4.2. Working-class students’ experiences of inter-professional interaction

The testimonies of Colleen, Jared, Monique, Chelsea, Yasaar and Lethiwe offered insights into how they experienced professional interaction and integration with dentistry students and with dentists as their lecturers. They felt that the dentistry students saw themselves as dominant in the faculty – as Colleen put it: “They feel the faculty is their space”. They also felt that the dentistry students assumed attitudes intended to display their power and intelligence. Jared elaborated: “They think of us like, ‘I’m doing dentistry and I am hiring you and I know better, oral hygienists aren’t anything and they don’t know anything’”. This perception was echoed by Monique: “That is their attitude where ‘I can do more than what you do ... at the end of the day you are going to be paid

by me” and Chelsea: “They feel they are becoming a doctor or something and they know a lot more, and they let you know that”.

Despite acknowledging the value of the opportunities for interdisciplinary learning available in the clinical context, feelings of exclusion and of being disregarded surfaced. Chelsea described the dentistry students as supportive, offering her several opportunities to enhance her learning: “Sometimes they were very helpful ... from my first year I experienced that some dental students are quite nice and they will explain to you”. However, in the same breath she described how, as students sharing the same learning context as the dentistry students, there were moments when she and her oral hygiene peers felt excluded or disregarded: “Sometimes you get the attitude. You can stand there and you can ask questions ... but it is like you are there but you are not there ... you are not acknowledged”. Jared felt that dentistry students saw oral hygiene as inferior to their own profession: “They see us as, ‘All they do is clean teeth and I just send everyone who doesn’t know how to brush to an oral hygienist’”. Colleen echoed Jared’s perception. She argued, however, that the dentistry students’ attitude to oral hygiene was a result of their ignorance: “It is sheer ignorance on their part about our roles”.

Feelings of exclusion and disregard were also foregrounded in the students’ accounts of their interaction with dentistry students in the faculty social structures. Monique described her experience of being on the Dental Student Association²⁵:

My class feels that there is no oral hygienist on the students’ council, because they didn’t even contact me when they had a meeting ... I feel I am doing nothing on the board. They feel they only want the dentistry students to do everything, and oral hygienists don’t have to.

Monique and Yasaar’s testimonies highlighted their feelings of alienation in social interactions within the faculty: “Even with the sports day²⁶ coming up now, you don’t

²⁵ The Dental Student Association includes students from the dentistry and oral health programs and represents the student body on social and academic issues.

feel like you're one of them or anything, because you don't really feel a part of the faculty" (Monique). Yasaar echoed Monique: "We don't feel needed ... as if we are not as intelligent or capable ... as if we are not part of the dental faculty". Embedded in Yasaar's testimony was a feeling of being excluded not just from the dental fraternity but from the faculty too. Apart from feeling this way about themselves, the students also believed that the profession of oral hygiene was regarded as worthless by their teachers: "The one lecturer said, 'When you are in the working environment you are basically a nothing'" (Lethiwe).

These experiences of domination, disregard, exclusion, alienation and worthlessness were shown to have an impact on the students' morale and manifested as feelings of inferiority. Colleen's comment was particularly pertinent: "We just want a bit more respect ... we feel more like an inferior person ... you don't feel like you're one of them or a part of the faculty". These feelings influenced the way she reacted to the educational climate. Because of her negative experiences, she felt discouraged and lonely: "It can be very discouraging ... if you don't have a strong foundation of who you are it can be very lonely ... it's not the easiest environment you can be a part of as an OH student". Her negative experiences arguably served as barriers to her integration and contributed to her decision to leave the program in her second year. Colleen's conclusion was echoed by Jared with a comment which implied an association between the students' experiences of the educational climate and their academic persistence: "The vibe here, it's demotivating". Demotivation and disillusionment were also reflected in Alexander's testimony, suggesting that his persistence in the program was undermined by the negative responses he had encountered arguably contributing to his unwillingness to integrate:

The reason I want to change is ... I enjoy what I do, but just being subject to this – being thought of as lower and things like that. I don't think I would like to work in that environment every single day ... I think if you aren't respected and you don't feel valued in what you are doing, obviously I am not going to put myself through that every single day and be miserable where I can just change to something else.

²⁶ Sports day at the faculty is a social event in which staff and students interact on a social level through sporting activities and a fun day aimed at enhancing social integration.

While earlier testimonies suggested that the educational climate and learning environment in the faculty were conducive to student induction into the profession of oral hygiene, inter-professional challenges clearly raised barriers to integration. The testimonies of middle-class and working-class students suggest that, although they shared common experiences of the educational climate as being in some ways negative, there were significant differences too. Of these two social class groups, the working-class students had more frequent and in-depth reporting. Significantly their testimonies, unlike those of the middle-class students, were embedded with claims of domination, disregard, exclusion, alienation and worthlessness which were linked to feelings of demotivation and their failure to persist with their studies. These aspects frame the discussion in the following section.

6.4.4.3. Discussion on the impact of inter-professional interaction

Of the group of middle-class students, Taylor's was the only reporting on the aspect related to inter-professional interaction. Her testimony hinted at inter-professional interaction as being negative. Her perception of the way dentists felt towards them suggests that she experienced the educational climate as being influenced by professional dominance and disregard. The lack of reporting was also significant, suggesting that middle-class students were not overly affected by the challenges of inter-professional integration. Although this perceived dominance and disregard in the climate had the potential to exclude students, Taylor did not claim to be affected socially by the attitudes of dentists, although testimonies in the following chapter suggest that lecturers' attitudes have the potential to be a barrier to performance.

Generally middle-class students are not affected by issues of exclusion and inferiority. Entering university is part of their natural progression from school, thus they do not experience a feeling of not fitting in (Reay *et al*, 2005; Archer *et al*, 2003). Having cultural capital which makes them familiar with the attitudes and behaviours in an institution allows them to successfully interact with "gatekeepers" in the educational field (Jæger, 2009:1949). Their pre-entry establishment of goals, skills, dispositions and preparation arguably sets them up to cope with any challenges which they may encounter

(Tinto, 1993; 1988), including issues of conflict. Children from culturally advantaged backgrounds, with more cultural capital than those from less advantaged backgrounds, are better equipped to understand the rules of the game (Jæger, 2009). Middle-class children thus draw on the cultural capital accrued through the family and school to navigate their way at university, transforming their capital into educational success.

For working-class students, on the other hand, specific experiences of inter-professional interaction, such as, dominance, exclusion, alienation, and feelings of worthlessness and inferiority, were shown to challenge their professional integration. These were not related to race but were rather social and professional in nature. However, they do suggest that interaction between dentistry students and students in the oral health program affected the educational climate in a negative way, creating an atmosphere which could either facilitate student transition or serve as a barrier. For working-class students, their experiences of inter-professional interaction had salient meaning to their inclusion and their need to feel “part of the faculty” (Monique and Colleen). For these students, the kind of climate experienced would have influenced their decisions and choices about integration into the academic and social structure and the culture of the institution.

As highlighted in Chapter Five and earlier in this chapter, the working-class students were the first in their families to attend university. They were shown to be under-prepared socially, lacking inside knowledge about university or of career choices. Unfamiliar with university in terms of its expectations and norms and not knowing the rules of the game, these students already felt alien in a middle-class environment. Their further experiences of exclusion, first among their own peers in the classroom and then with the students and staff at the inter-professional level, arguably exacerbated their problems around integration.

Implicit in the testimonies was that the dentistry lecturers were central to the negative ethos of the educational climate (Genn, 2001a; Roff & McAleer, 2001) in that they contributed to a climate which served to alienate and exclude students. In this way, they were indirectly instrumental in shaping the choices students made regarding their

willingness to integrate. University lecturers are understood to be the source of knowledge, guidance and support, and are often seen as role models by their students (Ali, 2012; Egnew & Wilson, 2011; Ramani & Leinster, 2008; Lombarts *et al*, 2010; Kilminster *et al*, 2007). However, when the lecturers themselves contribute through their actions to situations in which students experience feelings of worthlessness and exclusion, such students are unlikely to engage with the process of professional adjustment.

By raising issues of exclusion and alienation, the working-class students showed an implicit need to be included socially and professionally and to be recognized as part of the dental fraternity. The extent to which they felt affected by these feelings of exclusion and inferiority, dominance, alienation and worthlessness was evident in Alexander's testimony which indicated that these negative feelings influenced his motivation to persist in his studies (Mattila *et al*, 2009). Feelings of exclusion and worthlessness have the potential to impact on students' sense of integration and as a consequence to threaten their persistence (Tinto, 1993; 1988; 1975). Likewise, for Colleen, not having to feel "like you're one of them" pointed to her lack of integration; this was manifested in her withdrawal from the program.

It is argued that, when students with reduced self-esteem also experience a gradual loss of courage and confidence, this can finally lead to an inability to learn (Mattila *et al*, 2009). This assertion reiterates Tinto (1975), who argued that an inability to socially integrate impacts on the students' ability to integrate academically and can lead to their early departure from the program or university. In this study, the students' socio-economic locations, together with the conditions they experienced as part of the educational climate, shaped their integration and arguably impacted on their performance and eventual persistence.

6.4.5. Conclusion: professional transition and integration

This section discussed students' professional integration, firstly in terms of their transition into professional roles and secondly in terms of their inter-professional

interaction with faculty members. This section highlighted the extent to which cultural capital shaped their experiences of such transition. In addition, it showed how the educational climate, through aspects of the institutional *culture* and *structure*, contributed to shaping professional integration. Embedded in the discussion were explanations of how the educational climate, in terms of the ethos, the rules, regulations and attitudes of peers and staff, contributed to forms of alienation, exclusion and the *othering* of some students in the cohort.

6.5. Conclusion to Chapter Six: social integration

Against the backdrop of the students' social class locations, this chapter examined how cultural capital shaped the students' transition and influenced their experiences of social integration. The point was made that the locations of social class and race, as well as the educational climate, played a significant role in facilitating such integration. In the next analysis chapter, the students' experiences of academic integration are discussed, with particular focus on the classroom and clinically-based teaching and learning. The chapter also looks at the ways in which the educational climate facilitates students' academic engagement and thus influences their academic integration.

WESTERN CAPE

CHAPTER SEVEN

ACADEMIC INTEGRATION

7.1. Introduction

In Chapters Five and Six the following assertions were made: that there was a relationship between race, social class locations and academic performance; that social class locations influenced student preparation for university; that working-class and middle-class students experienced transition from school to university differently; and that the educational climate, in the form of institutional culture and structure, and the less tangible aspects of the institution such as expectations, rules and regulations, influenced student social and professional integration. In the light of these assertions, Chapter Seven focuses on student experiences in the oral health program through Tinto's (1975) construct of *academic integration*. Academic integration refers particularly to students' engagement and commitment to *institutional pedagogy* and intellectual development. The construct of academic integration makes possible an understanding of the way in which students' social class locations and the educational climate facilitated or deterred their academic integration into the program, framed from a teaching and learning perspective.

In the previous chapter the focus was on students' social integration. Specifically, this chapter focuses on the following key *academic* areas: students' perceptions, expectations and experiences of the *program*, with particular focus on the aspects that influenced their decision to choose the oral health program and their prior assumptions, expectations and subsequent experiences of the program; student academic competence preparation for university; student learning experiences in the classroom relating to their academic interaction with peers and their lecturers; and the role of the clinical teacher in shaping students' academic experiences. Lastly, concluding comments are made in terms of the nexus between students' academic experience, their motivation, persistence and performance. For each section, testimonies of middle-class and working-class students (excluding those who deregistered in the first year) are presented, followed by an interpretive discussion.

7.2. Students' perceptions, expectations and experiences of the oral health program

“I thought it's not hard work – that it's just going to be a course that you can fly and don't have to study”
(Zainub)

7.2.1. Introduction

A prominent feature of the transition to university is the students' first perceptions about the program which they have chosen and the new discourse they encounter. Their experience of the entry into university is often embedded with expectations of what the program will be like. Although transition from school to university is argued to pose great challenges for many students, it presents an even greater challenge for those who enter a program in which they have minimal information of and minimal preparation for (Leibowitz, 2009; Reay *et al*, 2005). Therefore understanding students' decision to be in the oral health program involves explaining issues of motivation and persistence – issues which are closely associated with student success (Tinto, 1993). It is also important to understand students' initial experiences of the oral health program, since their academic transition and integration is also associated with their success (Tinto, 1993). Although Chapter five highlighted students' pre-university exposure to academic guidance and support, the following section examines their perceptions, expectations and experiences of the oral health program once they entered university.

7.2.2. Students' perceptions of the program they had chosen

Choosing a career or educational program is complex, involving the processing of information from a range of sources. In particular, families and the school play a significant role in this regard (Reay *et al*, 2005; Tinto, 1993). For some students, the decision around a career goal may be well thought-out and planned – for others it is often a messy process in which intuition and serendipity can play a bigger role than rational calculation and evaluation of the information available (Reay *et al*, 2005). The following testimonies of students are presented using the lens of social class to show how middle-class and working-class students differed, not only in terms of their motivation and prior

interest regarding the program (Reay *et al*, 2005) but also in their perceptions, expectations and experiences of the oral health program.

7.2.2.1. Middle-class students' perceptions of the program they had chosen

The decision-making process for middle-class students typically involved rational approaches, such as setting career goals, collecting information from appropriate sources and then making a rational decision (Reay *et al*, 2005). The following testimonies highlight how prior interest, knowledge and expectations about the oral health program influenced their perceptions of transition and integration into the program.

The testimonies of middle-class students Taylor, Gabriella and Ashley signaled how choosing to study the oral health program was the result of long deliberation and prior insight. Taylor indicated how she had set her goal to be in the dental field early in her life: “I have always wanted to be in dentistry my entire life so I knew what I was getting into”. Her decision was informed by appropriate information and first-hand insights from a knowledgeable family member, as highlighted in Chapter Five: “My aunt was an oral hygienist and so she informed me and motivated me”. Gabriella’s testimony echoed Taylor’s experience of obtaining information through a family member who was also in the dental field: “My sister is here doing dentistry. I was very motivated by her and she guided me”.

Evidence from Ashley indicated that having long deliberation about and prior insight into the career and program increased the match for middle-class students between their expectations and their experiences of the program: “The program, it is not bad ... I worked part-time with a dentist before. I wanted to be an oral hygienist so I knew what to expect”. It was evident from Taylor’s testimony that this match between expectations and experiences resulted in her satisfaction with the oral health program: “I am really enjoying this program”. While the above testimonies of middle-class students emphasized aspects such as setting of goals, career insight and matched expectations, the following section presenting testimonies from working-class students indicated their experience in contrasting ways to their middle-class peers.

7.2.2.2. Working-class students' perceptions of the program they had chosen

In contrast to middle-class students, working-class students Amber, Chelsea and Monique reported feelings of confusion, ignorance, misconception and possibly regret about their choice to be in program. Amber's testimony suggests that her choice was based on chance and not on a rational, well informed and thought-out decision. She did not fully understand what the career or the program was about, as indicated in her testimony: "No-one guided us, I read a bit about it and then applied"; nor did she know why she chose the program: "I really don't know why I chose oral hygiene ... I didn't know what I was getting into". Like Amber, Chelsea claimed she had researched the career, but both their testimonies suggest that their access to first-hand information was limited. Chelsea also perceived the program to be different from her initial assumptions: "The first time I came here I didn't know much about this course ... I didn't even think it will be like this although I did research this career".

On the other hand, Monique and Nicole seemed to have chosen the program because they saw it as a short, quick way to a qualification. Monique explained: "When I came I wasn't too sure what oral hygiene was but I just expected to ... I don't know. I thought it was an easy course, a two-year course that is a diploma (sic)". Nicole echoed Monique: "When I was applying I thought, oral hygiene, okay, two years let me do this".

The following discussion focuses on explaining how social class locations in terms of access to career guidance influenced students' prior insights and preparation for the program they chose. It further highlights how their prior insights shaped their perceptions and actual experiences of the program.

7.2.2.3. Discussion on students' perceptions of the program they had chosen

The testimonies above suggest that the decisions and insights that framed students' choices to be in the oral health program were different for middle- and working-class students. The visions that middle-class students had of oral hygiene as a career were developed early in their lives. In middle-class families, choosing a career is experienced as a norm (Reay *et al*, 2005). Hence it was not surprising that career decisions for middle-

class students in the current study were largely engendered by their families and their schools (as indicated in Chapter Five). Thus middle-class students benefitted from this career insight and support to which they had access because these contributed to shaping their vision, goals and motivation in pursuing their program of choice. It is arguable that these well thought-out career decisions set them up to have realistic expectations about the career/program and to know what it would take to complete the program.

For working-class students in this study, entry into the program did not seem to have involved a significant amount of processing or evaluating information. Their testimonies captured their decision-making as being largely based on piecemeal, independent enquiry and intuition and not calculated as it was for the middle-class students. This assertion is evident from their testimonies, which suggest that they did not have sufficient information. Phrases from their testimonies such as: “I didn’t know ...” and “I really don’t know why” suggest that there was no clear vision or career goal towards which they had been working.

As explained in Chapter Five, working-class students had limited access to the cultural capital associated with university attendance and experienced little academic support from the school, the community and the environments in which they lived. Neither did they get sufficient guidance from their families, because they were the first in their families to have attended university. This lack of support arguably resulted in them having less insight into career options or into what to expect at university, so they managed their decisions with what was available to them in the form of cultural and economic capital. As a consequence, these students’ entry into university and the oral hygiene program was based on uncertainty. Their lack of insight arguably set them up to experience a mismatch between what they thought they knew about the career and their actual experiences of it. Their surprise at the reality of the program suggests that they were significantly less prepared than middle-class peers in this regard.

The following section further elaborates on students’ experiences of the program with particular attention on their perceptions of the academic work required for the program.

7.2.3. Students' experiences of the work demands in the program

“Obviously there is the workload ... because you can't go on like normal” (Taylor)

The following section focuses on students' perceptions and experiences of the academic work demands in the oral health program with particular reference to workload and intensity of the work.

7.2.3.1. Middle-class students' experiences of the work demands in the program

Evidence suggests that for the middle-class students, Ashley and Taylor, having prior insight into the nature of their chosen careers resulted in their realistic expectations about the work demands in the oral health program. Their testimonies suggest that they understood that university education meant dealing with difficult work, working hard and being committed (Leibowitz, 2009). Ashley explained: “University is tough for everyone but you must know why you're here and work hard if you want to be here”. Taylor echoed Ashley: “I have had no problem with the whole setup ... obviously there is the workload ... because you can't go on like normal”. As Ashley indicated, schooling only prepared them with knowing the basics in comparison to the work demands experienced at university: “The work is different, it is also difficult ... because you just know basics from matric”.

The program was also regarded as time-intensive as suggested in Taylor's testimony: “It's intensive ... there's a lack of understanding from the institution ... it just seems as though you are not allowed to have a break, that we are young and we can go on like machines”. Her perception was echoed by Ashley, Emily and Gabriella. Nevertheless, although these students experienced the work in the program as overwhelming, there was a sense of coping, as alluded to in Ashley's testimony:

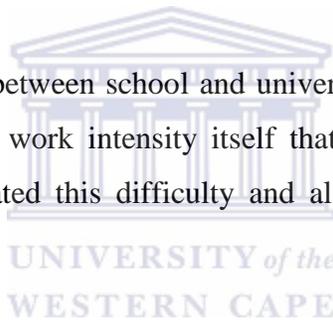
It is definitely about time and what I do with my time and I will sometimes get myself some space to recover and that helps me as well ... if we write a test on a Friday and it is a lot of work and I feel tired, I will rest the Monday and not do anything, so I can put all my time again into the rest of the days.

From the middle-class testimonies, it is arguable that their prior insight and understanding of the career/program realistically matched their expectations of university. The following testimonies are presented from the perspectives of working-class students that suggest their experiences were different.

7.2.3.2. Working-class students' experiences of the work demands in the program

The following testimonies of working-class students elaborated on how these students experienced a mismatch between what they knew or expected and their actual experiences of the program. Chelsea and Colleen's testimonies regarding assumptions about workload attest to this assertion. Chelsea noted that: "I didn't expect this workload". Colleen's experience was similar: "When I came here it was difficult to get used to the increase in the workload".

