ADDRESSING THE NEEDS OF UNDERACHIEVING STUDENTS IN AN EXTENDED CURRICULUM PROGRAMME

GARELDA NICOLETTE HANS

A thesis submitted in partial fulfilment of the requirements for the degree of Magister Educationis in the Department of Educational Psychology, University of the Western Cape.

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KEYWORDS

Academic Development

Academic support

Extended Curriculum programme

Foundation programme

Higher education

Support services

First year students

Barriers to learning

Students at risk

Underachievement

ABSTRACT

Addressing the needs of underachieving students in an Extended Curriculum Programme

GN Hans

M.Ed (Educational Psychology) Thesis, Department of Educational Psychology, University of the Western Cape

The purpose of this study is to determine the nature of support services offered to Extended Curriculum Programme students in a South African university. The primary goals of support services in higher education are to support students holistically and reduce barriers to learning in the teaching and learning environment. One of the faculties in a South African university established a support unit to assist with the low throughput level. The academic support unit is housed in the Academic Development Department (ADD) in a faculty. The unit attempts to address the needs of underachieving students in the Extended Curriculum Programme (ECP). The thesis first identifies the challenges the ECP students are experiencing. Then, support services in the university and in the support unit are described. Thereafter, the challenges experienced by the centre of support services in the university and the support unit are illuminated. Qualitative data was gathered through individual interviews with senior management. Then, a focus group discussion with tutors who volunteer in a support unit was facilitated and lastly the staff members employed in the support unit were also interviewed individually. The thesis was able to identify the intrinsic and extrinsic barriers to learning the ECP students are experiencing. It became evident that the support services available in the university and the support unit are not sufficient to address the needs of the students. The challenges the support service centre of the university and the support unit are experiencing are twofold. The first is a lack of organisational resources that hinders service delivery, the second is a lack of skills and expertise in attain structures that limits the provision of support services.

November 2014

DECLARATION

I declare that *Addressing the needs of underachieving students in an Extended Curriculum Programme* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Garelda Nicolette Hans   November 2014

Signed: ....

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WESTERN CAPE

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CHAPTER 1

INTRODUCTION

Keywords

Academic Development, academic support , barriers to learning, Extended Curriculum Programme, higher education , first year students, Foundation programme, support services, students at risk, underachievement

1.1 Background to the study

South Africa has been experiencing a crisis in the education system (Bloch, 2009; Mouton, Louw & Strydom, 2012). The consequence of the crisis in basic education according to Mouton, Louw and Strydom (2012) leads to higher education struggling to exceed a 15% graduation rate. The crisis in basic education can be ascribed to a shortage of teachers in schools, due to more than 20 000 resigning per annum, leaving a shortage of 6000 teachers per year (Nel, 2008). The causal factors are retirement, better career prospects in the private sector and the impact of HIV and AIDS (Reuters, 2007). The shortage of qualified and experienced staff results in overworked and sometimes poorly motivated under-qualified and unqualified teachers. These teachers lack the motivation and expertise to stimulate learners intellectually (Rabie, 2008; Nel, 2008). The educators who persevere are faced with numerous challenges such as undisciplined learners, under-prepared learners for their grade, hungry children and a disproportionate average of 40-60 mixed ability learners in one classroom in township schools (Nel, 2008; Bloch, 2009). The consequences of the crisis in basic education according to Nel (2008) and the Council of Higher Education (CHE, 2013), can be seen by looking at the matric results- specifically the Mathematics and Science marks. The low Mathematics and Science results are clearly linked to the learners' low level of literacy and educators' poor qualifications in Mathematics and Science (Howie, 2002; Nel, 2008; Bloch, 2009). In order to solve poor performance at the almost 60-80% dysfunctional schools in South Africa, schools recommend that high-risk learners repeat grade 11 or register as private candidates for the National Senior Certificate examination (Mouton, Louw & Strydom, 2012).The matric results are then standardised by Umalusi in such a way that marks are upwardly adjusted, to grant more students the National Senior Certificate (Mouton,

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Louw & Strydom, 2012). In addition, the Department of Basic Education adds 5%-10% to the Science and Mathematics marks of learners who wrote in their second language (Nel, 2008). Jansen (2009), Bloch (2009) and Bush, Joubert, Kiggundu and van Rooyen (2010) assert that the reasons for the poor grade twelve results are under-resourced schools in impoverished communities, poor quality of teaching at foundation and secondary levels, the medium of instruction, and some children having an additional disadvantage of often not receiving enough parental support due to the parents' low educational level.