In highlighting the difference between school and university, Amber implied that it was not just the workload but the work intensity itself that made her academic transition difficult. Her testimony indicated this difficulty and also highlighted her mismatched expectations:



I did expect it to be more difficult or a different environment from school, but coming here is not the same as I expected. It is definitely more difficult than I thought ... my transition to university is very difficult.

Nicole echoed Amber in that the experience of university education was very different from that at school: "Varsity education is much more different to school education, so I think this is where the fall comes ... if you are an academic in school it doesn't mean that you are going to be an academic in university". These mismatched expectations were shown to be similar for Lethiwe and Zainub. Lethiwe noted: "I came here and there was all this work and so much learning and I think it was way above my expectations because I did not think that OH would be so intense". Zainub highlighted how she expected the program to be easy but that her experiences were contrary: "I didn't expect it to be this

challenging ... I thought it's not hard work, that it's just going to be a course that you can fly and don't have to study".

The workload was not only regarded as academically intensive by this group of students but was also perceived to be *time-intensive*. Lethiwe's testimony suggests that she originally felt that the multiple demands of the program would be easily managed but her experience indicated otherwise:

I thought you would have time to do your assignments, time to study, maybe two days you do clinical work ... and to meet certain quotas ... so that really surprised me when I had no time at all.

Lethiwe's testimony suggests that students experienced moments of not coping with the demands of the program and felt overwhelmed in this regard. Tinto (1993) argues that one of the consequences of students' feeling overwhelmed and not coping in a program is that they struggle to integrate, and integration serves as an indicator for persistence and success. Colleen's testimony further stresses on this notion when she described her experiences in her first year as overwhelming and stifling:

You think first year is almost like a type of breeze sort of thing but here if you are not working in the first year, you are not going to get through the second year. There's no balance, there's no life and that's very hard for me to take.

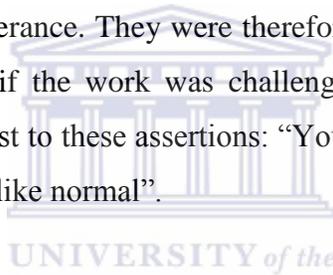
The testimonies above highlighted students' perceptions and experiences of the work demands involved in the program. In framing these perceptions and experiences as different for middle-class and working-class students, the following discussion contributes to explaining the role of cultural capital in shaping students' perceptions and experiences in this regard.

7.2.3.3. Discussion: students' experiences of the work demands in the program

The testimonies of the middle-class students, Ashley and Taylor, suggest that they had realistic expectations of the volume of workload and the intensity of the program. They

knew what to expect from university because they were prepared accordingly. Their preparation was grounded by the family and school. For these students, having set their career goals of becoming an oral hygienist early in life and having been informed of what the career entailed, shaped their confidence and desire to reach their set goals. Having clear goals are regarded as an important factor in creating a momentum of motivation and hence persistence (Tinto, 1975). These goals arguably served as a motivation for middle-class students to persist and so be successful (Tinto, 1993; 1975).

Middle-class students also valued hard work. This attitude may stem from the fact that they experienced good academic performance as a result of their input (see Chapter Five). For these students balancing their time, as indicated by Ashley above, was part of the process of achieving their goals. They experienced an internal realization that university meant commitment and perseverance. They were therefore willing to work hard in order to get this qualification even if the work was challenging. Extracts from Ashley and Taylor's testimonies above attest to these assertions: "You must work hard if you want to be here" and "You can't go on like normal".



Apart from setting goals and working hard, having good management and organizational skills are the kinds of dispositions, skills and attitudes middle-class children accrue through the family and school. Having had exposure to good quality schooling and a range of extra-curricular activities such as sport, set study-times and extra classes and tuition, would have prepared them with such skills and dispositions which would have helped them make the academic transition. In addition, the kind of support they received in terms of planning and preparation towards their career goals would have facilitated their transition further.

However working-class students' testimonies about their experiences of the oral health program suggest that there was a mismatch between their prior assumptions and expectations, and their actual experiences. It is arguable that their limited access to information about their chosen career and what university study entailed worked to their disadvantage. These students, as highlighted in the above testimonies, were unprepared

for what to expect of the work that lay ahead. At university, the level of workload is more intensive and the focus is on new discipline-specific work in comparison to the school curriculum which is provided at a basic level (Leibowitz, 2009). As was the case in the study by McMillan (2005a), the findings in the current study suggests that all students in this cohort needed to adjust not only to large volumes of work but to large volumes of new work. But for working-class students, the academic transition would have been amplified because they did not come prepared for what lay ahead.

Testimonies such as those presented by Amber and Colleen: “My transition to university is very difficult” and “There is no life” and “It’s hard for me to take” are suggestive of their lack of coping with the work in the program. It has been argued that apart from poor academic performance, when issues like *workload*, *difficulty* and the program being *time consuming* surface, these issues seem to create an impetus for students to withdraw from the program (Fozdar *et al*, 2006). Colleen, for example, who experienced the program as overwhelming, as gauged from her testimonies and her actual performance (presented in Chapter Five), eventually deregistered during her second attempt of the second-year program.



7.2.4. Conclusion: students’ perceptions, expectations and experiences of the program

In this section, students’ perceptions, expectations and experiences of the program were discussed. Middle-class students were shown to be better prepared and to have more realistic expectations of the program than working-class students. Working-class students were shown to enter the program with minimal information and understanding about their career and what the educational program entailed, leading to a mismatch between what they experienced and what they had envisaged.

In the following section, students’ preparation in terms of academic competence is discussed. Using social class locations as lenses, this section set out to explain how differential academic preparation impacted on student academic integration.

7.3. Academic competence challenges: the “big adjustment” (Nasra)

7.3.1. Introduction

Skills such as academic competence and literacy, which are assumed to be developed through study at school, are pivotal in facilitating students’ transition into university (McMillan, 2005a). Under-preparation in this regard is not uncommon for many young people making this transition. It is particularly significant when the academic gap between university and the quality of educational experiences at school is too wide (SAIRR, 2012). Transition is then exacerbated by under-preparation and consequently impacts on how students integrate academically (Wilson-Strydom, 2010; Scott, 2009; Scott *et al*, 2007; McMillan, 2005a; Tinto 1975).

Based on the literature and data from this study presented in Chapter Five, it was argued that middle-class and working-class students have different kinds of access to economic and cultural capital. As a result of this differential access, the students in this study had unequal experiences of school education, which prepared them differently for post-school education. The following section is framed within this context of preparation for university and elaborates on the academic difficulties faced by students in the cohort in their transition from high school to university. Testimonies are presented from the perspectives of middle-class and working-class students and highlights the differences between these two social classes. Two themes emerged regarding academic challenges: academic competence and language competence.

7.3.2. Student perceptions of their academic competence challenges

“Everything must have a point and a comma ... we weren’t taught like that” (Nasra)

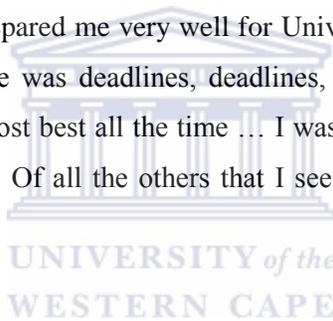
Learning at university is facilitated if certain academic competences such as literacy, study skills and research skills are embedded through the schooling experience (Wilson-Strydom, 2010; McMillan, 2005a). The following testimonies of students capture their perceptions of their preparation reflecting their initial academic competence challenges that impacted on their transition. The interviews in their second year explored these challenges further in order to ascertain the consequent effect that these challenges may

have had on their academic integration and learning. The participants' testimonies concerning their reading, writing and study skills are central to the ensuing discussion.

7.3.2.1. Middle-class students' experiences of academic competence challenges

Following from the interview focus on students' academic challenges in the program, middle-class students did not attest to having experienced academic challenges regarding their academic competence, except for having to manage the heavy workload discussed earlier. When probed about their academic difficulties. Taylor summarized the experiences of the middle-class students when she indicated she had "no problems". Only Komilla gave indication that she perceived herself to be better prepared than most of the other students in her class in terms of how her schooling prepared her:

I think that my school prepared me very well for University. It was a lot of pressure and everything was like, there was deadlines, deadlines, deadlines all the time and you're working like, at your utmost best all the time ... I was prepared very well and compared to like, the other Matrics. Of all the others that I see out of Matric, I think I'm coping quite well.



None of the students provided details on the kinds of academic competences that they learned in school that helped them to cope at university nor did they indicate that they lacked skills to cope at university. This situation was in contrast to that of working-class students as will be discussed next.

7.3.2.2. Working-class students' experiences of academic competence challenges

Most of the academic challenges that working-class students faced were related to their perceptions around their lack of academic skills. Many working-class students in this cohort had claimed to have little prior experience in writing, grammar and punctuation, referencing, sourcing of information and computer skills. These academic competences were a requirement for university but were new to the working-class students who felt under-prepared in this regard. Whilst these competences are in the school curriculum for all students, the emphasis placed, the amount of time spent and effort put into embedding

these academic skills arguably differed in the schools attended by middle-class and working-class students. The following testimonies support these claims.

Nasra's difficulty was with her lack of writing skills such as punctuation expected in university academic writing: "When I came here it was a big adjustment. Everything must have a point and a comma ... we weren't taught like that". Zainub echoed the challenge of writing academically in relation to her perceived lack of the referencing skill, a skill that was an essential component of the majority of her tasks in the program: "In school, we weren't with references and that sort of thing ... that was difficult ... whereas the others in the class they knew referencing and everything ... therefore they didn't find that very difficult". Chelsea highlighted that her struggles at university was related to her lack of skills in constructing an assignment – something she was not exposed to in school. As highlighted in Chapter Five, she felt that the writing challenges which she experienced at university were a consequence of her lack of exposure to different methods of teaching which would have enabled her to develop appropriate academic skills: "There is a whole adjustment [at university] because at school we didn't do assignments. We weren't taught to do an assignment. There wasn't even a thought how to actually do assignments". Part of her challenge in constructing and writing an assignment was that she did not know how to access information. She indicated that she had not been taught these skills at school:

There was also not even a thought how to research or to try to write up something ... here you have to go and research and you have to read up, whereas the teachers actually gave you the work researched already and you just have to give the same thing back.

In Chapter Five, Chelsea and other working-class students were shown to have experienced teaching in school that relied almost entirely on rote methods. This experience impacted on their academic readiness for university in that they were not exposed to certain methods that would have developed particular kinds of academic competences valued at university (Wilson-Strydom, 2010; Conley, 2008; 2007). Assignment writing as a mechanism for learning, for example, allows the student an

opportunity to access information for academic purposes, reading critically and understanding the work required. But in this cohort, some students only experienced their first piece of academic reading when they entered university as indicated in Colleen's testimony: "I only learnt how to first read properly and do a proper mind map here". Her experience was echoed by Chelsea and Monique. In order to prepare and write up their assignments, students also needed to source information and thus required specific digital literacy skills. Amber indicated in her testimony that she did not feel competent academically because she lacked computer skills: "Like with computers and stuff some students are more advanced than others and it is a disadvantage to the others that don't have that ... you are not prepared the same ... when you come here ... you struggle".

Another academic challenge was that of lack of study skills. Colleen indicated that she was struggling with how to study at university. She highlighted that she had not been taught study skills at school: "I don't think that school ever taught us how to study properly ... I actually did not know the technique of how to learn". Chelsea echoed Colleen highlighting her problem with not remembering what she learned. She perceived her academic skills challenge was that she had not developed a way of studying that allowed better recall, a skill that would have helped her when studying more complex concepts at university: "I will remember a lot of stuff but when the paper comes ... I don't know". Lastly, the working-class students indicated that note-taking from lectures was a challenge. Nasra highlighted this challenge, by comparing the note-taking expectations at school and at university: "We did not have to make notes in school ... here you must write your own notes". These testimonies signaled the impact of differential academic preparation on the university experience. The following is a discussion of this impact, framed around the transition challenges experienced by some students in this regard.

7.3.2.3. Discussion on students' experiences of academic competence challenges

Based on the above testimonies, middle-class students arguably experienced minimal academic competence challenges when their testimonies are compared with those of working-class students. Their indication of having experienced no challenges as well as

their lack of reporting on these aspects supports this assertion. Their overall testimonies suggest that the schools they attended had prepared them for the academic transition to higher education. As highlighted earlier, middle-class students would have had access to a range of educational resources and experiences because of the economic capital accrued in the family. Like Komilla, attending schools with highly qualified teachers, quality curricula and a strong academic focus worked to their advantage in that they were academically prepared for the demands at university. Having accrued cultural capital in the form of academic skills, their transition into university was enhanced and their academic integration facilitated as demonstrated by their good academic performance.

In contrast, working-class students' schooling in low socio-economic areas (mentioned in Chapter Five) worked to their disadvantage because the schools did not offer quality educational experiences. These schools lacked resources such as, computers and an ethos of discipline and educational support; nor was their culture of learning geared towards higher education trajectories. These schools adopted teaching methodologies that emphasized rote learning rather than the kinds of learner-centered activities (such as research projects and assignments) which are more characteristic of middle-class schools (Anyon, 1980). Working-class children thus lacked skills development in terms of accessing information and in reading and writing – skills that would have been developed if they did projects and assignments at school. These skills would have prepared them academically to manage the demands of higher education.

Skills such as essay writing, researching and note taking, which were reported as concerns for the working-class students in this study, are regarded as essential academic competences in that they contribute to independent learning (McMillan, 2005a). These competences are also required in the oral health program (McMillan, 2005a). Study skills, for example, which Colleen claimed to be lacking, would have helped her organize, process, and use information effectively. These skills would have contributed to improving her performance because they would have allowed her to study in a way that made recall easier. As a consequence of not having such skills in place, the students lose on the opportunity to master the old work upon which new work is built. Therefore when

students enter university without these skills, they begin to struggle and experience a series of failures because they are unable to consolidate the information before new work is presented. Zainub, Chelsea, Monique and Colleen who claimed to lack academic skills also struggled academically as seen from their academic performance – these students’ were placed in the low performance category. The skills that the students claimed to lack are the taken-for-granted skills that are assumed by higher education institutions to have been developed through the schooling (Wilson-Strydom, 2010; Scott *et al*, 2007; McMillan, 2005a).

The working-class students in this study acknowledged that their lack of competence could be attributed to their poor quality schooling as implied in Amber’s testimony: “It’s the school you come from that plays a big role on your performance ... because they don’t prepare you the same like others”. Embedded in her statement was also a perceived awareness that she and her working-class peers did not share the same levels of preparedness as the middle-class students and as a consequence started university from different platforms to middle-class students (Reay *et al*, 2005; Archer *et al*, 2003). This assertion is also highlighted in Amber’s statement above: “Some students are more advanced than others”.

Working-class students also came from backgrounds where, apart from the school, the community did not prioritize post-schooling education. This lack of prioritizing may explain their challenges of articulation to the academic demands and ethos of the university. Amber’s testimony attested to this assertion: “Coming from the not studying environment it is very difficult”. Thus for this group of working-class students, the skills they claimed to lack resulted in their not being fully prepared for the academic tasks demanded at the university. The skills that they did bring to the university experience also worked to their disadvantage because these were inadequate to help in transferring them into a space where they did not struggle academically (Soudien, 1996). As a consequence for working-class students, the lack of the academic competences pre-requisite for success at university resulted in an “articulation gap” (Scott *et al*, 2007:42)

or “chasm” (Wilson-Strydom, 2010:3) between school and university. This gap is what they experienced as overwhelming.

Working-class and middle-class students are clearly differently “prepared” for university by their schools, families, and communities. For working-class students, the enormity of the “articulation gap” (Scott *et al*, 2007:42) has the potential to help explain why some students thrived whilst others did not. Working-class students “drop out or stop out” (Breier, 2009) because they experience that they are not prepared for university. Further, their consequent poor academic performance begins to serve as “evidence” for them that university is not the right place for them – and consequently they elect, or are forced to leave the program. Chelsea’s testimony makes this nuanced, but powerful, relationship clear: “I feel I don’t achieve anything sometimes ... I feel it’s not worth going on”.

While the transition to university is usually a challenge for all students (Wilson-Strydom (2010), in multi-lingual South Africa, language also plays a significant role in students’ experiences if they attend a university where the language of instruction is not the same as their home language or the language of their schooling (McMillan, 2005a; Angelil-Carter, 1998). The following section addresses the challenges students experienced because of their lack of proficiency in the language of instruction of the institution.

7.3.3. Proficiency in the language of instruction

“We just translate first before making sense of what was taught” (Chelsea)

English-language proficiency is recognized as an important skill for successful academic performance at the English-medium Faculty of Dentistry at the University of the Western Cape (McMillan, 2005a). Language proficiency was also recognized as important to the group of middle-class and working-class students in the current study. The following section highlights the challenges experienced by students who did not have the language of instruction as a home or schooling language. It will be argued that although the challenge was common for middle-class and working-class students the challenge was amplified for working-class students.

7.3.3.1. Middle-class students' challenges of English-language proficiency

Middle-class students Ashley, Gabriella and Emily did not have English, the language of the university instruction, as a home or schooling language. However, none of these students raised having to study in another language as a concern, nor did they indicate that it influenced their learning in some way. In response to explicit questions probing for language-related challenges, all three students Ashley, Gabriella and Emily indicated that translating the notes from English to Afrikaans was their academic challenge in that it was time-intensive. Ashley's comment is characteristic of these students' experience: "I have to translate all the notes from English to Afrikaans ... it is time-consuming". Significantly, she made no reference to having difficulty understanding in a language that was not her home language: "I came from an Afrikaans background and school and here I had to translate all the notes daily ... and then study everything in English ... but it was okay, it just took time". Language proficiency did not appear to pose a challenge to her understanding of content neither did it impact on her academic performance. The high performance of these middle-class students attests to this claim. All these students were in the high performance category (see Chapter Five).

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7.3.3.2. Working-class students' challenges of English language proficiency

Working-class students Chelsea, Amber, Nicole and Amanda claimed they did not have English, the language of instruction, as a home or schooling language. For these students English was a second language. Unlike the middle-class students above, Chelsea, Amber, Nicole and Amanda felt that language played a significant role in their academic performance. Chelsea believed that language competence influenced the quality of her learning: "I am not English speaking and that had an influence over studying".

Like for middle-class students, translation preceded understanding for this group of working-class students. Chelsea explained: "We just translate first before making sense of what was taught". In attempting to understand her own struggles with English, Nicole tried to make sense of how it was that her middle-class peer Ashley performed well, even though Ashley was also Afrikaans-speaking. Nicole and her friends Chelsea and Amber perceived themselves to understand English a bit better than Ashley:

She is first on Dean's list and I asked her how she copes because she is Afrikaans-speaking and all the notes are English and she doesn't understand English as well as all of us, whereas the ones who do understand some English are not doing so well. Ashley told me she works very, very hard and you can see it. She said she rarely sleeps ... most of us sleep in the afternoon.

The above testimonies on challenges of English-language proficiency are explored further in the following discussion. This discussion will highlight how middle-class students because of the academic skills that they bring with to university are able to excel even when the institutional language of instruction is different to their own.

7.3.3.3. Discussion: students' challenges of English language proficiency

In a discipline-specific program students are required to become familiar with new concepts and terminology. This requirement is increasingly challenging for the student who is not familiar with the language of instruction. This challenge has the potential to impact on performance. Although middle-class students Ashley, Emily and Gabriella's testimonies suggest they lacked proficiency in the English language, their performance scores, as indicated by their being positioned in the high performance category, suggests that they did not suffer the consequences of not being proficient. These students appeared to have spent the time well in translating and so presumably enabled them to master the discipline-specific discourse.

Although middle-class student Ashley and working-class student Amber both spent time translating the work, they performed at very different levels. This difference alludes to the kind of differential skills and competences that middle-class and working-class students accrued that made their coping with the challenge of language proficiency different (McMillan, 2005a). Ashley had access to other competences which potentially mediated what she did not have language-wise (McMillan (2005a). Coming from a middle-class background and having attended a good school, she would have had access to skills and dispositions that would have facilitated her coping not only with the language difference but in her understanding of a new discipline-specific discourse.

For working-class students like Chelsea, Amber, Nicole and Amanda, the lack of English-language proficiency was significant in that for these students, poor skills in the language of instruction complicated mastery in the discipline-specific discourse (Hardaway & McLoyd, 2009; McMillan, 2005a). Generally, as has been highlighted earlier in this chapter, these students entered university with fewer academic competences developed through the schooling and home experience. When academic competences such as accessing information, reading and writing are not in place, it makes learning generally complex. However where the student lacks proficiency in the language of instruction this situation is amplified and becomes particularly significant in a program that requires a mastery of its own scientific discourse. Thus for these students learning at university is a double burden – it is not only about confronting a new language medium but it is about applying particular competences to the new language of the discipline-specific discourse so that effective learning can take place.

Lack of language proficiency appeared to also have compromised engagement for these working-class students. It is arguable that poor language competence contributed to their reasons for sitting at the back of the classroom. By sitting in the back of the classroom, they argued, they were less likely to be asked a question – and so would be less likely to have to show their incompetence either in the language of instruction or in mastery of the lecture content. In this way they would have avoided embarrassment. Had these students had other academic competences in place like study skills, for example, it would have also supported their understanding of how to discuss and also study the translated information.

From the testimonies presented in this chapter, it appears that for this group of working-class students, their transition from an academic perspective has been marked by a series of disadvantage. Not only did they come to university under-prepared for the work demands, they were further burdened with having to learn in a language they did not speak every day. For these students, testimonies of their academic challenges were not only confined to their first year experience but rather surfaced across their two/three years. Whilst most academic challenges are common in the first year transition

experience, for these students, this series of academic disadvantage signals that there was no single first-year experience but there is a multiplicity of first-year experience (Harvey *et al*, 2006).

7.3.4. Conclusion: academic competence challenges

In this section, the focus was on students' academic competence challenges. Aspects such as writing, reading, finding information, research and study skills and English language proficiency were central to the discussions. Significant differences were highlighted between middle-class and working-class students in terms of their academic preparedness and competences. The ramifications of the lack of academic preparation are further illustrated in the following section on students' experiences of teaching and learning in the classroom. In this section, cultural capital accrued through social class locations is again highlighted as a significant factor in shaping students' academic transition and integration. It begins with testimonies of students' experiences in the classroom, followed by a section focusing on their learning experiences in the clinical area.

7.4. Students' experiences of teaching and learning

7.4.1. Introduction

The classroom is the central point in the university structure where social and academic integration occurs (Tinto, 2012a; 2012b; 2010; 1975; Demaris & Kritsonis, 2008). However, in *clinical* programs not just the classroom but also the clinical setting is important in enhancing the learning experience (Ali, 2012). The role of the lecturer is central in both these settings with regards to shaping the quality of the academic experience and learning outcomes for the student (Ali, 2012). Although lecturer-student interactions affect the classroom climate and hence student learning (Ali, 2012; Tinto, 1975), peer interactions also help shape this climate, especially in modules which involve group collaboration. In Chapter six, peer interactions were highlighted from a *social perspective* in terms of how students related to each other in their interactions in the classroom. In this chapter, this section focuses first on the role of peers in shaping the *academic experiences* of students using group-work as an example. Thereafter the focus is on the role of the lecturer in shaping academic experiences of the students in the

classroom, followed by students' academic experiences in the clinical setting. The influences of peers, lecturers and teacher-student interaction on learning are aspects that talk to the *institutional structure* and *pedagogy* of an educational climate.

7.4.2. The role of peers in shaping academic experiences of students

Case-based and problem-solving approaches to teaching are commonly used in the oral health program in the research institution (UWC, 2008a). These approaches make use of interactive methods, such as group-work, which allows for peer consultative and inquiry-based learning (Van Oudtshoorn & Hay, 2004). In group-work, attributes such as interpersonal skills, team-work and communication are among the competences required (Van Oudtshoorn & Hay, 2004). This method involves close collaboration between students and serves to enhance and facilitate their learning (Van Oudtshoorn & Hay, 2004). Whilst group-work arguably contributes to the development of skills, its value in enhancing peer-learning is put into question by the testimonies of students in the cohort.

Peers in the current study were shown to have a significant effect on the norms of the classroom – both in how individuals chose to interact and how they encouraged or discouraged their classmates' involvement in group-work. The following student accounts highlight how learning in the context of group-work was enhanced for middle-class students, but experienced as disempowering by working-class students.

7.4.2.1. Middle-class students' experiences of group-work

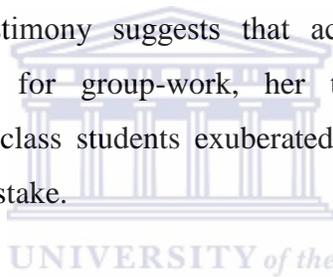
The following testimonies of middle-class students highlighted how group members were selected for a given task, followed by testimonies that captured their experiences of group-work. Although these testimonies will be interpreted from the perspective of social class locations, inherent in these discussions is the significant role of academic performance in facilitating student decisions. The argument will highlight the nested relationship of academic performance, social class, race, and power. In Chapter Five it was highlighted that middle-class students were white, Indian and international students. They were also were the high performing students.

During group-work activities, in the absence of lecturer intervention for group selection, the formation of groups was based on choices students made. Groups were formed by a similar approach to clique forming, in which a Darwinian-like natural selection process (Archer *et al*, 2003) facilitated group formation. The testimonies of middle-class students like Zubeida, Gabriella, Ashley and Komilla offered insights into how these groups were composed. Zubeida highlighted the way in which perceptions of academic competence and hence potential academic contribution informed group member selection: “When we have to choose our own groups, the academically weak will choose the academically weak and the academically stronger ones will stay with the stronger ones”. Zubeida’s testimony suggests that the academically strong students had preconceived notions of who they would group with which resulted in group member selection appearing to be *automatic*: “It’s almost the just second word mentioned, ‘get into groups’, and we know where we’re going”.

These students also preferred to choose their own groups. Gabriella’s comment echoed the opinions of Zubeida, Ashley, Komilla and Taylor: “I don’t like working with people I can’t choose”. According to Gabriella’s testimony, selection of group members was influenced by perceptions of other students’ work ethic and of perceptions of what peers might contribute to a group. Komilla explained that she preferred to work with students who were academically strong because they were dependable, organized and would arguably contribute equally towards a good mark: “I choose to work with Ashley, Zubeida and Ashley because they are reliable ... we plan properly ... and we are organized”. Ashley added that trust and mutual benefit played a role in her decisions: “It is who you can trust ... they will help you and you can help them”.

However, when lecturers intervened in selecting the groups for group-work this resulted in students being grouped randomly (Van Oudtshoorn & Hay, 2004). These groups were diverse and were made up of a mix of middle-class and working-class students and those who were academically strong and those who were academically weaker. Ashley and Gabriella highlighted their negative feelings about working with students who struggled academically. They associated academic competence with the ability to make a

contribution to the group. Ashley was explicit in this regard: “Those that struggle, they don’t give their best ... they just sit there and the work is always coming from you or the other people”. Gabriella echoed Ashley. From her testimony it is evident that she assumed that her less academically able peers would make a lesser contribution and that somehow this less contribution was of their own choice: “The fact that they don’t want to contribute makes it like you have to do more and give a lot more just to get the mark that you want and to do good (sic)”. Taylor explained that her desire to maintain good marks meant setting the standard and laying down her expectations. When others did not perform according to what she expected, she did the work herself: “My policy is to do it, and redo it until it’s perfect ... the one project was terrible. I had to redo everything”. But in doing the work herself and how she wanted it, the working-class students were disadvantaged in that it prevented them from participating, making a contribution, or learning. Whilst Taylor’s testimony suggests that academic performance was the reasoning behind her tactic for group-work, her testimony offered a nuanced understanding of how middle-class students exuberated a sense of *control* and *power* when academic grades were at stake.



The working-class students’ experiences and perceptions of group-work were quite different. The following testimonies from the working-class students captured how they felt disempowered by their peers, reinforcing the notion of them being trapped in a cycle of academic disadvantage.

7.4.2.2. Working-class students’ experiences of group-work

The students in this section were all working-class and located either in the middle or low performance categories, but largely in the latter. Nisha, a middle performance category student, noted that when students were allowed to choose their groups for group-work, they worked largely with people familiar to them because in such a group people helped each other and their contribution was valued. Implicit in her testimony was also a notion that academically strong students do not mix with students who perform at a lower level:

The groups are divided into people that they are familiar with and like know that they are able to help each other, and I may not go to that group because they may not think what I say is significant to their knowledge and they will not come to our group thinking that they may be too high.

Further, Chelsea, a low performance category student, thought that working-class students did not get to choose their groups because they felt there was no option of choice for them. For these students there was nowhere to go. Just by the high performers selecting students who matched their own academic performance, they incidentally left the struggling students as a group: “We do not have a say about the groups ... we have no choice. The choices are already made”. Zeta made the consequences of this choosing process clear – she was always left with her usual group, a group that middle-class students would not work with: “They just don’t choose us ... so I usually end up with Chelsea”. Working-class students were technically free to choose but the classroom climate that middle-class students appeared to contribute to through their attitudes and the choices they made seemingly prevented these students from participating in the grouping decisions.

Working-class students’ testimonies further suggest that they saw themselves as not being included in the group because of their poor academic performance. Chelsea explained: “If you perform bad (sic) it is unlikely that they are going to choose you to be in your group. They would choose people normally performing well”. Although working-class students perceived that diverse groups are good to have because it offered them a good learning opportunity, it did not work this way for them. They had perceived diverse groups to be a source of motivation and inspiration, as Lethiwe explained: “If you have people who do better than you, it just motivates you to work on their level as well”. They also felt that the better performing students would have guided them academically because they knew what to do, how it should be done and that it would be done timeously. Amanda made this assumption clear: “If you do it with someone who is clever ... you do it at the right time”.

However, when groups were put together by the lecturer, making them diverse, Zeta and Chelsea's experiences were a mismatch to how they expected to benefit from group-work. The testimonies of the working-class students suggest instead they experienced that their middle-class peers "devalued" (Heller, 2011:19) their contributions. Chelsea described her experience:

Some of them feel you just there, you just want marks, you don't want to put in your share (sic). If you give in your work they will criticize it, they say 'no, but this isn't right – you have to do it like this.' They want stuff to be done in their way and how they want it. Your suggestions are put down.

Zeta echoed Chelsea: "The only problem I could see with Taylor (middle-class) was that she likes to do everything herself ... all the writing and all the talking but I did not get to do too much". Thus for these working-class students there was a diminished opportunity to learn – no learning happened when they were grouped with high performing middle-class students, nor were there learning opportunities when they were grouped on their own. Chelsea made it clear: "There is no learning taking place when you with students who also struggle". From the testimonies of working-class students it is apparent that their experiences contributed a cycle of academic disadvantage.

The following discussion explores working-class students' academic disadvantage in comparison to middle-class students' experiences, who, because of their prior academic preparation for university had the power to reproduce academic advantage.

7.4.2.3. Discussion: students' experiences of group-work

From the above testimonies of middle-class and working-class students, the issue of power appears to be inherent in their experiences of group-work. Capital, as Bourdieu (1986) argues, is power. Some children, because of their cultural capital, come to university with more power, others with less. Power manifests in the way students behave, in the skills they come with and the way in which they perform, placing them at an advantage over others. The middle-class students in this study entered university academically competent, already knowing and believing that they had an advantage over

most other students in the classroom. Taylor's earlier comment is testimony to how she conceived of herself: "I am the best". Similarly, Komilla had also indicated she felt better prepared than most students: "I was prepared very well and compared to like the other matrices".

For middle-class students Zubeida, Ashley, Komilla, Gabriella and Taylor, academic performance mattered. They achieved at an elevated level compared to others in the classroom, as shown by their being positioned in the high performance category. They displayed attributes such as confidence and being in control of achieving their goals. Besides seeing themselves as the best, they also perceived themselves as knowing what was best and what to do to get good marks. They demonstrated this power by making group-work decisions which were aligned to their goals of excelling, even if this meant working against the benefit of the working-class students.

Embedded in their testimonies was the way that these students exerted power in choosing members for their group-work and how they dominated group-work activities (Burdett, 2003). Middle-class students had expectations about the kind of students they would have to work with in order to achieve the marks they wanted. Their testimonies suggest that they aimed to work with students who were academically strong, who were dependable, organized, and responsible and who would arguably contribute towards a good mark. This need to attain good marks was reflected in their choice of students for group-work. In choosing members for their group they excluded peers whose performance they thought would prejudice that of their group. For them, being in groups sharing similar dispositions, skills and performance to themselves was important, purely for the perceived benefit of attaining good marks, as expressed by Gabriella above: "Just to get the mark that you want and to do good".

Their preference for working with those who shared similar dispositions to themselves, such as being ambitious, academically strong, responsible and organized, suggests that they viewed such qualities as being significant to high achievement. Middle-class students would have also brought to the university a familiarity with inquiry-based

learning approaches, including how to conduct group-work. They would have expected their group members to also have certain skills, including accessing information, conducting research and reading and writing, all features common to group-work. Overall, these dispositions and skills are important to middle-class students because they perceive them as aligned to what the university expects in the way of competence and performance. For such students, these dispositions and skills contributed to their academic rewards, as shown by their good performance (Bourdieu, 1986; Bourdieu & Passeron, 1977). As a consequence they were also rewarded by accruing further power in the university context. However, by demonstrating these dispositions and skills, such middle-class children, in pursuing their own advantages, contributed to the disadvantages encountered by working-class students. When middle-class students were forced to work with working-class peers whom they deemed less suitable for inclusion in their groups, they used their accrued power to sanction the academic behaviour of the working-class students, as Taylor explained in her earlier testimony: “My policy is to do it, and redo it until it’s perfect ... the one project was terrible. I had to redo everything”.

For working-class students, on the other hand, their experience of group-work was remembered as one of academic disadvantage. Their experiences appear to have been influenced by the classroom climate that middle-class students created because of the power that they displayed. Working-class students foregrounded the climate as alienating and disempowering and seemingly interfering with their opportunities to learn. They acknowledged that they were not the preferred choice for middle-class students in group-work and as a result felt excluded and alienated. These feelings of not being valued, of being criticized for their efforts and being made to feel they were not good enough, exacerbated their earlier experiences of disadvantage, alienation and exclusion described in Chapter Six.

During group-work, because of not being selected to be part of the high performing groups, they inevitably came to be grouped with other working-class students who happened to share an academic performance similar to their own, as Zeta noted: “I usually end up with Chelsea”. Considering that these students came from situations of

previous academic disadvantage, being grouped with other poorly performing working-class students resulted in further educational disadvantage. Their chances for engagement and learning were compromised due to the lost opportunity to interact and learn from more informed and able peers. In this way, the lost opportunity impacted not only on their social integration but also on their academic integration.

One of the consequences of the climate that working-class students perceived as alienating and disempowering was that it impacted on their engagement with their middle-class peers. Not only did the group-work activity prevent working-class students from engaging with middle-class students, but it arguably alienated and disempowered them further from engaging generally in the classroom. Working-class students often come to college with a lower level of academic skills and sophistication than their middle-class peers (Reay *et al.*, 2005). They also accrue less power in the classroom because they do not perform as well as middle-class students. They might therefore expect to be alienated and might also choose not to engage (Reay, 2006). Furthermore, although many working-class students may be just as prepared as middle-class students in some ways, uncertainty and lack of confidence in what they can offer academically can lead them to be quieter and less visibly engaged with their peers (Reay, 2006; Warren, 1998). As was the case in the studies by Reay (2006) and Warren (1998), it is not surprising that this lack of confidence and academic skills amongst the current cohort affected their engagement with peers in the classroom and arguably influenced their performance. This may also be the reason that middle-class students in this study were led to *exclude* working-class students. They perceived the working-class students as not being engaged and their academic performance as being poor – as misconstrued Taylor: “Who want to kind of cruise, they will sit at the back. You never find the guys getting straight A’s sitting at the back”.

The discussions thus far have offered a nuanced understanding of how the decision to employ group-work - whether the groups were self-selected or teacher-created - contributed to shaping peer engagement and the learning experience of students. The way in which power operated, that is, middle-class students dominating working-class

students in the classroom, made it difficult for group-work activities to result in genuine and authentic learning for working-class students. Practices which were contradictory to engagement and interaction in the classroom, such as those experienced in group-work, partly explain the academic challenges these working-class students generally experienced in their interactions, transition and integration. These experiences did not occur in isolation and tended to impact on other forms of interaction, such as their engagement in lectures.

Although group-work is regarded as an appropriate method of teaching and learning, particularly among diverse groups, since it can catalyze a feeling of participation and eliminate passivity (Van Oudtshoorn & Hay, 2004), among working-class students in this study it served as a potentially alienating experience. The evidence from this study highlights the role of the faculty in identifying and addressing pitfalls in classroom pedagogies of engagement which can impact on the learning environment and hence on student performance (Tinto, 2012a).

The following section examines students' experiences during formal contact with lecturers in the classroom. The focus is on how lecturers' attitudes, behaviour and teaching practices contributed to students' engagement and learning. It offers insight into the role of the lecturer in facilitating students' academic experiences in the classroom.

7.4.3. The role of the lecturer in shaping academic experiences in the classroom

“The negative attitude does transfer into my marks” (Zeta)

In higher education, the lecturer and the quality of his or her teaching are an important part of the *institutional pedagogy* of the educational climate – the lecturer and the quality of teaching are regarded as seminal in shaping students' learning (Roff, 2005; Genn, 2001a; Roff & McAleer, 2001). How lecturers engage with students and assist them in their integration is integral to the learning experience (Tinto, 2012a; 2010). However, lecturers' attitudes and practices are also part of this context and can act either as significant catalysts or deterrents to learning. Factors such as the lecturer's preparation,

organization, clarity in delivery, helpfulness, the quality and frequency of feedback, as well as the relationship with students, are all important in facilitating the learning experience (Tinto, 2012a).

This section presents the students' testimonies of their interaction with their lecturers in the classroom, followed by a discussion. Attention is drawn to students' experiences with their lecturers, with particular focus on the lecturers' practices, such as preparation for lectures. In addition, attention is given to students' perceptions of their unmet needs when learning new subject matter and the terminology of the curriculum. Particular aspects frame this section. As in the previous sections, where the testimonies of students were categorized on the basis of their social class locations, in this section middle-class and working-class testimonies are used to differentiate their experiences of learning with the lecturer in the classroom. Students' preparation in terms of their dispositions and skills are foregrounded as central to their differential experiences. It is important to note that, while the oral health program lecturers included both oral hygienists and dentists, the students' comments were specifically directed at the dentists who taught them. No comments were made about lecturers who were oral hygienists.

7.4.3.1. Middle-class students' academic experiences with lecturers in the classroom

As in previous sections, middle-class students offered few responses about their academic transition and integration challenges. With regard to their interaction with lecturers in the classroom, their testimonies were largely focused on their perceptions that their lecturers lacked preparation.

The students made specific reference to lecture notes which they believed were recycled from those used in the dentistry program but which did not meet their needs in the oral health program. For them, the lecturers' lack of preparation was experienced as negative in that they felt that it impacted on their understanding of the subject material and so influenced their learning. In both undergraduate programs, that is, the oral health and dentistry programs, it was common practice for lecturers to provide notes relating to the topic under discussion. These notes gave additional information and served as study

material, as well as guidelines in defining the parameters of the topic. Taylor described how she viewed those lecturers who did not prepare specifically for students in the oral health program, highlighting how such practices affected her learning: “They are too lazy to make notes for us ... it’s like they just take dentistry students’ notes and slap it on us and walk out”. Taylor further testified that the lecturers’ lack of preparation impacted on her learning: “It affects my learning ... it is not fair the way we are treated”.

Komilla’s testimony suggests that lecturers also taught in a way which assumed that the students had academic skills, such as being able to figure for themselves aspects they were unsure of, to source information and to learn independently. Although Komilla in earlier testimonies claimed to be “prepared very well” and “coping quite well”, her lack of experience of learning in a new subject area or discipline meant she still had to draw on guidance from the lecturer. But middle-class students generally interact with their teachers, are not afraid to ask questions about a subject matter they do not understand and expect that the teacher will respond (Calarco, 2011).

However, for Komilla, her experience of asking a lecturer for assistance suggests an awakening for her to the reality that the university way of teaching was different. She recalled how, instead of receiving help, she was directed to the textbook: “I went to him [professor] because there was one slide I didn’t understand. He said that’s his way of teaching and that’s it ... he said that I should go read the textbooks and not rely on his slides”. While for her this was a minor challenge in a discipline-specific subject area, her testimony signals how much greater the academic challenge would have been for working-class students, who in earlier testimonies were described in terms of academic under-preparation. The following testimonies highlight working-class students’ academic challenges with regard to their experiences with the lecturers in the classroom.

7.4.3.2. Working-class students’ academic experiences with lecturers in the classroom

The following testimonies of working-class students highlight how their under-preparedness for the academic demands of university impacted on the way that they experienced lecturers teaching them in the classroom. While all the students saw the

lecturers as lacking in specific preparation for them, working-class students appeared to face greater academic challenges in this regard. Central to their raised concerns was the role of the lecturer not only in shaping the way learning was experienced by these students but also in the way that the lecturer's teaching practices appeared to contribute to a climate which could either promote or create a barrier to their learning.

The working-class students' testimonies, as indicated by their reactions, suggest that lecturers' lack of preparation contributed to a negative learning environment and that they were affected in significant ways. Apart from maintaining that the lecturers did not provide notes especially tailored for their needs, Yassar maintained that the notes, when provided, arrived days after the lecture: "We don't even get the notes before or at the same time as the lecture ... we get the notes much later". Her testimony signaled how late notes could impact on their ability to follow the lecture and in revising the work. The lecturers' practice of giving in-depth and detailed notes but handing them out days late also appeared to affect study time. Students had to spend time summarizing notes which had been prepared specifically for dentistry students, as highlighted by Yasaar: "We don't have time to summarize the dentistry notes". Lastly, given the in-depth and detailed nature of the notes, Yassar was confused about what to draw out of the notes to study: "When we are given those notes we don't know what to study", suggesting that these incidents affected her learning.

With regard to the lecturers' teaching, some students felt that the lecturers did not teach in a way which took into account their prior preparation, their prior knowledge or their understanding about the subject matter being taught. As a consequence, the students faced several challenges in their learning. In the series of testimonies which follow, Yasaar, Chelsea, Jared, Nisha and Monique believed that lecturers pitched their lectures at the depth and level at which they would teach dentistry students. Yasaar indicated that during lectures, the lecturers' slide presentations posed similar problems to those they faced with the quality of notes they received, in that most of the slides were not applicable to the level of knowledge they needed to acquire: "Their slides are for the dental students. Maybe out of ten slides, for example, we only have to learn two slides".

Chelsea complained that: “They set the standard that you have to know as much as the dentistry students”. Jared believed that the oral hygiene students were taught at a level which was not appropriate for their qualification or needs: “We are not dental students ... and we are not so advanced”. Nisha echoed Jared, also highlighting their learning challenges as a result of the level at which the lecturers taught. She felt that the lecturers were even inappropriately recycling *lecture presentations* between the dentistry and oral hygiene programs: “They use high words that we are not familiar with ... it is difficult because obviously we are only in second year ... and the same is taught to the fourth-year dentistry students”. Monique felt that the lecturers took it for granted that the students understood what was being taught and implied that the lecturers did not care whether students understood or not: “They’ll just shove it in our faces and if we get it, we get it, and if not, it’s none of their worries”.

Yasaar, echoing these testimonies, felt the lecturers were aware that the material they presented was inappropriate to the needs of oral health students. Embedded in her testimony was a sense that they were being compared to dentistry students and being judged about their ability. She believed that these lecturer behaviours were as a result of the bias that lecturers had in favour of the dentistry students:

About the slides and notes and things they say things like that, ‘It is not for you it is for dentistry students.’ They think that we are not on the same academic level. That is what makes me upset because I don’t like someone telling me indirectly, ‘This is not for you because it is too difficult and you won’t understand it’.

Apart from trying to make sense of new subject material and having to draw out what they needed to understand from a lecture, Nisha recalled how she struggled with the fast pace set by the lecturer, further impacting on the challenge of trying to keep abreast of the new subject material: “The lecture was fast paced ... and way beyond our level”.

Lecturers’ attitudes were also raised as a concern for working-class students. Colleen’s remarks signaled a sense of apprehension because she felt intimidated by some lecturers: “Some of them are very aggressive and I know everyone feels it, especially with the older

men, like the doctors, they are very intimidating ... although some are more approachable”. Zeta also highlighted how a particular lecturer’s attitude negatively influenced her learning and contributed to her poor performance in that module:

They should try and adapt to our individual learning style ... the thing is not all of us learn in the same way. They are negative and their negative attitude does transfer into my marks because I do bad (sic) in Cons [Conservative Dentistry]. I did fail the test and I had to rewrite ... and I failed again.

The above testimonies signal how students’ perceptions of their lecturers’ practices and attitudes shaped their academic experiences and potentially contributed to their performance. The following discussion focuses on the role of the lecturers in contributing to a classroom climate which posed as challenging and how their practices and attitudes shaped the way the students learned from them.

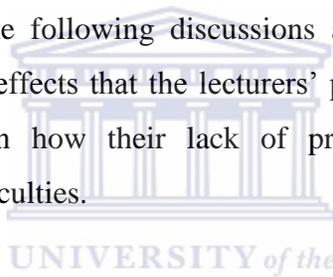
7.4.3.3. Discussion on the role of the lecturer in shaping academic experiences in the classroom

Lecturers contribute to the educational climate (Roff, 2005) and so play a fundamental role in shaping the learning environment, and hence the classroom climate, in particular ways that can affect how students engage and learn (Tinto, 2012a; 2010). From the above testimonies of middle-class and working-class students, it is clear that, while all the students in the cohort reacted to the dental lecturers with some negativity, this manifested in different ways and depths for middle-class and working-class students. This difference is largely attributable to the differential academic competences of middle-class and working-class students.

Middle-class students, because of the kinds of cultural capital they bring with them to the university, are expected to rise above the shortcomings in the classroom (Reay *et al*, 2005). They already have skills in place to access information, to work independently and to master their academic work. By demonstrating these skills and strategies, middle-class children create their own advantages and these contribute to their academic performance. The middle-class students’ testimonies in this study suggest that they were particularly

concerned about the lecturers' lack of preparation around notes and the lack of guidance from the lecturers. However, as was evidenced by their good performance throughout the three-year program, these students clearly rose above these challenges.

Although most students generally struggle with the transition from the school way of teaching and learning to that of the university, with its more self-directed approach to information access, it appears to be a greater struggle for those who are under-prepared (Briggs *et al*, 2012; Wilson-Strydom, 2010; Whittaker, 2008; McMillan, 2005a). A central factor affecting learning for working-class students is a lack of confidence, based on real or perceived weaknesses in their own preparation (Warren, 1998). Working-class students in this cohort entered university academically under-prepared and so perceived lecturer interaction in negative but in real ways, in that they felt it negatively impacted on their learning experiences. The following discussions around working-class students' experiences highlight the real effects that the lecturers' practices had on these students, with embedded inferences on how their lack of prior academic preparation and confidence amplified their difficulties.



When working-class students felt that lecturers failed to structure their teaching for the oral health program, they claimed to experience confusion about the level at which they should engage with a topic. In particular, they were unable to recognize what information was core to their specific curricula. They also spent time inappropriately trying to make sense of the essence of what they should know and study. Receiving notes late further prevented them from contextualizing the information they received from the lecturer. Furthermore, the fact that information was new and that the lecture was seen as fast-paced, as noted by Nisha, these students appeared to have lost out on important information, leading to their further confusion. Of significance was the claim that lecturer' practices influenced their learning. They held that their classroom learning was compromised because the lecturers conducted their teaching on the assumption that they already had the necessary academic skills and so would cope with new terminology, sourcing of information, reading, interpreting and extracting relevant material (McMillan, 2005a).

The literature suggests that students are destabilized when they perceive lecturers as failing to take cognizance of their prior educational experiences or recognizing when they are not prepared in the way that the lecturers expect (Briggs *et al*, 2012; Wilson-Strydom, 2010; Whittaker, 2008). However, this situation of lecturers failing to take cognizance can also arise when they expect and take for granted that all their students will come into the classroom academically prepared to make the transition into the new discipline. Teaching practices which emphasize independent learning may be interpreted by the students as the lecturers failing to engage or support them. In this study, encouraging independent learning appears to have left the lecturers unaware of the students' varying levels of understanding and differential needs, leading them to assume that all their students were coping (Tinto, 2012a; 2010). In this study, when working-class students perceived that lecturers were ignorant of their academic needs, their testimonies were arguably aligned to their real experiences of a lack of interaction and engagement between themselves and the lecturers (Tinto, 2010).

Given the lack of confidence with which working-class students enter university, they frequently withdraw from any form of engagement; they also choose not to ask questions even about subject matter over which they are confused (Calarco, 2011; Reay, 2006). Often when students do not engage they also avoid seeking help in other situations in which they are having problems, be it with class materials such as notes, difficulties with tasks, or uncertainty about directives from the lecturer (Calarco, 2011). These kinds of behaviours, attitudes and practices arguably work to the disadvantage of the working-class students (Calarco, 2011; Reay, 2006), resulting in their failure to cope. In addition, where lecturers' behaviour was seen as negative, as noted by Colleen when she claimed that one lecturer was "not approachable" or was "aggressive", may have added to the reasons for working-class students' withdrawal from engagement and their fear of asking questions.

Because discipline-specific programs have a discourse of their own, students in these programs generally face the challenges of needing to understand new concepts and terminology and new ways of thinking about the subject matter. This discourse shift is

part of the transition they are required to make (McMillan, 2005a). Mastering the discourse of a new discipline is thus both challenging and difficult, and working-class students may find themselves academically under-prepared to cope with the transition (McMillan, 2005a). This situation is worsened if the problems of mastering new concepts are amplified by the lecturers' failure to support students in their academic transition. For the working-class students in this study, the resistance of lecturers to tailoring their lectures or notes to the program's specific needs intensified their problems with this transition. In this way the students experienced a climate that was both challenging and unsupportive of their academic challenges and needs.

From the above, it is clear that the lecturers' practices had real effects, particularly for working-class students, impacting on their interaction and subsequent engagement, academic integration and consequently on their overall learning and performance in the program. This much was evident in the testimony of Zeta, who claimed: "The thing is, not all of us learn in the same way". Apart from the role of the lecturers in shaping student learning in the classroom, the way in which students experienced them as clinical teachers also had an impact on their learning in the clinical context. The following section turns attention to the students' experiences of clinical learning.

7.4.4. The role of the lecturer in shaping academic experiences in the clinic

In the dental setting, the clinic is a significant learning environment because it is the place where students practice their skills in an authentic context (Mullins *et al*, 2003). It is here that the professional, clinical reasoning and clinical skills which are central to the competences expected of oral health students are practiced, refined, and assessed. Seminal to the process of acquiring clinical competence is the role of the lecturers as clinical teachers (Boor *et al*, 2008b; Genn, 2001a). Beyond supporting students' learning in the clinical context, such teachers also shape the students' competence through the process of role modelling the behaviours expected of clinicians (Ali, 2012; Egnew & Wilson, 2011; Raman, 2008; Lombarts *et al*, 2010; Kilminster *et al*, 2007). In clinical education, teacher feedback, which has a seminal role in shaping student engagement, is

considered significant in influencing students' learning experiences (Ali, 2012; Cantillon & Sargeant, 2008; Kilminster & Jolly 2000). The current study echoed these cited views.

Although feedback is important in reinforcing positive behaviour when the student does something right (Tinto, 2012a), it is equally crucial when he or she is unsure or does something wrong (Cantillon & Sargeant, 2008). However feedback provided to the student in a negative way can result in demotivation and deterioration in performance (Cantillon & Sargeant, 2008). The following testimonies of students show how the nature and quality of feedback shaped their experiences in the clinical context (Kilminster & Jolly, 2000). Their feedback is linked to the way they engaged, contributing to shaping how they learned (Kilminster & Jolly, 2000). These testimonies also offer an understanding of the differences between the experiences and academic needs of middle-class students and those of working-class students in the clinical context.

7.4.4.1. Middle-class students' academic experiences in the clinic

Middle-class students reported that they had constructive learning experiences in the clinical area. Taylor saw the quality and nature of the engagement between herself and her clinical teachers as being a positive experience: "I have not had a problem this year at all when it comes to clinical supervision. I feel confident ... I don't feel afraid to ask anything". Ashley's testimony confirmed that she experienced the clinical sessions as a constructive opportunity to learn: "So if you don't know it, it is not like you will be punished because it is a learning situation so you must just remember what you did wrong and learn from your mistakes".

The only concerns about learning in the clinical environment came from Komilla and Gabriella, who felt that feedback was necessary but that it should be given appropriately. Komilla experienced feedback as humiliating when it occurred in the presence of patients: "We need feedback, but some lecturers talk a lot when giving feedback ... they are kind of embarrassing themselves and you in front of the patient (sic). It is really not professional". Gabriella echoed Komilla highlighting her dissatisfaction with being spoken to in front of patients: "When they correct you in front of the patient ... I don't

like it”. The testimonies of working-class students also highlighted the delivery of feedback as an issue. However, unlike their middle-class peers, they raised multiple other significant challenges they experienced with their clinical learning.

7.4.4.2. Working-class students’ academic experiences in the clinic

The following testimonies of working-class students, highlighting the challenges related to the quality of clinical teacher feedback, also offer insights into their perceived learning experiences in the clinical context. Chelsea testified that feedback was her main concern during clinical practice. She claimed she did not get feedback on her clinical work: “They don’t give you feedback on how you worked”. She reaffirmed the view offered by the middle-class students Gabriella and Komilla, that feedback could create a negative environment for learning when clinical teachers spoke in a negative manner in the presence of patients: “The patients always will pick up on the lecturers’ or supervisors’ attitude ... they just feel it is unnecessary to say that or to tell you something in that manner”. Nasra explained that she felt humiliated because of the manner in which feedback was given in front of the patient, but also highlighted how the quality of feedback impacted on her learning: “They would shout at you in front of your patient, instead of calling you one side and saying, ‘Okay, this is where you went wrong’ ... it doesn’t help”.

The working-class students also recalled how during the clinical teaching, as they experienced it, the teachers did not explain the rationale for certain clinical decisions. Nisha complained: “They are not prepared to explain to you, this is the way you do it”. Alexander felt that feedback was unconstructive, in that the lecturers would criticize but not correct them. He described how the nature of feedback from the clinical teacher influenced learning in the clinic:

The thing that makes it easy to learn in the clinics is when the person that supervises you to tell you (sic) that you have done something wrong and then explains to you and shows. I learn a lot from that. I don’t mind the criticism because we get to learn, but if you criticize me then I would like to know the correct way and be shown how.

Yasaar highlighted the kind of feedback she felt was necessary for effective learning and which she arguably did not receive. She believed that students needed different kinds of support. Interaction and engagement were seminal to her needs:

The difficulty is when you don't know what you're doing and this term I didn't know how to handle the patient ... you are vague and I know now at this moment I have a thought. I don't want to do the scaling²⁷ or anything. You feel like you're never going to get anything right and I actually need to have a supervisor right next to me and watch me scale and tell me what to do. I want the supervisor to just sit with me and tell me, this is what you are doing wrong and this is what you must do. In not showing me there's no point, I don't learn anything, but if they show me then I am grateful, because I will try to do that instead. I have a problem in learning, really I don't know, I really don't know how to.

In foregrounding the kind of support she felt she required in terms of the quality of clinical teaching interaction and engagement, Yasaar highlighted the role of cultural capital in the way that confidence appeared to influence her clinical experiences. Apart from the students' perceived challenge of not knowing or failing to use the feedback to learn and improve their clinical practice, the nature of the clinical learning experience also impacted on some students in other ways. Their confidence or morale, for example, was affected by the quality of feedback they received. Zainub's comments highlight how feedback by a clinical teacher delivered in a negative way not only impacted on morale but also had the potential to result in student disinterest and demotivation:

You are not interested because you're not doing it right, you're never doing it right because they are always picking on you and it's almost like you don't feel like doing it. You're put off for your next patient. Having this happen in the first session²⁸, when it comes to the second session it's like you're so negative you don't feel motivated enough to go on.

²⁷ Scaling is a clinical procedure which involves the removal of calculus from the tooth surface in order to prevent and control particular oral diseases related to the periodontium.

²⁸ In the Faculty of Dentistry at the University of the Western Cape, clinical sessions were two hours in duration. There were four sessions that made up the academic day.

Thus for working-class students, negative clinical learning experiences appeared to impact on their confidence. Nicole reinforced this notion: “When they scream at you, then you get all nervous and you wonder what you are doing is right (sic)”. Yasaar added that some of the clinical teachers were “moody and frustrated when they talk to you”. Being shouted at caused Nisha to feel depressed and demotivated, and to lose her confidence: “If you have a lecturer that shouts, you feel very down and don’t want to continue sometimes ... it makes you lose confidence ... you feel depressed and demotivated”.

Having different lecturers giving different feedback was also experienced as confusing, as Amanda explained: “When different lecturers supervise you, they confuse you because each one has their own needs and it happens sometimes in front of the patient”. Zeta in her interview appeared despondent when she expressed feelings about her clinical experience. She also displayed confusion in that she appeared not to understand what she was doing wrong when a clinical teacher gave her negative feedback. Her testimony signals that either the teacher must have given poor or inadequate feedback or that she was oblivious to the right way that the clinical teacher expected: “She said I’m not up to scratch ... I don’t know why ... I think I am doing something incorrect”.

From the testimonies above the following significant aspect will frame the discussion ahead: the influence of the educational climate as embodied in the role of the clinical teacher in shaping students’ experiences.

7.4.4.3. Discussion on the role of the lecturer in shaping students’ academic experiences in the clinic

Clinical teachers play a seminal function in the way students learn in the clinical setting (Boor *et al*, 2008b; Genn, 2001a). It has been argued that negative behaviour by clinical teachers during their chair-side teaching can translate into negative learning experiences for their students (Kilminster *et al*, 2007). In this study, middle-class and working-class students shared some experiences of clinical teaching, with particular emphasis on feedback. For working-class students in particular, but to a small, perhaps insignificant

extent for middle-class students too, feedback was found to be disengaging and demotivating. However, while all the students experienced a lack of constructive feedback, middle-class students still performed better clinically than working-class students.

The middle-class students Taylor and Ashley saw their experiences as problem-free. Gabriella and Komilla testified that their overall experience of clinical teaching and learning was constructive, but that feedback was a concern. However, their experiences were not recalled by them as overly significant or as challenging. The positive experience of the middle-class students reflected how, even in the clinical setting, they were able to use the cultural capital they had brought with them to the university. Their *overall* positive experiences suggest that they were better prepared for and orientated to the program with a command of the kind of learning that needed to take place. Middle-class students were prepared in the following ways that facilitated their clinical learning.

Firstly, by being better orientated to the profession (as seen in their pre-university preparation), they were better prepared for the clinical setting as well. They knew what to expect and what needed to take place in the clinical sessions. They also shared similar assumptions with their teachers about clinical expectations and were aware of the kind of behaviour the teachers expected of them. In this way their clinical experiences experienced as positive was thus arguably less challenging.

Secondly, because of the academic competences they already had in place they did better theoretically, which in turn prepared them better for the clinical procedures ahead. They knew that they had to extrapolate from what they had learnt theoretically and to think critically about the case on hand. Their testimonies suggest they were already accustomed to inquiry-based learning methods (Anyon, 1980). Their transition into the clinical setting was therefore arguably easier in that they had other skills and dispositions which enabled them to cope. Conley (2008; 2007) argues that lecturers teach according to the expectations of the university, assuming that students will be ready for the demands of university once they have gained access. Similarly, it would appear, clinical teachers

expected students to respond by drawing on prior academic preparation and classroom work, applying laboratory and simulated experiences to the real-life clinical situation (UWC, 2008a). For middle-class students, this was seen as a reasonable demand. Schooling had prepared them for university; and the match between their schooling and university had prepared them for transferring these accrued competences and dispositions into the clinical learning situation. It is thus arguable that for both the teachers and the middle-class students, clinical sessions were constructed and experienced as work as usual and consequently problem-free.

Thirdly, because they were from middle-class locations they entered university confident, since the university and its expectations were a familiar context. Their lecturers would have had higher expectations of them (Tinto, 2012a; Reay, 2006; Reay *et al*, 2005), and higher expectations are associated with improved performance (Tinto, 2012a). Their confidence and consequent coping were evidenced by their engagement at all levels, with peers and lecturers, as well as with their coursework and their profession, all of which served as an addendum to their positive experiences in the clinical setting. Through these positive experiences they performed better academically and clinically, which meant that their confidence was further increased. Thus they coped with the clinical tasks at hand and because of their confidence in themselves and their work, they did not feel quite as pressingly the need for engaging feedback. In doing so they avoided any negative experiences highlighted by working-class students.

Furthermore, middle-class students' entry into university is seen as a natural progression and a non-choice by the middle-classes, so they come prepared for the demands ahead (Rey *et al*, 2005). Because universities are middle-class institutions, they tend to "valorize middle-class rather than working-class cultural capital" (Reay, 2001: 334). Middle-class students are therefore more likely to experience a "smooth transition between their own life-worlds and the social institutions around them" (Perry & Francis, 2010:10). Furthermore, this reasoning may account for Taylor and Ashley's testimonies regarding their perceived confidence in engaging with their clinical teachers. It also reflects the role that cultural capital played, with particular reference to prior preparation

in shaping their positive learning outcomes in the program. Furthermore it may explain their successful integration clinically, the problem-free experiences which they described with regard to their clinical learning and their consequent competent academic performance.

For working-class students Amanda, Chelsea Yasaar and Nisha, their transition into the clinical environment was expressed as challenging because of the way they experienced interaction with the clinical teacher. As argued (Perry and Francis, 2010; Reay 2010; 2009) working-class students are more likely to encounter disjuncture and alienation in university because of their lack of familiarity with the university environment. Similarly, they experience the clinical setting as an environment filled with challenges.

Yasaar's clinical experiences, for example, exemplified the way working-class students appeared to approach learning in the clinic. The independent learning expected in the oral health program was contrary to what Yasaar expected, as indicated in her testimony above that the "supervisor must be right next to me and tell me ... this is what I must do". While Yasaar herself felt she needed assistance with her technical skills, as illustrated in her testimony regarding scaling competence, like all students in the program she needed to conform to what university education expected – that is, by showing a deeper understanding of practice through drawing on theoretical knowledge from a range of sources. Yasaar's emphasis on her need for technical assistance, rather than on other aspects of clinical practice such as professional or clinical reasoning skills, suggests that her attention was focused largely on technical aspects and getting a task done, rather than on the reasoning involved in the task. This misplaced emphasis may have led to her overall average performance in the program (refer to Table 5.2 and 5.3), given that theoretical application and reasoning formed the basis of clinical practice (UWC, 2008a).

Yasaar's academic performance suggests that her assessment of the clinical challenges with which she struggled was well founded. In her testimony, she offered insights into her lack of confidence in relation to her competence. Competence related to what she knew about her ability to perform a task ("You don't know"), while confidence related to

her judgment, which influenced whether she was willing or not to perform the procedure (“Didn’t know how to ... I don’t want to”) (Stewart *et al*, 2000). Thus Yasaar’s lack of skills (“scaling”), knowledge (middle performance group), attitudes (“don’t want to”) and abilities (“don’t know how”) undermined her competence, which in turn affected her performance (ANMC, 2005). The emphasis she placed on needing feedback and engagement with the clinical teachers seemed to be closely related to her lack of confidence in her clinical skills. From both Yasaar’s testimony and that of Alexander it is arguable that clinical teachers need to be equipped with the skills to support the academic development and associated academic confidence of students like Yasaar in order to help develop their clinical competence.

Working-class students’ reports on their experiences of interacting with their clinical teachers also suggest that they saw the teachers as behaving in ways which were both disrespectful and unhelpful for their learning. Their experiences appeared to be in contrast with those generally expected in clinical teaching – clinical teachers are expected to act as appropriate role models and to model the behaviour that they expect of their students (Ali, 2012; Lombarts *et al*, 2010; Kilminster *et al*, 2007). While the students’ accounts were a subjective record of their perceptions of being criticized, such perceptions can have real effects. Importantly is the effect that these experiences appeared to have on their morale, intent to engage and their learning.

In terms of student morale, Zeta’s testimony captured her reaction to being criticized when she was told she was “not up to scratch” and not knowing the reason for it. Her testimony also suggests either that she did not get adequate feedback and so could not improve her practice or that she had some significant learning gaps in that she genuinely did not know what it was that she was doing wrong. In either case, there was a potential effect on Zeta’s morale. Her experience would also have led her to lose confidence in herself and to feel despondent and humiliated.

Other working-class students also claimed to have had experiences that were suggestive of being discouraging and demeaning, as was evident in the comments from their

testimonies. Given the failure of the clinical teachers to provide quality feedback to these students, the teaching sessions appeared to have been ineffective, and as a consequence undermining the students' interest in learning in the overall program. Yasaar attested to this with her claim that the clinical teaching was unhelpful for her learning: "I have a problem in learning". The consequences of students experiencing clinical learning as demotivating and unhelpful is that it can result in the students' withdrawal and lead to their failure (Mattila *et al*, 2009:155). For working-class students Chelsea, Nasra, Zainub, Nicole and Zeta, their demotivation and struggles in their clinical learning is assumed to have had real effects in that they repeatedly failed in the program particularly in clinically-based modules.

From the above testimonies, it is interesting to note and to speculate that not only are the outcomes of learning in clinically-based programs influenced by the students' experiences but that these experiences are possibly shaped by the attitudes and overall behaviour of their clinical teachers in the learning process (Oyeyemi *et al*, 2012). This section highlighted how clinical teachers were felt by students to contribute to a climate which could either support or hinder their learning, depending on the attitudes and behaviour that their teachers displayed during teaching and feedback (Mattila *et al*, 2009). However, it appears that the clinical teachers' lack of foresight in understanding the different learning needs of their students may have played a more significant role in why the students struggled. While feedback on errors and corrections must be conveyed explicitly so that mistakes and weaknesses are acknowledged, such feedback should be carried out with empathy, support and respect (Ramani & Leinster, 2008; Kilminster *et al*, 2007).

The clinical setting is generally regarded as a context in which competences are acquired, practice is mastered and experience is gained (Lewin, 2007). In the current study, however, it was seen as a context in which learning was compromised for working-class students. This assertion reflects a significant relationship – the students who *struggled* with learning in the clinic were the *working-class* students and they were also those who did *not perform well* academically, as evidenced on the mark schedules. From these

statements it can be concluded that a relationship exists between poor clinical learning experiences, social class and academic performance (and hence clinical competence). The reason for this apparent relationship is the mismatch of capital: what the students expect as the learning requirements in the clinical setting and the alternative expectations of the university lecturers, results in the disjuncture that working-class students in particular seemed to have experienced.

7.4.5. Conclusion: students' experiences of teaching and learning

Two aspects were focused on in the preceding section. Student engagement was discussed using group-work in the classroom to explain how diversity and classroom approaches to teaching (*institutional pedagogy*) impacted on academic integration. This was followed by a discussion of the role the lecturer played in facilitating engagement and learning both in the classroom and the clinical setting. In particular the section created an understanding of how students' academic experiences in the classroom and in the clinical area shaped their learning, arguing for the potential influence that these experiences may have had on their performance and clinical competence.

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The next section presents concluding comments in terms of the nexus between students' academic experience, their motivation, persistence and performance. The effect of students' social and academic preparation for university, their experiences in the learning environment, which included interaction with peers and teachers in the classroom and clinical setting, in addition to their performance, are central to the reasoning behind their motivation and persistence. The section highlights how students who came from disadvantaged backgrounds and who struggled with academic competence, new subject matter, clinical skills and institutional ways of doing, were predisposed to experiencing feelings of despondency and demotivation. Of significance is how these experiences contributed to their overall motivation, persistence, integration and performance in the program.

7.5. The nexus between social class, persistence and performance

7.5.1. Introduction

Taking persistence as seminal to student performance and success (Tinto, 2010; 1975), this section shows how as a consequence of students' academic experiences their motivation was affected. Because motivation is affected, students' thoughts about persistence are also influenced. The purpose of this section is to foreground how the academic experiences of middle-class and working-class students impacted differently on their motivation and thoughts about persistence. Highlighting the differences between social class groups serves to define the relationship between social class, persistence and performance.

Several academic and social factors influence a student's tendency either to persist or to withdraw (Tinto, 2006). These factors are often intertwined and complex, particularly when social class and economic and cultural capital is taken into consideration (Archer *et al*, 2003). Furthermore, when students find themselves in programs which are both difficult and intensive their perseverance may be threatened and they may be compelled to withdraw (Fozdar *et al*, 2006). In the event of their becoming demotivated and losing confidence, their thoughts, attitudes and actions relating to persistence may be influenced, affecting their overall success in the program (Tinto, 1975).

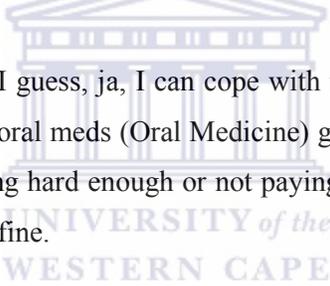
Although these issues can affect students in general, this section highlights how social class locations influenced the decisions taken by students, their experiences and consequently their varying perceptions and different kinds of engagement. Earlier in this chapter, the middle-class students' display of confidence and ability to cope were presented as a contrast to working-class students' difficulty with the program, their demotivation and lack of confidence. The following testimonies suggest that, while middle-class students framed their experiences around thoughts of coping, working-class students framed theirs around the decision whether to persist or to drop out. This section is significant in that, although the *intent to persist* may be a proxy for actual persistence (Tinto, 1975), it could also be a valuable indicator as to whether the student is thriving.

7.5.2. Middle-class students' framing of perseverance

“It’s quite demanding, but I guess, ja, I can cope with this” (Komilla)

Middle-class students’ testimonies in this chapter thus far have revealed attitudes and behaviours associated with persistence. Although there were no direct accounts from them related to persistence, the attitudes and behaviours they displayed were characterized by their perceptions that they could cope and by their show of confidence, determination and motivation. These characteristics feed into the discourse of persistence and success (Tinto, 2010; 1988; 1975). These characteristics of persistence will be explored in the discussion in this section.

Komilla’s testimony serves as an example of *intent to persist* through highlighting a significant aspect of persistence – the ability to cope in the midst of challenges:



It’s quite demanding, but I guess, ja, I can cope with this. It hasn’t gotten too hectic for me where I can’t cope ... oral meds (Oral Medicine) gets me now and then, but that may be because I’m not working hard enough or not paying as much attention in lectures as I should. If I do that, I’ll be fine.

Her testimony indicates she was clear in knowing what she needed to do to succeed. Further, it suggested that she had the confidence in herself, in that, if she did what she knew she should be (and is capable of) doing, she would be fine. Her testimony reflects the cultural capital which she brought to the university which enabled her to meet the academic demands of the program and to succeed.

While coping featured strongly in middle-class testimonies for students such as Taylor: “I’m enjoying this” and Komilla: “I can cope with this”, it was the opposite for working-class students. For working-class students coping was their challenge and often led to them having thoughts of quitting and dropping out.

7.5.3. Working-class students' framing of perseverance

“There is some days when I feel really ... I want to quit” (Monique)

Students who framed their experience at university and in the program around thoughts of dropping out were working-class students who generally performed less well than middle-class students. While their thoughts were aligned to several factors, these were confined to academic and social class issues.

The testimonies of the working-class students Monique and Yasaar suggest that their experiences of the work in the program led them to consider dropping out. Monique described the effect of being overwhelmed by the workload and the attitude of the lecturers and explained how these feelings led her to consider leaving the program:

There is some days when I feel really ... I want to quit because it is getting too much work and things and then it doesn't help if you have a lecturer that shouts at you and things ... so that also makes you quite ... it is complex and difficult.

Yasaar's testimony also alluded to the workload as being overwhelming, which also led her to think about dropping out of the program: “It just made me go crazy and I just wanted to quit ... everything like builds up with too much work”.

Comments by Chelsea, Colleen, Nicole and Amber, on the other hand, suggest a connection between demotivation and their thoughts about dropping out. They shared a number of experiences which could account for their feeling this way. All had in common problems with poor academic preparation, felt that the program workload was intensive and overwhelming, struggled with the academic competence and had learning challenges in both the classroom and the clinic. Chelsea connected her demotivation with poor academic performance: “I feel I don't achieve anything sometimes ... I feel it's not worth going on”. Colleen expressed strong views, adding that studying in the program was not for her: “This is not for me”. Zainub's testimony captured her despondency over her challenges in the clinical sessions: “You're so negative, you don't feel motivated enough to go on”.

Nicole's reasons for her demotivation were somewhat more prominent and were not confined to her academic struggles. Her earlier testimony of challenges in her community, together with her experiences in the program had impacted on her will to study: "I just want to study when I need to study ... I don't know... I don't feel like studying. It is just not working for me". Her further testimony revealed that her demotivation was closely linked to her culture in her community, which earlier was aligned to her social class location: "I am not motivated because it is my culture not to study". Amber, on the other hand, was not sure what exactly contributed to her thoughts around dropping out: "I don't know what the problem is ... it may be willpower ... I think it is that ... I am not motivated to study actually". In Chapter Five, both Nicole and Amber described the challenges of living in communities in which education was not emphasized. For these students, academic challenges alone did not explain their debate about whether to drop out or to persist. Social class appeared to be intertwined with their academic challenges, amplifying their difficulties in the program.

Drawing on the evidence presented thus far in this study, the underlying reasons for the differences between middle-class and working-class students in terms of intent to persist will be discussed. This discussion is framed using the lens of cultural capital and the educational climate to explain the contrasting attitudes of middle-class and working-class students towards persistence.

7.5.4. Discussion on students' framing of perseverance

The student's background is understood to play a seminal role in the way students are prepared for university and how they experience the educational environment (Tinto, 2012a; 2010; 1975). This environment is seen to be equally responsible in shaping students' experiences (Tinto, 2012a; 2010). However, it is the convergence of the students' social class locations and the academic environment that together influence their chances of success, leading either to persistence or the decision to drop out (Tinto, 1975). For middle-class student Komilla, several pre-university characteristics framed her experiences at university and hence her attitude to persistence. Apart from her ability to cope and manage her performance, as indicated in her testimony above, her other

testimonies in this chapter illustrated her qualities of goal setting, motivation and perseverance (Tinto, 1975). For Komilla and other middle-class students like her, the goal of becoming oral hygienists enabled them to overcome any challenges and they ensured their academic drive in group-work and problem-free classroom and clinical experiences. Their preparation and set goals directed their behaviour and attitudes, helping them to persist and complete the program successfully.

For middle-class students like Taylor, Ashley, Gabriella, and Komilla, the decision to be at university and in the oral health program was the result of a well-researched and planned process. This included clearly thought-out goals which not only promoted their motivation but also resulted in realistic expectations (Reay *et al*, 2005). Such planning and motivation were not unusual among middle-class students and were clearly aligned to their long-term goals and plans (Reay *et al*, 2005). Thus when they entered university they understood that being there meant striving to achieve those goals. They also made every effort to perform well, as indicated by the strategies which they adopted, for example, Taylor's determination to repeat something until it met her own standards of excellence.



Komilla, as she indicated in her testimony in this section, had a remedy to address areas which she conceived as challenging (“If I do that, I’ll be fine”). She was aware that dedicating her time and working hard would enable her overcome any challenges because she knew what it would take to be successful. Her ability to manage any changes in her expected performance attests to the confidence she had in herself – a further attribute associated with being middle-class. The confidence of Komilla and other middle-class students stemmed partly from their access to a range of resources which enhanced their knowledge base. Their quality schooling, for example, had equipped them with skills and academic competence. This form of preparation shaped their confidence, motivation and ability to cope in the program and was consequently matched with their academic performance in the program (refer to Tables 5.2, 5.3 and 5.5). This match was reflected in their positions in the high performance category. For these students, academic experiences and good performance were iterative. They had come to university already

prepared with the academic cultural capital and confidence they needed to perform well, knowing that these insights and skills were valued for university success. When they performed well it affirmed for them that they were doing the right thing, which further enhanced their confidence levels. Given their cultural capital, these students were able to work in accordance with the expectations of the program and as a result achieved good performance.

In contrast, the experiences of working-class students were complicated by several factors, leading to low morale and thoughts about quitting. Their problems with poor academic preparation, with the program's workload and intensity, with poor academic competence and challenges and learning both in the classroom and the clinical setting were among the factors which reduced their motivation to persist. Their testimonies foregrounded the role they assumed the institution should play in accommodating, supporting and facilitating their transition into the university environment (Tinto, 2012a; 2010). The educational climate, shaped as it was by the institutional culture, structure and pedagogy, was seen as seminal in shaping these students' challenges with their engagement, motivation and persistence in the program (Tinto, 2012a; 2010).

Furthermore, these students' experiences of *alienation* and *othering* as recorded in earlier discussions emphasized further eroding of their motivation. Their motivation to persist in a program appeared to be affected by the educational climate. The literature suggests that if they experienced the climate as supportive and felt they were included and heard, their motivation would have been enhanced (Reay, 2010; Case, 2007). On the other hand, if they were not given support and were marginalized by the classroom climate, their motivation to engage or even persist might be eroded (Tinto, 1975).

Apart from academic factors affecting their integration into the institution, social factors such as access to cultural and economic capital (Bourdieu & Passeron, 1977) also contributed to the working-class students' demotivation and their temptation to drop out. Poor quality schooling, lack of academic guidance from parents and family, difficult living environments and low educational aspirations in the communities from which they

originated were among the challenges they faced (Chapters Five and Six). Working-class students both in this study and in general (Reay *et al*, 2005; Archer *et al*, 2003) enter university with few career insights or academic competences. When they perform poorly, they lose confidence and motivation, and contemplate dropping out. Reay *et al* (2005:135) explain that enrollment for working-class students who lack “appropriate cultural and social capital” carries with it the risk of poor performance or even dropping out because of the risky and unstable position from which they start university.

For the working-class students in this cohort, their experiences and feelings about dropping out were a match to their low academic performance. In Chapter Five it was shown that, of the twenty working-class students, fourteen fell in the low performance category, at least six deregistered (dropped out) from the program, while eight struggled throughout the program (Refer to Tables 5.2, 5.3 and 5.4). For these students, their negative academic experiences and poor performance were iterative – they had come to university under-prepared in terms of both academic cultural capital and confidence. Poor performance only affirmed for them that the university might not be the place for them (Reay, 2006; Reay *et al*, 2005; Archer *et al*, 2003) further reducing their motivation and their intention to persist. Given the limited cultural capital with which they entered university, these students were unable to work in accordance with the expectations of the program and as a result performed poorly, leading to their thoughts of dropping out. For the working-class students in this study, negative thoughts around *intent to persist* were a clear indicator of their failure to thrive.

In terms of the evidence from this study, it would appear that middle-class students are significantly more inclined to be motivated and to persist than working-class students. The data, both from testimonies and academic performance schedules, indicates a significant relationship between persistence and academic competence. Thus the relationship between motivation and persistence, which are the primary attributes students need to be successful (Tinto, 1975) is closely associated with social class in terms of the cultural capital students bring with them to the university experience.

7.5.5. Conclusion: the nexus between social class, persistence and performance

In this section, concluding comments were made about the students' notions of coping, motivation and perseverance in relation to their social class locations, their social and academic experiences in the educational environment and their academic performance. The study has highlighted that, just as preparation and appropriate cultural capital are crucial to the student's intent to persist, so too are social and academic experiences with peers and lecturers significant to their motivation and will to persist. Both academic and social integration are therefore crucial in influencing the learning experiences and academic outcomes for the student, including their intent to persist (Tinto, 2012a). The following section concludes this chapter on academic integration.

7.6. Conclusion to Chapter Seven: academic integration

Chapter Seven concludes the analysis sections of this study. The focus was particularly on students' academic integration. Several aspects were highlighted: students' perceptions of their program, their challenges of academic competence, the role of peers in shaping their academic experiences and of the lecturers in shaping their classroom and clinical experiences. The convergence of the students' backgrounds, in terms of the cultural capital that they brought with them to the university experience, as well as the educational environment, was argued to influence student academic integration. Their experiences were suggestive of their level of integration, contributing to an understanding of the aspects which shaped their performance.

Together with Chapter Six, this chapter offered evidence addressing the quality of academic life for students from both historically disadvantaged and advantaged societies. Analysis of testimonies of middle-class and working-class students, regarding their social and academic integration in the university, the research institution and the program, allowed conclusions to be drawn about their differential experiences. Evidence was also provided to address the question how and why certain issues influenced them and in what way, and to what extent the institutional culture at the University of the Western Cape accommodated all students. The following chapter concludes the thesis, offering concluding statements and recommendations for future research.

CHAPTER EIGHT

CONCLUSION, RECOMMENDATIONS AND FUTURE RESEARCH

8.1. Introduction

This chapter concludes the study on the influence of diversity and the educational climate in shaping clinical competence of oral health students. The chapter revisits the purpose and aim of the study, the research questions, the concepts used and the methodology. Salient findings are then summarized and the significance of the findings and the limitations of the research are discussed. Recommendations are then provided for higher education professionals involved with institutional governance, academic support, staff development and teaching. The chapter concludes with suggestions for future research.

8.2. Purpose and aim of the study

High attrition, low retention and low throughput are major problems in South African higher education institutions, particularly for students from disadvantaged backgrounds (CHE, 2010; 9009; Scott *et al*, 2007). Persistently low levels of performance are an increasing concern for the various stakeholders (government, funders and university management and administrators) and especially for educators at classroom level (Koen *et al*, 2012 *et al*, 2012; Strydom *et al*, 2012; Wilson-Strydom, 2010; Breier, 2009; van Schalkwyk *et al*, 2009a; Breier *et al*, 2007; Scott *et al*, 2007; McMillan, 2007a; 2007b; 2005a). These concerns were shared by the present researcher in her capacity as educator in the oral health program at the Faculty of Dentistry, University of the Western Cape. Empirical evidence from the oral health program, which showed vast differentials in performance between students from different race and social class locations, formed the basis of this research. This differential performance gave impetus to an investigation aimed at gaining in-depth understanding of why some students thrived academically in the oral health program, while others failed to do so. In health sciences education academic performance is significant in that it reflects the level of clinical competence achieved. Diminished clinical competence has the potential to compromise patient treatment success. Academic performance in this context is therefore a key issue for scrutiny when students perform poorly or when they graduate under-prepared.

In South Africa, student success is influenced by multiple factors, the majority of which are associated with the legacy of apartheid wherein race and social class share a nested relationship. These factors include limited insight into the requirements at university and the associated academic challenges, and the lack of knowledge for the profession for which students are registered. These insights and competences are, for middle-class learners, embedded in the practices and assumptions of their homes and schools (Breier, 2010). Further factors include poor quality schooling (Scott *et al*, 2007), lack of academic readiness for university (Wilson-Strydom, 2010; McMillan, 2007b, 2005a), and limited access to the financial and material resources needed to support students' educational aspirations (Breier, 2010; 2009; CHE, 2010; 2009; Letseka & Breier, 2008; Breier *et al*, 2007). These factors signalled two major aspects as shaping students' success: race and their social class locations and the role of the institution. Hence in this study significant emphasis was placed on understanding the social, academic and institutional factors influencing academic performance.

Given the researcher's intent and the aspects highlighted above, the aim of the study set out to examine the influence of diversity and the educational climate in shaping the clinical competence of oral health students. The research was framed around a particular set of questions:

- Why is it that some students thrive while others do not?
- What is the quality of academic life for students from historically disadvantaged and advantaged societies?
- How and why do certain issues influence them and in what ways?
- To what extent does the institutional culture at the University of the Western Cape accommodate all students?

As the study unfolded, it became necessary to place emphasis on the following in order to address the initial research questions:

- The quality of academic life for historically disadvantaged and working-class students
- The research context in terms of the extent to which the educational climate at the Faculty of Dentistry accommodates these students.

This study did not intend to solve the issue of throughput and retention but rather to understand differential performance. It was envisioned that the findings would inform institutional strategies for increasing effectiveness and responsiveness to differing student needs. Further, the findings would facilitate those aspects of the educational climate that would favourably enhance the students' experiences.

In the following section the concepts around which the study was framed are highlighted.

8.3. Concepts seminal to the research

Diversity and the *educational climate* were the two concepts seminal to the theoretical parameters of the study. Diversity formed the backdrop to this study as an expression of the different socio-economic contexts from which students came from, specifically with reference to race and social class. In this study diversity was used in understanding how students' race and social class backgrounds influenced their performance. Drawing on Bourdieu (1986) and Bourdieu and Passeron (1977), the construct of *capital*, specifically *economic* and *cultural* capital, was used to explain how students' race and social class locations shaped their readiness for higher education and hence influenced their experiences and performance in the program.

Educational climate is defined as a "manifestation or operationalization of the educational environment" (Genn, 2001b:446). When students experience the overall educational *environment*, it is perceived as a *climate* (Genn, 2001b:446). The current study drew on the work of Genn (2001a; 2001b) and Roff and McAleer (2001) to suggest that the climate of an institution is shaped by a range of aspects, including the, structure and regulations of the institution, the institutional culture, the physical and material environment, and the teaching styles, expectations, attitudes and classroom interactions. Educational climate is then an appraisal, real or perceived, of the educational environment as it relates to interpersonal, academic, and professional interactions.

Tinto's (1975) constructs of *social* and *academic integration* allowed for an understanding of students' persistence in the educational climate, taking into account

their social and academic experiences. Central to the concept of *integration* were the students' *engagements, interactions* and *experiences*. *Experience* in this research referred to the social, institutional and curricula aspects with which the student engages during his or her *interaction* with the educational climate (Seabrook, 2004). Students' *engagement* was recognized as a crucial indicator of their *experience* since such experience, within Tinto's theoretical framework, depends on the extent to which engagement occurred (Mori, 2008; Tinto, 2006). *Engagement* was seen as a two-pronged concept. It referred to "what students do", including the time and energy they devote to educationally purposive activities and "what institutions do" to engage their students (Strydom *et al*, 2012: 3).

In summary, *cultural capital* denoted what students brought to the educational context in terms of the skills, dispositions, behaviours and attitudes which influenced their experiences, while the concept of *educational climate* allowed for an assessment of how aspects within the institution contributed to shaping the students' experiences once they had gained access. The following is a summary of the methodology used in this study.

8.4. Methodology

Because of the *interpretive* nature of the study, the approach to the methodology was based on the qualitative paradigm (Schensul, 2012; Creswell, 2012; Schurink, 2003; Byrne-Armstrong *et al*, 2001). This paradigm allowed for in-depth understanding and interpretation (Ritchie & Lewis, 2003; Patton 2002) of the factors influencing students' experiences and hence their performance. Using a case study design based on the characteristic principles of bounded place, context, time and activity (Creswell, 2012; Baxter & Jack, 2008), allowed for the study to be confined to a particular setting (Faculty of Dentistry of the University of the Western Cape), a particular context (the first-year class of 2007 in the oral health program), and particular time-frame (the period from 2007 to 2010 in which the students were tracked).

Although this study used a qualitative approach, both qualitative and quantitative data were collected. Quantitative sources included an analysis of records and documents, whereas strategies such as reflective writing, interviews, focus groups and observations

provided qualitative sources. This varied approach allowed for rich and detailed insights into student experiences. It also allowed certain data to be verified and thus to increase the internal validity (Crowe *et al*, 2011). A thematic approach was used to analyse the data which involved identifying, analysing, interpreting and reporting patterns and themes from the data (Bazeley, 2009; Braun & Clark, 2006). The following section presents the salient findings of the research.

8.5. Salient findings

This study set out to examine differential performance in the oral health program in terms of why it is that some students thrive while others do not. Drawing on the concepts of diversity and the educational climate to explain the factors influencing students' clinical competence, the following questions were posed: what is the quality of academic life for students from historically disadvantaged societies; how and why do certain issues influence them and in what ways and to what extent does the institutional culture at the University of the Western Cape accommodate all students?

The presentation of the salient findings follows a non-traditional approach. Unlike the approach used in most quantitative studies which answer research hypotheses, this section will present the salient findings in conceptualized categories framed around the research questions. Because the research questions were nested in nature, which means that they overlap and together they combine and function as a single unit in addressing the main question, it is therefore impractical to answer each question in isolation. Hence three distinctive categories informed the structure in which the findings were discussed.

The following three categories which are theoretically grounded thus served as a framework to present the analysis in this thesis and are used here to highlight the salient findings:

- The relationship between academic performance, race and social class
- Social integration
- Academic integration

The following aspects formed the basis for understanding thriving and differential performance: the first was student preparedness for higher education; the second was their ability to navigate their transition into university, the faculty and the program and the third was the factors that influenced their transition and subsequent integration both socially and academically.

As a departure point to addressing issues of preparation, transition and integration challenges, it was imperative to first assess which students were thriving and which were not. This aspect was addressed in Chapter Five. Firstly students' performance marks were analyzed alongside their demographical profiles. Thereafter performance was mapped against race and social class indicators. These insights allowed for an understanding of student preparedness for university. Further analysis of students' insider accounts served to add depth to understanding the social, academic, professional and institutional experiences as well as the factors that facilitated or deterred their progress. Chapter Six addressed the social and professional aspects whilst Chapter Seven focused on the academic aspects. Through these subsets of inquiry, the research questions were addressed. The nature of the inquiry and salient findings are presented below in the three conceptual categories.

8.5.1. The relationship between academic performance, race and social class

Chapter Five presented an analysis of students' performance and argued for a relationship between performance, race and social class. Final performance marks served as an indicator of clinical competence because of the way in which marks were accumulated from the practical and theoretical components associated with clinical practice. The final assessment mark at the end of each year in the program was a summative assessment and was a product of continuous assessments during the year plus a final year-end assessment. The analysis of student performance marks which included clinical assessments for the first two years of enrollment in the study period, informed the categorizing of student performance into three performance groups – high, middle and low performance. This process of analyzing the marks was guided by specific criteria.

The following conclusions were drawn from the students' performance scores. There was evidence of patterns showing an association between performance, race and social class. The low performance rates were associated with students who were both working-class and of colour (coloured, black and Indian students). The performance of this group was characterized by high rates (52%) of students repeating at least one year in the program, high deregistration rates (43%) among those who experienced failure at some point in the program, and increased time to graduation with some students taking up to four years to complete the two-year diploma program.

In order to assess how diversity in terms of race and social class shaped students' preparation for university, an initial step in the research process was to identify the range of privileges and disadvantages which students experienced in relation to their race and consequently classed locations. These included, for example, whether their parents had experience of, or were informed about tertiary studies, their home and neighbourhood environments as a stimulus for university attendance, as well as their access to schooling and other educational experiences which directly and implicitly prepared them for university. Analysis showed that middle-class and working-class groups had very different kinds of access to the various forms of cultural and economic capital that shaped their preparation in terms of what was valued and rewarded at university.

Middle-class students experienced privileges associated with both economic and cultural capital. The data highlighted that in terms of economic capital, apart from abundant access to material resources, such as, finance for university, residence in middle-class areas and having their own cars and apartments, they were rewarded culturally too. Their cultural capital was strengthened through the schools they attended, since these placed significant emphasis on career guidance and academic competence preparation. Through the material resources offered by way of good teachers, well-equipped school libraries, computers and science laboratories, the schools shaped the development of the literacy and linguistic skills which they experienced in rewarding ways at university.

Furthermore, middle-class students also benefitted by the way in which family members with experience of higher education supported them in making informed career choices resulting in their better orientation to the expectations of university. The aspirations and role modelling in the family context around higher education reinforced this educational trajectory as an automatic and natural progression beyond school education. Thus middle-class students, because of the cultural capital accrued through their good quality schooling and the support from their families, were prepared for and informed about the university's requirements and the associated academic challenges.

Working-class students, on the other hand, were predominantly the first in their families to attend university. As a consequence they had less insight into, or experience of university requirements and the associated academic challenges. They lived in low socio-economic areas and had less access to economic capital – this lack of capital impacted on them in several ways. Firstly, the working-class students in this cohort had attended poor quality schools which were less committed to preparing them socially and academically for higher education trajectories. Secondly, the evidence indicated that, coming largely from communities in which education was not a key focus, they had limited access to role models. Their motivation was also negatively affected because of the limited emphasis and low expectations these communities placed on university attendance. Furthermore, the disruptive nature of the communities from which the students came had a negative influence on their educational aspirations. Thirdly, the quality of their life at home was influenced by the stress that the financial burden of university fees and traveling costs additionally created. Combined with the challenges associated with their social class locations, their lack of insight into university and under-preparedness impacted on their sense of security and motivation.

In this section the school and the family were shown to play a fundamental role in shaping the cultural capital these students brought with them to the higher education experience. Differences in access to economic and cultural capital resulted in working-class and middle-class students being differently prepared for university. This difference

manifested in two ways: in students' experiences of social and professional integration, and in their experiences of academic integration into the program.

The salient findings pertaining to student social and academic integration are presented in the next two sections in response to understanding how and why certain issues influenced student integration and in what ways and to what extent the institutional culture at the University of the Western Cape accommodated all students.

8.5.2. Social integration

Social integration here refers to the students' interaction and engagement with the institution, with staff and peers, but also with intangible aspects such as the rules and regulations of the university. The study was underpinned by the notion that social integration is essential for academic integration and that greater social integration leads to greater academic integration. Students' progress is facilitated by this integration since it encourages them to persevere and to achieve academic success (Tinto, 1975). Therefore students' transition experiences and their eventual integration into the educational environment in this study were considered important for success (Tinto, 1988).

Based on the above understanding of student success, students' experiences of transition and integration into the institution were explored. The focus was on students' experiences of transition from the school and home environment to that of the university's and was examined from the perspectives of access to economic and cultural capital. Essentially attention was on how students used the different capitals to navigate their university experience.

Analysis showed that social integration was experienced on three practical levels: at the level of the university from the time the students first interacted with their new environment, at the classroom level in terms of their interaction with peers, and at the level of the profession in terms their experiences of transiting into professional roles. Significant differences in experience was noted for middle-class and working-class students in terms of social transition and integration. While middle-class students

reported to a lesser extent on these aspects, working-class students offered insights with much more depth, detail and frequency.

Middle-class students entered university prepared for the social transition because they accrued cultural capital which was valued and rewarded at university. Their experiences of geographic transition, their first encounters with the university, their classroom experiences and their adaptation to professional roles were all facilitated by the attributes, dispositions and skills they brought from home and school to the university experience. Their familiarity with the norms of university and the variety of attributes, such as confidence, independence and sense of entitlement also made it easier for them to make the transition not only into university but also into professional roles.

Working-class students appeared to face greater challenges than did middle-class students. The challenges they experienced with their social transition and integration into the university environment included feeling socially displaced in terms of moving home, having negative first encounters with the university, challenges with fitting in with the expectations of the program, lacking interaction with middle-class peers in the classroom and difficulties with professional integration. Being displaced from the home environment, separated from family, friends, and the familiar social settings and cultural practices to which they were accustomed, they found that integration into the university climate required a significant adjustment from them. These students, because of the lack of preparation through the home and schooling were unprepared for the requirements of university and the associated social challenges. As a consequence, they experienced their transition in challenging ways.

Apart from the social displacement and separation anxiety they experienced, working-class students found their social experiences in the classroom alienating when interacting with their middle-class peers. In situations such as classroom decision-making their integration was complicated by feelings of disempowerment when they were excluded from contributing. In this classroom, race, social class, language and performance differences were infused into how the students interacted with each other. This much was

evident from their seating positions in terms of who they interacted with, where they chose to sit as well as how students were included or excluded from making decisions.

For working-class students, a significant challenge was also in shifting from novice student to assuming a professional role. Not only were these students new to the university experience but they were also new to the profession. Becoming an oral hygienist was for most working-class students an unplanned choice and an unformed decision, thus, making both the university and the profession an unfamiliar territory. The mismatched expectations of what university would be like generated a tension with the expectations of the professional program. Some students reacted to this unfamiliarity with bewilderment and uncertainty, others with resistance. They struggled to adopt the behaviours and attitudes expected of them, and so experienced adapting to the professional role as challenging.

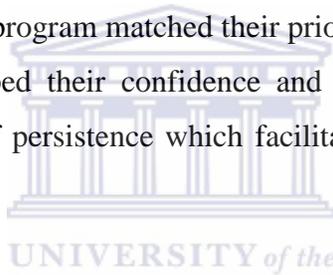
In addition, they also found that *inter-professional* interaction had an impact on their sense of inclusion in the faculty. Interaction with members of the dentistry fraternity was central to the structure in the faculty, but the kind of interaction that transpired was shown to contribute to a climate which alienated and excluded some students. Their perceived experiences of dominance, exclusion, alienation, and feelings of worthlessness and inferiority appeared to be instrumental in shaping their willingness to integrate professionally. Moreover, the social challenges and problems of integration that working-class students perceived they faced were not confined to their first year in the program, but surfaced as issues throughout their enrolment period.

8.5.3. Academic integration

Chapter seven largely addressed the question ‘what is the quality of academic life for students from historically disadvantaged and advantaged societies’. The chapter presented the students’ academic experiences of the program in order to gain insight into the academic and institutional factors affecting student performance and hence their competence. The following salient findings are presented in this regard.

Academic transition and integration were dissimilar for working-class and middle-class students. These differences were reflected in the students' expectations and experiences of the program, their challenges regarding academic competence, as well as in their responses to both classroom and clinical teaching and learning.

In the classroom context, middle-class students appeared to have had a problem-free academic transition – they had minimal, almost insignificant reporting of challenges when compared to working-class students. Their ease of academic transition and integration was clearly related to their prior social orientation and preparation for the academic demands of university. These students set their goals of becoming oral hygienists early in life. Given that they entered university prepared for what such a career entailed, they were ready for the academic demands which came with it. As a result, the work-load and intensity of the program matched their prior expectations and assumptions. Being prepared arguably shaped their confidence and motivation. These dispositions contributed to a momentum of persistence which facilitated their success (Tinto, 1993; 1975).



Middle-class students also demonstrated the attributes, dispositions, skills and academic preparation expected and rewarded by the university. They were familiar with inquiry-based learning and had the necessary academic competences, such as, accessing information, conducting research and reading and writing, already in place upon enrollment. Expectations from the school and the home also led them to value hard work. Further, they had clear expectations about the kind of work they wanted to produce and the marks they wished to attain. Collectively, the rewards of the investment of their cultural capital equipped them to transcend any specific challenges they encountered, whether in terms of language proficiency or interaction with their lecturers. Being academically prepared for the demands of university facilitated their overall academic transition and integration, and for these students it manifested as academic competence.

Analysis indicated that working-class students, on the other hand, were less informed about university and the course of study leading to becoming an oral hygienist. Hence their entry into the program was marked by ignorance and uncertainty. Their lack of

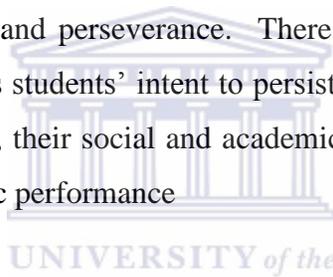
awareness impacted on their understanding of the academic demands of the university in general and of the program in particular. Not only were they under-prepared for the volume and intensity of the work but they also lacked the essential academic competence, experience and prerequisite skills demanded in the program. These students were not equipped as were the middle-class students with the skills needed to carry out research, access information, read, write and study effectively, nor the knowledge to respond to exploratory teaching methods. As a result, their academic transition and integration into the program were experienced as problematic.

The academic integration of working-class students was also negatively affected by the alienating experiences of peer learning. Because of their poor academic performance, they were excluded by their middle-class peers, for example, during group-work which involved significant student interaction. When they were included in middle-class groups they felt that their contributions were not valued, that they were being criticized for their efforts and were made to feel they were not good enough. Given that these students came from backgrounds of academic disadvantage, being grouped with other poorly performing working-class students only disadvantaged them further. Their chances for engagement and learning were compromised because the opportunity to interact and learn from more informed and able peers had been lost. For these students, whether they were included or not, the pedagogical approach of methodologies such as group-work put them at a disadvantage, compromising both their engagement and their learning.

Furthermore, working-class students appeared to react in negative ways to learning from particular lecturers. Their testimonies were framed around both classroom and clinical experiences. In the classroom, they felt that the lecturers taught in ways which assumed that the students had in place the prerequisite concepts, foundational knowledge and skills needed to grasp the subject matter being taught. They also maintained that lecturers did not prepare according to their needs – this perceived lack of preparation by lecturers was reported by students as having an impact on their experiences of learning.

In the clinical context, the students felt that the nature and quality of feedback influenced their clinical learning. Middle-class students reported constructive learning experiences. Their responses suggested that they were better prepared for and orientated to the program with a command of the learning that needed to take place. The working-class students, on the other hand, found the transition into the clinical environment challenging because of the way they experienced interaction with and feedback from their clinical teachers. They claimed that their teachers behaved in ways which was unhelpful for their learning. Such perceptions appeared to have had real effects, especially on their morale, intent to engage and consequently on their learning.

The last aspect highlighted in Chapter Seven turned attention to how the academic transition and integration challenges experienced by students appeared to impact on their notions of coping, motivation and perseverance. There was a vast difference between working-class and middle-class students' intent to persist. Intent to persist was related to students' social class locations, their social and academic experiences in the educational environment and their academic performance



Middle-class students did not report on any aspect that could be related to problems of persistence – the attitudes and behaviours they displayed were characterized by their perceptions that they could cope, as well as by their show of confidence, determination and motivation. Working-class students on the other hand framed their experience at university and in the program around thoughts of dropping out. For these students academic challenges alone did not explain their debate about whether to drop out or to persist. Combined with the challenges associated with their social class locations, their social and academic transition challenges and their poor performance their thoughts of drop-out was influenced. Their negative thoughts around *intent to persist* were a clear indicator of their struggles or failure to thrive. The following section offers concluding points on the salient findings.

8.5.4. Conclusion to the salient findings

The study provided evidence that allowed conclusions to be drawn about the influence of diversity and the educational climate in shaping the clinical competence of oral health students. The study addressed the major factors affecting thriving, in particular diversity in terms of race and social class and, the educational climate.

Middle-class students were shown to thrive while working-class students were either challenged to thrive or failed to do so. In this study, thriving was related to evidence of good performance, while *performance* marked *clinical competence*. Noticeable differences in performance were seen between these groups of students. Middle-class students' better performance and minimal challenges signaled their successful integration into the university and in the oral health program. Because of the kinds of privileges associated with their social class locations, they were prepared for the requirements of the university and the academic demands of the program. They were not affected as the working-class students were by the institutional structure, culture and pedagogy and so experienced the educational climate as a norm. Their learning and hence their clinical competence remained unaffected. In contrast, the working-class students performed poorly and struggled to thrive in most aspects. Because of their limited access to economic and cultural capital, they were under-prepared for the requirements of university and the academic demands of the program. As a result, they experienced the educational climate in significantly negative ways. The cumulative experiences of these students had real effects on their performance and hence on their competence. In the next section, the significance of the findings is discussed.

8.6. Significance of the research

The study is significant in that it makes a contribution to understanding the differences in performance between middle-class and working-class students in an oral health program in the South African context. This following section argues for the ways in which the study makes a contribution to the research context.

This study set out to gain an in-depth understanding of why some students thrived academically in the oral health program, while others failed to do so. In South Africa this topic is a relatively unexplored area in terms of a qualitative understanding of differential performance particularly in the context of a post-apartheid legacy. The existing research on educational access in this country on increasing participation and differential performance offers significant statistical insights (Badat, 2010; CHE, 2010; 2009; Scott, 2009; Scott *et al*, 2007). However, only a limited number of South African studies have focused on the qualitative meaning of these statistics or on students' experiences in higher education (McMillan, 2013; 2007b; 2005a; Wilson-Strydom, 2010; Breier, 2009; van Schalkwyk, 2008a; Breier *et al*, 2007). Little is also known about the qualitative nature of differential performance and the lived experiences of *health sciences students*, in particular those from working-class or historically disadvantaged communities (Wilson-Strydom, 2010; Wilson-Strydom & Hay, 2010; Breier, 2009; McMillan, 2005a). Even fewer studies have examined the role of South African institutions in effecting the integration of such students (Koen *et al*, 2012, 2012; Strydom *et al*, 2012; van Schalkwyk *et al*, 2009; van Schalkwyk, 2008a; McMillan, 2005a). Currently there are no studies addressing differential performance of oral health students in the South African context.

The present study also makes a contribution in other ways:

- In terms of the knowledge generated, the study allows a qualitative understanding and explanation of the factors relating to the differential performance of oral health students in a particular context and over a specific time-period. This insight could not have been gauged from other studies. In this way the current study has fulfilled its original intention and purpose. The findings foreground that not all students enter university prepared in the same way and that they have different kinds of social, academic and professional needs. These findings will be used to inform appropriate support interventions for subsequent students in the program.
- The findings have also made contributions to the higher education sector. Although the study intended to satisfy a need to understand differential performance in the oral health program, the findings also contribute to the larger national debate and concerns about differential performance and under-preparation of students for university. It

further contributes to the national call for institutions to understand the qualitative nature of the needs of the students they enrol and to explore how best to help them complete their studies successfully (Ramphela, 2013; CHE, 2010).

- Methodologically, the longitudinal design deployed in this study allowed for a depth of inquiry which could not be gained from a single entry into the participants' lives.
- Theoretically, the study foregrounds the issue of professional integration, a relatively unexplored area in health professions education (Koltz & Champe, 2010). In exploring the concept of professional integration, the study highlights the significant transition that students are required to make in order to integrate into professional roles. This area is frequently neglected in higher education studies which focus primarily on the academic and social aspects of student transition and integration.

This study highlights the role that the Faculty of Dentistry plays in addressing the challenges of differential performance. In the absence of adequate social and academic preparation for some students at school level, it is incumbent upon the institution to identify ways of facilitating student transition and integration into the institution (Tinto, 2012b). The following section offers recommendations to this end.

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8.7. Recommendations

The findings in this study show how issues of *diversity* and the *educational climate* contribute to shaping the clinical competence of oral health students. This section is framed in terms of what faculty could do to support students' transition and integration at social, academic and professional levels. Given that students have unequal access to capital, they are differently prepared for the social and academic demands of the university and the program. Simultaneously, the faculty, through its culture, structure, and pedagogy, contributes to creating an educational climate which either supports or impedes students' integration, in both social and academic ways. In combination, issues of diversity and the educational climate influence the students' experiences, particularly those from working-class backgrounds, in three significant ways: in their transition, in their integration, and in their performance in the program. In view of the above, the

following recommendations are suggested for ways in which student transition and integration could be enhanced:

- **Addressing student under-preparation**

The research institution plays an integral role in ensuring a strategic and coordinated approach to supporting students from different social class locations, helping them to integrate both socially and academically. However, students from working-class backgrounds who are not adequately prepared for the demands of university study ideally require intervention well before the point of entry into the faculty – early intervention strategies would ensure their successful transition and hence integration.

Students who require such intervention need to be identified through particular pre-enrollment assessments that provide insights into their preparation at both social and academic levels. The current national academic readiness assessment, the National Benchmark Tests²⁹, only considers *academic* readiness. It is recommended that, in addition to the academic readiness assessment, a *social* readiness component be administered at faculty level for all students enrolling in the oral health program. This component should capture aspects such as student demographics, family history of university attendance, career choice, students' schooling background, their exposure to extra-mural activities, their parents' employment, and their commuting arrangements to university. Together, these assessments would provide insights into the level of student preparation as well as possible barriers to progress. These assessments could then inform the kind of intervention required, based on individual needs.

Although the university and faculty have in place some early interventions aimed at providing orientation and insight into the oral health program prior to student enrollment, such as, career open days and information-sharing opportunities, these sessions are insufficient for prospective candidates. An investment in an induction program directed at pre-selected students *prior* to enrollment is recommended. It should involve interaction

²⁹ The National Benchmark Tests (NBTs) focus on academic readiness for university study. Each test requires application of prior learning - what the student knows and is able to do - to materials that reflect expectations for first-year students in university programs (National Benchmark Tests Project, 2013)

between prospective students and senior students, lecturers and management staff. However, to be effective, orientation should involve more than just information sharing (Tinto, 2012b). The induction program needs to embed opportunities for students to experience what the classroom and clinical settings offer. The induction program would allow them the opportunity to finalize their career decisions prior to enrollment. It would also give them a deeper insight into the kind of work-load involved and the expectations of the faculty and the program. Given that only a small proportion of prospective students live outside the Western Cape, such an induction might take place as an oral health winter week or spring week during the school vacation period. However, in order to avoid a cost to the student, the faculty would need to secure sponsorship to fund accommodation, food and travel for the prospective participants to attend.

Students who are identified through the academic readiness assessments as requiring academic literacy support need to be inducted into the mainstream program through a far more extensive academic literacy focus than is currently available in the first-year oral health program. First-year students currently register for a module which develops university-level academic literacy skills, but this study has shown that working-class students have not found this intervention adequate to prepare them for all the academic challenges which they face at university. The academic literacy competences that these students did not master at school often remain unresolved when they enter the university. It is therefore suggested that it is not enough to embed academic literacy competences at the first year alone, but that these should also be incorporated into the second and third years of the program. In this way academic competences would be reinforced at all levels. By making the findings of this research available to the faculty education advisor, who also coordinates the academic literacy module, a restructuring of the curriculum could be motivated for, planned and implemented.

Another way of addressing the issue of academic under-preparation would be to develop a foundation provision of one year as an adjunct to the oral health program for those students who require it. This foundation would need to be discipline-specific and would shape students' preparation for the mainstream program. It would allow them an

opportunity to acquire particular competences and knowledge. In the sciences, for example, students could be orientated to the terminology and concepts that they would encounter in the mainstream program. The curriculum should be designed so that those in the foundation provision could spend ample time in the clinical settings with senior students. This aspect would serve to orientate them to the kinds of clinical work involved, setting a context for their future learning, as well as contributing to shaping them as professionals. This provision would not interfere with the current structure of the oral health program but would facilitate students' experiences and navigation into the mainstream. Oral health students who should be taking the foundation provision could be identified through criteria which took into account their Senior Certificate results, their student readiness assessments, English proficiency, academic literacy, knowledge in the sciences, and social readiness. A formula would need to be developed, one which incorporated the above diagnostic assessment scores, categorizing students into potentially at-risk performance students, average performance students and high performing students. This recommendation implies that at-risk students would spend an additional year before following the mainstream program. The current proposal for undergraduate curriculum reform in South Africa, which makes a case for a flexible curriculum structure that allows for an integrated intervention provision (CHE, 2013), could influence how the foundational provision is conceptualized and provided.

- **Increasing student support**

- Students' testimonies on their experiences of social and academic transition suggest a need for support and guidance from multiple sources in the university. Student mentoring offers a positive route to this support. However, the current clinical advisor program in the faculty, which involves teacher-student interaction, might not be effective for students who experience the climate as alienating. Such students, if allocated an advisor whom they perceive as contributing negatively to their academic or social experiences, might be reluctant to meet with the advisor or to share their learning difficulties and personal problems. Thus, students who are experiencing challenges and who arguably require much-needed support may lose out on the value that mentoring programs could offer them, particularly in terms of learning opportunities, progress monitoring and creating a

sense of belonging in the faculty. Increasing intervention is recommended and could take the form of support from various sources, such as access to advisors with whom the student feels comfortable and senior students who could share their lived experiences. In addition, increasing access to counselors, psychologists and/or social workers on the faculty site would significantly benefit the students. While support is currently available from practitioners on the main campus, it is less accessible to the oral health students. Access to support from any available source should be embedded as routine and viewed as part of the normal activity of students, rather than as a solution when a crisis arises. This would also alleviate the stigma that may be attached to students seeking support, given the association between seeking support and experiencing problems.

Other ways of supporting the students and enhancing their socialization and sense of belonging could be through further initiatives aimed at increasing interaction both between the diverse groups of students and between students and staff (Tinto, 2012b). The current initiatives, which include the faculty sports day and team-building, are inadequate as these events are one-off and are insufficient for building a sense of community and belonging. In the team-building event, only a few students attend at a given time rather than all the faculty students participating together in one event. Furthermore, team-building is not structured with ways of addressing issues of diversity in mind. Further strategically planned events aimed at increasing diversity interaction, cultural awareness and sensitivity are therefore recommended. These events would be a beneficial adjunct to the existing initiatives. However, they should not be confined to one-off events, but should rather be *on-going* in the faculty.

- **Improving the effectiveness of the educational process**

In view of the fact that the diversity of the student body in the higher education sector has increased dramatically since democratization, particularly in terms of race, language and educational background, change in educational processes to support such diversity has not been significant (Scott *et al*, 2007). Scott *et al* (2007:39) highlight that although diversity is enshrined in national education and university policy statements, the associated practical changes of educational processes, such as, teaching approaches, the

curriculum framework, the design of its component parts, assessment, and student support, remain in need of reorientation. Tinto (2012b) maintains that in order to improve the quality both of students' learning and their performance, a faculty needs to focus actively on ways to create an educational climate for all, rather than only for some students. To assume that students will adjust to the educational climate and integrate socially and academically is wishful thinking.

- **Staff development in support of student learning**

In the current study, students' testimonies raised issues and concerns about the nature and quality of teaching given by the staff. In particular, lecturers needed to accommodate the diversity of students in their teaching. Issues raised included lecturers recycling lectures and notes used in the dentistry program, taking no account of the students' prior preparation, knowledge or understanding of the subject matter being taught, speaking above the students, and providing inadequate or poor quality feedback during clinical learning sessions. These findings could be presented to the faculty education advisor, so that staff development programs could be tailored that would help academic teachers to understand that each student brings to the university different forms and amounts of capital. Such a program would focus on assisting teachers to prepare activities which engaged with the specific learning needs of each student. It could include appropriate preparation of teaching and learning materials, innovative teaching methods and ways to enhance student-lecturer interaction and engagement. Off-site learning activities, such as community engagement projects, for example, would also have the potential to nurture learning for all students. This strategy would draw on the lived experiences of working-class people, including students. Such opportunities could bring out the hidden strengths of such students once they were in communities with which they could identify. These teaching strategies could contribute in other ways as well, in that they would favour interaction across diverse groups and create the potential to enhance peer learning.

8.8. Limitations of the study

Although this study was significant in creating an understanding and provided explanation of student differential performance, there were certain limitations inherent in this study:

- The cohort comprised of one black African student. Delineations between groups of students in some instances posed as a challenge, for example, when describing behaviour and attitude between race groups.
- Language may have posed as a barrier to students during the reflective writing exercise or when expressing themselves in the interviews. This challenge if experienced has the potential to influence the quality and authenticity of the data.
- The tracking of all the students in the cohort was incomplete.

Student tracking was limited to those who persisted in the oral health program and did not include those who deregistered. Although some students who deregistered participated in the reflective accounts and questionnaires, not all were included in the interview sessions since they had left the program prematurely. Understanding the experiences of this group of students would have allowed greater insight into the challenges in the program or personal which would have led to their departure.

- Transferability

Because of the qualitative nature of the study and it being a bounded case (that is a specific cohort in a bounded context and bounded time frame), the researcher is not in a position to specifically state the transferability of the research findings. The ability and degree to which aspects of the research method and findings can be applied in other settings are dependent on several factors. The first is the conditions of the research situation – meaning how similar or different the original research setting is to that to which it is being transferred. The second is the usefulness of the research findings to individual researchers and readers. By the researcher providing sufficient information about the setting, the sample and the data should be an indication as to the extent to which applicability, generalizability and transferability could be made. The act of transparency in this regard employed in this study allows readers to make informed decisions about which aspects of the study may be transferable.

Whilst other year groups in the program preceding and following the class of 2007 showed similar patterns of differential performance, this study was limited to tracking one class. It could be argued that the experiences reported by this cohort were idiosyncratic, that is, not universal for students in the oral health program at the research institution. Insights from other cohorts would have revealed whether the factors affecting student performance were generic or specific. Had the research participants been drawn from a larger student body in the faculty or a bigger institutional context, the data and findings might have some relevance to other groups of students in the oral health program or in other health sciences programs in the research institution. However, the findings are not representative of other students' experiences in the institution and were not intended to be.

8.9. Future research

In the light of the salient findings and limitations of the study, two potential avenues for further research are suggested.

- Research that tracked students beyond graduation into their roles as practicing professionals would offer greater insight into how students from different social class and racial locations integrate and thrive in a real-world situation.
- At present, research which explores the transition of the oral health student from university to a professional clinician is limited (Koltz & Champe, 2010). Increased knowledge of students' development towards professional roles could assist clinical teachers in understanding the aspects which facilitate professional transition and incorporate the lessons learnt into their clinical teaching.
- Research in other health sciences programs is warranted to increase an understanding of the effects of diversity and the educational climate on student experiences.
- Research on ways to improve educational processes that would impact positively on student throughput rates is suggested.
- Many issues that surfaced in the findings could not be addressed in this study. Issues such as claims made by participants about lecturers attitudes, students enrolled in a program for which they knew little of and made uninformed decisions about, are some of the aspects that need further exploration in future research.

8.10. Concluding comments

This chapter concludes the study entitled: *The influence of diversity and the educational climate in shaping clinical competence of oral health students*. After decades of research and interventions related to the influence of social class locations on educational attainment and achievement internationally, vast differentials in performance remain a concern in South Africa. This study was born out of a need to understand such divergence in performance, which in effect reflects clinical competence, between oral health students from differently raced and social classed backgrounds. The researcher therefore sought to gain an in-depth understanding of why some students thrived while others failed to do so.

This study has illuminated many ways in which student performance is affected by diversity, with particular reference to race and social class locations and the associated access to economic and cultural capital. In addition, it has presented ways in which the faculty, through its culture, structure, and pedagogy, is responsible for creating an educational climate which either supports or impedes students' integration, both in social and academic ways. Many of the issues that surfaced support much of what has been written in the literature about the problems of persistence, integration and poor performance of working-class students. While this study does not solve the issue of differential performance, it does make a significant contribution by gaining an in-depth understanding of the nature of differential performance between middle-class and working-class students in the program under study. It also offers in-depth data on which to base interventions aimed at improving the transition and integration experiences of students, and in so doing improve their performance. Improving the social and academic experiences of students enrolled in the oral health program is considered the first step towards improving their performance and hence clinical competence.

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APPENDIX 1

UWC: Point scoring system (sourced from faculty documents through the faculty officer)

A point is allocated for the value of each matriculation subject

Percentage pass	Higher Grade:	Standard Grade:
80-100	A = 8	A = 6
70-79	B = 7	B = 5
60-69	C = 6	C = 4
50-59	D = 5	D = 3
40-49	E = 4	E = 2
30-39	F = 3	F = 1

Example of point calculation

Subject	Grade	Percentage	Pass/Fail	Point allocated
English	HG	65	Pass	6
Afrikaans 2 nd language	SG	60	Pass	5
Mathematics	HG	68	Pass	6
Biology	HG	70	Pass	7
Accounting	HG	75	Pass	7
Geography	SG	70	Pass	5

Student qualifies for a Senior Certificate with Endorsement (matriculation exemption) (i.e. 4 subjects on higher Grade and 2 on standard Grade)

Total points scored: 36 points

APPENDIX 2

Scope of practice of the oral hygienist (excerpt from OHASA, 2004)

Legislation and Regulation governing Oral Hygiene Practice in South Africa

The practice of Oral Hygiene has been governed by legislation since 1969. Currently, the policy of the Health Professions Council of South Africa (HPCSA) states that courses in oral hygiene must be conducted at a dental faculty or a department of dentistry at a university. The scope of practice was initially enacted in 1974 by the Minister of Health and Welfare in the Medical, Dental and Supplementary Health Service Professions Act and extended in 2000 to include additional functions. The profession is regulated by the Professional Board for Dental Therapy and Oral Hygiene under the Health Professions Council of South Africa (HPCSA). In these regulations the "Act" means the Health Professions Act, 1974 (Act 56 of 1974), and any expression to which a meaning has been assigned in the Act shall bear that meaning, and unless the context otherwise dictates:

Scope of the profession of oral hygiene

The following acts are hereby specified as acts which shall, for the purposes of the application of the Act, be deemed to be acts pertaining to the profession of oral hygiene:

1. Develop, implement and evaluate oral health promotion programs;

2. Patient care:

a. Assessment:

- i. assess a patient by means of an interview and an oral clinical examination, which includes patient histories, oral hygiene practices, dietary and tobacco use, vital signs, extra-oral and intra-oral examination;
- ii. perform analogue and digital radiography and take clinical photographs
- iii. take impressions, cast, trim and polish study casts
- iv. refer to appropriate dental practitioner any conditions or presenting features outside the scope of practice of the oral hygienist

b. Diagnosis and treatment plan:

- i. make a differential diagnosis
- ii. make a dental hygiene diagnosis and develop an appropriate treatment plan within the scope of the profession of the oral hygienist
- iii. consult with dental therapists, dentists and dental specialists as appropriate

c. Education and preventive care:

- i. advise and educate patients about oral self-care practices
- ii. apply topical agents such as caries-preventive agents, remineralising agents, tooth-desensitising agents, topical anaesthetics and plaque-controlling agents
- iv. apply pit and fissure sealants

- v. perform scaling of teeth, scaling of implants and polishing of teeth
- vi. make study casts to produce protective vacuum formed mouth guards

d. Therapeutic care:

- i. apply minimally invasive procedures such as atraumatic restorative techniques (ART)
- ii. apply minimally invasive procedures such as sealant restorations
- iii. treat dentine hypersensitivity and cervical abrasion lesions with glass ionomer cement or appropriate materials
- iv. polish and recontour overhanging restorations
- v. perform root debridement
- vi. apply local anaesthesia

3. Perform the following supportive clinical procedures as prescribed by dentists and dental specialists:

a. Periodontics:

- i. take cytological smears
- ii. apply and remove periodontal packs
- iii. remove surgical sutures



b. Conservative Dentistry and Prosthodontics:

- i. place temporary restorations as an emergency measure
- ii. perform temporary cementing of inlays, crowns and bridges
- iii. place soft linings in dentures as tissue conditioners
- iv. place and remove rubber dam and matrix bands

c. Orthodontics:

- i. perform cephalometric tracings
- ii. relieve trauma caused by intra-and extra-oral appliances, such as the cutting of distal ends of arch wires
- iii. take impressions, cast and trim study and primary work models
- iv. place pre-activated orthodontic appliances, remove orthodontic attachments and bands (place and remove elastics and ligature wires, place and activate arch wires)
- v. re-cement orthodontic retainer.

APPENDIX 3

Extract from the 2007 Faculty of Dentistry Year Book: Entrance requirements for the oral health program

Diploma in Oral Health (OH)

Minimum requirements:

- In order to be admitted to the first year of the diploma the student must have obtained a School Leaving Certificate (Grade 12) with a pass in Biology of at least 40% (Higher Grade) or 50% (Standard Grade); a First Language Higher Grade; Second Language Higher Grade and an additional subject on Higher Grade, unless otherwise decided by Senate. A pass in Physical Science or Physiology with a minimum of 40% on the Higher Grade or 50% on the Standard Grade will be a recommendation.
- A minimum average of 50%.

Bachelor in Oral Health (BOH)

- In order to be admitted to the first year of the degree the student must have obtained a Matriculation Exemption Certificate or an equivalent certificate with a pass in Biology of at least 40% (Higher Grade) or 50% (Standard Grade); a First Language Higher Grade, Second Language Higher Grade and an additional subject on Higher Grade, unless otherwise decided by Senate. A pass in Physical Science or Physiology with a minimum of 40% on the Higher Grade or 50% on the Standard Grade will be a recommendation.
- A minimum average of 50%.
- Students in possession of a Diploma in Oral Health/ Hygiene require 3 years appropriate experience to be admitted to the degree (third year level).

APPENDIX 4 (extract)
SOUTH AFRICAN QUALIFICATIONS AUTHORITY
REGISTERED QUALIFICATION:

Bachelor of Oral Health

SAQA QUAL ID	QUALIFICATION TITLE		
7705	Bachelor of Oral Health		
Originator		REGISTERING PROVIDER	
		University of the Western Cape	
Quality Assuring ETQA			
CHE-Council on Higher Education			
QUALIFICATION TYPE	FIELD	SUBFIELD	
National First Degree	Field 09 - Health Sciences and Social Services	Promotive Health and Developmental Services	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	120	Level 6	Regular-Provider-ELOAC
REGISTRATION STATUS	SAQA DECISION NUMBER	REGISTRATION START DATE	REGISTRATION END DATE
Reregistered	SAQA 2663/05	2006-07-01	2009-06-30

PURPOSE AND RATIONALE OF THE QUALIFICATION

The oral hygienist will be trained as a public health professional, health promoter, clinician and researcher to contribute to the promotion of oral health at an individual and population level.

In addition this qualification will equip the hygienist as a multi-skilled professional as 25% of the course credits can be selected in the faculties of Education, Health Sciences, Arts and Economics and Management.

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

Diploma in Oral Health +3 years work experience or
 Matriculation Exemption with a pass in Biology of at least 40% on the Higher Grade or 50% on the Standard Grade.

EXIT LEVEL OUTCOMES

1. Demonstrate communication, reading, academic writing, listening, problem solving and basic computer literacy skills
2. Make decisions based on a review of available evidence.
3. Understand and apply the principles of health promotion
4. Understand that oral health is an integral component of the general, social and economic health of society
5. Demonstrate a positive, consistent, informed behaviour towards the promotion and maintenance of oral health and prevention of illness at individual and population levels
6. Demonstrate sound educational and communication skills in providing appropriate education to individuals and groups in a variety of settings
7. Measure and record basic oral health levels in individuals and groups
8. Design, implement, evaluate and manage oral health programs within communities
9. Integrate their knowledge and skills to function within a multi-disciplinary primary health care team
10. Recognize and be able to manage certain oral diseases
11. Demonstrate a practical understanding of epidemiology, biostatistics and research
12. Do a research project, including a research protocol, research process and a report.
13. Provide basic oral health care and specialized care within the scope of the hygienist
14. Perform clinical procedures according to the scope of a hygienist as defined by the HPCSA
15. Be equipped to perform clinical procedures within a specialist practice e.g. orthodontics, periodontics, maxillo-facial surgery or prosthodontics.
16. Apply preventive procedures including dietary counseling to a range of patients including the medically compromised and disabled.
17. Be able to assist in general and specialist practices
18. Make ethically informed decisions within their scope of practice.

ASSOCIATED ASSESSMENT CRITERIA

1. Effective communication skills are demonstrated through reading, academic writing, listening, problem solving and basic computer literacy skills
2. Decisions are made based on a review of available evidence.
3. The principles of health promotion are understood and applied
4. Knowledge and understanding is demonstrated to reflect the inter-relationship between oral health the general, social and economic health of society
5. Oral health and prevention of illness at individual and population levels are positively and consistently promoted and maintained through informed behaviour
6. Sound educational and communication skills are demonstrated in providing

- appropriate education to individuals and groups in a variety of settings
7. Basic oral health levels are measured and recorded in individuals and groups
 8. Oral health programs are designed, implemented, evaluated and managed within communities
 9. Knowledge and skills to function within a multi-disciplinary primary health care team is demonstrated in an integrated way
 10. Certain oral diseases are recognized and managed
 11. Practical understanding of epidemiology, biostatistics and research are demonstrated practically
 12. A research project is completed which includes a research protocol, research process and a report.
 13. Basic oral health care and specialized care are provided within the scope of the hygienist
 14. Clinical procedures are performed in accordance with the scope of a hygienist as defined by the HPCSA
 15. Ability is demonstrated to perform clinical procedures within a specialist practice e.g. orthodontics, periodontics, maxillo-facial surgery or prosthodontics.
 16. Preventive procedures including dietary counseling are applied to a range of patients including the medically compromised and disabled.
 17. The ability to assist in general and specialist practices are demonstrated
 18. Ethically informed decisions are made within scope of practice.

Integrated assessment appropriately incorporated to ensure that the purpose of the qualification is achieved:

The assessment is integrated. It is expected of the candidate to examine and assess the oral health status of a wide spectrum of patients; to develop a comprehensive treatment plan; to implement the treatment plan and to be able to evaluate the outcome of the treatment.

A variety of assessment procedures will be used. These include the following

- * Formal end of course assessment (summative)
- * Continuing formal assessment (formative and summative)
- * Continuing informal assessment (formative)

Assessment will be designed to monitor the learner`s level of theoretical knowledge and critical thinking and the learner`s practical skills and clinical reasoning.

APPENDIX 5 (extract)

SOUTH AFRICAN QUALIFICATIONS AUTHORITY REGISTERED QUALIFICATION:

Diploma: Oral Health

PURPOSE AND RATIONALE OF THE QUALIFICATION

The oral hygienist will be trained as a public health professional, health promoter and clinician with an introduction to research, to contribute to the promotion of oral health at an individual and population level.

LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING

To be admitted to the first year of the diploma, the student must have obtained a Matriculation certificate or an equivalent with a pass in Biology of at least 40 % on the Higher Grade or 50 % on the Standard Grade. In addition a first language HG, second language HG and an additional subject on the HG is required.

RECOGNISE PREVIOUS LEARNING? N

EXIT LEVEL OUTCOMES

1. Demonstrate communication, reading, academic writing, listening, problem solving and basic computer literacy skills
2. Understand and apply the principles of health promotion
3. Understand that oral health is an integral component of the general, social and economic health of society
4. Demonstrate a positive, consistent, informed behaviour towards the promotion and maintenance of oral health and prevention of illness at individual and population levels
5. Demonstrate sound educational and communication skills in providing appropriate education to individuals and groups in a variety of settings
6. Measure and record basic oral health levels in individuals and groups
7. Design, implement, evaluate and manage oral health programs within communities
8. Integrate their knowledge and skills to function within a multi-disciplinary primary health care team
9. Demonstrate a basic, practical understanding of epidemiology, biostatistics and research
10. Recognize and be able to manage certain oral diseases
11. Provide basic oral health care and specialized care within the scope of the hygienist
12. Perform clinical procedures according to the scope of a hygienist as defined by the HPCSA
13. Apply preventive procedures including dietary counseling to a range of patients including the medically compromised and disabled.
14. Be able to assist in general and specialist practices
15. Make ethically informed decisions within their scope of practice.
16. Carry out preventive and promotive activities based on a review of available evidence.

APPENDIX 6

Modules in the oral health program

ORAL HEALTH Curriculum Framework (2006)

DiplOH I/BOH I

Credit

Year Course

CLP100	Clinical Practice I.....	20
ODP110	Oral Diseases I.....	10
ACL100	Academic Literacy for Oral Health.....	10

1st Semester

APH110	Human Biology for Oral Health	20
ICP110	Introduction to Clinical Practice.....	15

2nd Semester

ADP120	Applied Dental Practice	15
OHP120	Oral Health Promotion 1	15
HDP110	Health, Development and Primary Health Care.....	5
HDP111	Interdisciplinary Health Promotion	10
RAD123	Radiography 1	5
	Non-invasive restorative Techniques	5
CHO120/AFR120	Introduction to Xhosa / Afrikaans.....	10

BOH III

Credit

Year Course

CLP300	Clinical Practice 111.....	40
ARS300	Applied Research.....	20

1st Semester

ODP310	Oral Diseases and Prevention 111	20
--------	--	----

2nd Semester

OHP320	Oral Health Promotion 111	25
	Electives	15

BOH III

4 compulsory modules are offered with a total of 105 credit points.

Electives are chosen from other faculties with a total of 15 credit points.

Choices may be made from the following modules:

- Industrial Psychology BPS 111 (IPS 111; 12 1111)
- Industrial Psychology BPS 121 (IPS 121; 12 1121)
- Brain and Behaviour 112 (PSY 112; 861015)
- Introduction to Psychology 111 (PSY 111; 861013)
- Psychology of Child Development 121 (PSY121; 861012)
- Xhosa 111 (XHO 111; 296113)

Details of electives obtainable from respective faculties.

DiplOH II/ BOH II

Credit

Year Course

OHP200	Oral Health Promotion 11	10
CLP200	Clinical Practice 11	30
LAS200	Local Anaesthesia and Oral Surgery	10
RAD200	Radiography 11	10
	Conservative Dentistry, Prosthetics & Orthodontics	15

1st Semester

SPC210	Special Patient Care	15
STD210	Oral Diseases 11.....	15

2nd Semester

MHD223	Measurement of Health and Disease	10
PRV212	COH Prevention.....	5
EPM224	Ethics	5
HST211	Health Systems.....	5
PMP220	Practice Management & Professional Development	5



APPENDIX 7

UNIVERSITY of the WESTERN CAPE



Student Interview Guide

Research Title: The influence of diversity and the educational climate in shaping clinical competence of oral health students

Focus on student backgrounds, educational climate, learning.

- Welcome student, review the purpose of the research, confirm consent
- Describe your family background: where you live, how many in your family
- Describe support of family, community. Financial support/assistance.
- Discuss factors within the home environment that may influence your learning?
- Describe schooling experience (government or private, access to resources, experiences of learning)
- Describe your career choice process. Where did you get your information from?
- What was it like to move from home to the university environment (focus on residence, other accommodation, travelling)
- What are your views and experiences of the oral health program?
- Describe your experiences of classroom interaction with peers. Who do you sit with or join in your lunch-times. Who do you learn or do group-work with? Issues of race, diversity can be explored.
- Describe your interaction with your lecturers/ staff in the classroom/clinic/other
- Describe your experiences of transition into a professional role.
- Ways how schooling prepared you for university, elaborate.
- What do you think helped you cope with or is an obstacle to your learning?
- What are your perceptions of the educational environment (Tygerberg/Mitchells Plain)?
- What is your perception on your progress in the program?
- What are your views on faculty support for oral health students?
- What can be done to assist your learning/coping?
- Thank participant, reassurance of confidentiality.



APPENDIX 8

UNIVERSITY *of the* WESTERN CAPE



Staff Interview Guide

Research Title: The influence of diversity and the educational climate in shaping clinical competence of oral health students

Focus on teaching experiences, perceptions of student performance, factors affecting performance, student challenges

- Review research project, interview process and consent.
- What are your perceptions of the current environment as an educational context for the students?
- What has been your experience of teaching the oral health students?
- Were there any specific challenges teaching the oral health cohort.
- If student selection is raised as a concern, further probing will be required.
- Describe student progress in your module?
- What do you think this (differential) performance could be attributed to?
- Describe student participation in class. Focus on students who generally struggle in the module in comparison to those who perform well.
- What are your views on student preparation particularly in terms of the skills they come with into the program?
- What are your views on faculty support for oral health students?
- What initiatives should be in place to support student needs?
- Thank the staff for their insights.

APPENDIX 9

Analysis Codes and quotes - Notepad

File Edit Format View Help

P15: Chelsea.doc - 15:27 [Some of them - not all of them..] (141:151) (Super)
Codes: [educational climate | group work | academically strong | dominating nature |] [educational climate | group work | differential academic grouping creates problems | stronger students carry the load] [educational climate | group work | struggling | treated inferior | academically strong dominating]

Some of them - not all of them. Some of them feel you just there, you just want marks, you don't want to put in your.. If you give in your work they will criticize it, so you are not left any room to do your own thing?

Your suggestions are put down..

Just put down. They just.. I think we are going to do it..

P10: Ashley.doc - 10:18 [Normally my friends because yo..] (137:137) (Super)
Codes: [educational climate | group work | differential academic grouping creates problems | stronger students carry the load] [educational climate | group work | prefer academically strong partners | wont bring mark down]

Normally my friends because you know you can trust them and they will help you and you can help them and some people in the class we used to work with you can't always

P 6: Gabriella.doc - 6:18 [The fact that they don't want ..] (234:234) (Super)
Codes: [educational climate | group work | differential academic grouping creates problems | stronger students carry the load]

The fact that they don't want to contribute makes it like you have to do more and give a lot more just to get the mark that you want and do good.

P11: Gabriella.doc - 11:25 [The fact that they don't want ..] (234:234) (Super)
Codes: [educational climate | group work | differential academic grouping creates problems | stronger students carry the load]

The fact that they don't want to contribute makes it like you have to do more and give a lot more just to get the mark that you want and do good.

Code: educational climate | group work | prefer academically strong partners | wont bring mark down {8-0}

P10: Ashley.doc - 10:21 [Yes, that is why I don't like ..] (149:149) (Super)
Codes: [educational climate | group work | prefer academically strong partners | wont bring mark down]

Yes, that is why I don't like working with people I can't choose.

UNIVERSITY of the
SOUTHERN
CAPE

08:23 PM
2013/11/16



APPENDIX 10

UNIVERSITY of the WESTERN CAPE Consent Form



Research Title: The influence of diversity and the educational climate in shaping clinical competence of oral health students

Researcher: Mrs P Brijlal *Contact Details:* 021-937 3126 prbrijlal@uwc.ac.za

The purpose of the research project is to:

- Understand why some students thrive whilst others do not.
- to understand and explain the factors influencing student learning and competence

This research project on oral health students looks at:

- The clinical performance and competence.
- What issues influences learning and clinical competence
- How and why certain issues are an influence.
- The quality of academic life for students

Data for the research will be collected through the following:

- assessment records, such as tests and assignments
- observing students in the classroom and clinics.

The results of this will guide the next stage of:

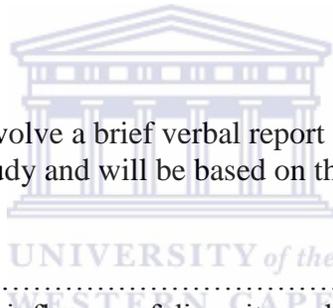
- interviews with students
- focus groups with students
- journal writing by students
- **Please note that the nature of this study may require more than one meeting with you.**

The research is designed within the following principles:

- You have a right to decide whether or not to participate in the study, without being subject to any form of penalty.
- The intention is to audio-tape all interviews. You may refuse to be video or audio-taped, or may elect to turn off the recorder temporarily or permanently at any stage during the observation or interview. You may leave the interview or observed activity without completing it if they so desire.

- Information from the research will only be used only for academic purposes.
- Confidentiality will be ensured through a number of mechanisms:
 - All information from the research will be securely stored and will be accessible only to the researcher.
 - It is to be used only for the purpose of the research.
 - You have the right to determine the circumstances under which the data will be shared or withheld from others.
 - You will remain anonymous. No quotations will be used from the information you give.
 - Any information that will suggest your identity will not be included in any public document or presentation.
 - In order to protect their identity, a make belief name will be used for purposes in academic papers

Feedback from the research will involve a brief verbal report which will be presented to staff and to students on completion of the study and will be based on the above principles.



I, (please print name), am willing to take part in the research on “The influence of diversity and the educational climate in shaping clinical competence of oral health students” on condition that the research principles outlined above are adhered to.

Signature of subject: **Date:**

Signature of Researcher:..... **Date:**.....

APPENDIX 11

Extract from student interview transcript (Nicole)

We are going to start by reflecting on your home environment and support from family. Can you describe how your home life influences your learning?

I don't have anything that influences my work but I don't think there is a problem at home concerning my studying there is nothing holding me back. If I need to study I make sure that I study. I just want to study when I need to study ... I don't know... I don't feel like studying. It is just not working for me

Can you describe a bit about the background and the community you come from.

I live in a coloured community. It is very violent I am afraid.

What area is this?

It is in Somerset West. It is a township. My uncle got killed there – they shot him. We from a poor community.

Does the community you live in support you in your studies – like families and friends? No. none.

None? Is there anybody else in your family who has studied? No. ***Do they support your interest?*** Yes my parents are only there.

What makes you say that your community and friends don't support you?

When I was younger I was motivated but since I come to high school everyone like they started like saying bad things about me. Even my family say that I want to be this and that and I am... so I just decided to not speak to them and not make contact with any of them. ? if I want to study, I study and if I want to do something or watch TV...

Why do you think you are treated like that?

Because I am the only one who tried to be different, you can say that.

Does this situation affect your learning. Do you think you could have performed better if this wasn't the situation?

I just ignore it. I don't think I like perform badly... I want to perform good because I want to show them that I can do it because they don't believe it, I want to show them.

So you are very motivated?

I am motivated to complete this year but motivated in general, no.

Can you describe why you are not feeling motivated?

I am motivated to finish this course because I want to become someone. I don't want to be a housewife someday. I want to be in England but I am not motivated because I am not motivated because it is my culture not to study but that is not an excuse. I would say yes, it is just the way I am.