The education system in South Africa should be opening up opportunities, but with the current state of affairs it is reproducing apartheid and inequality (Bloch, 2009). The Apartheid regime created inequalities amongst races, this discrimination has left the marginalised with poor foundational knowledge of basic concepts and skills-which has still not been reformed due to the secondary teaching and learning experiences from under-qualified educators (Boughey, 2002; Bloch, 2009). One South African university, a historically Black university, opened its doors of learning to all races from 1988-1998. The university's enrolments for coloureds dropped from 82% to 36%, whereas the enrolments of black students increased from 13% to 58% (Breier, 2010). The decrease in the number of qualified and competent applicants created the need to address this challenge. This strategy at the university encompassed the development and implementation of Senate Discretionary Rules. Students accepted through the Senate Discretionary Rules are accepted into the Extended Curriculum Programmes, which are designed "to facilitate access to and progression within higher education" (Boughey, 2002, p.70). The students with conditional exemptions, no exemptions and school leaving certificates are thus able to apply to study at institutions of higher learning (Boughey, 2002).

Mouton, Louw and Strydom (2012) analysed the 2008 National Senior Certificate (grade 12) 2008 results and found that the South African Institute of Race Relations specified that only 36.2% of learners had passed, however a pass rate of 62.6% was declared nationally. The marks in nine of the 2010 final examination papers were adjusted; this included Mathematics, Language and Accountancy papers. Furthermore, the 2011 examination results reflect that one in six learners got less than 10% in Mathematics and that more than 50% of the matriculants who wrote Physical Science attained less than 30%. Howie (2002) and Bloch (2009) ascribes this to the fact that among professional Mathematics teachers only 50% had specialised in mathematics, and of the 84% professional science teachers only 42% were qualified to teach science. CHE (2013) found that of the 2010 cohort of graduates at a

historically Black South African university in 2010- 78% had enrolled at the institution with a Science mark below 60% and that 66% had Mathematics marks below 60%.

Howie (2002) and CHE (2013) postulate that the mathematics and science marks can also be a result of learners' contextual factors, such as their socio-economic circumstances. Howie (2002) found that individuals from poor socio-economic environments do not have the resources at home or in the neighbourhood, to assist them with the development of mathematical skills. Zoch (2013) argues that individuals raised in impoverished communities by poor parents with low education levels, levels, when compared to individuals coming from more affluent and better educated parents- do not have the same access to the resources to succeed. CHE (2013) reported that amongst the 2010 graduates of the historically Black university, 69% of the students had parents with no post-matric education and 45% of those parents had no matric. Zoch (2013) contends that early developmental life stages depend heavily on the mother's education level, but that the family's income becomes far more important in explaining differences in later outcomes of the school career. Hence, it is evident that the parents' education level and financial resources will influence the student's performance in higher education.

In order to assist with the throughput of underachieving students, academic support units were established to support students with their under-preparedness for higher education (Boughey, 2002; CHE, 2013). A faculty established an Academic Development Department at a South African university in 2005 and an Academic Support unit in 2006. The mandate of this support unit was to assist struggling students in the Extended Curriculum Programme. The identity of the support unit was reflected in their vision; which was to act as a medium for students to improve their academic performance and also to support their general well-being.

To improve the academic performance of students, two known factors play a vital role, namely academic preparation and motivation (Strydom & Mentz, 2010). The demand to intensify the method of supporting students, led to the establishment of the support units, whose mandate it was to improve academic skills such as reading, writing, thinking and speaking. In order for the holistic development of the struggling student to occur, life skills should also be part of the support to develop intrinsic motivational factors which influence students' daily academic activities.

1.2 Problem statement

Academic support units were initiated in the United States of America after they adopted an affirmative action policy stipulating conscious efforts to admit and graduate minority students in the field of engineering (Jawitz, Kotecha, & Setiloane, 1990). Support units' which were first established in the late 1980s at various South African universities focussed on academic literacy, emphasising tertiary level reading, writing and cognitive skills for under-prepared students (Hunter, 1990). Support units and Academic Development Departments (ADD) were created to prepare under-prepared students for mainstream higher education in an Extended Curriculum Programme (ECP), and to provide support to academics in the teaching and learning environment (Prebble, Hargraves, Leach, Naidoo, Suddaby & Zepke, 2004). The establishment of Academic Development Departments was a realisation that the ECP by itself was not adequate support, and that other forms of intervention should be introduced to reduce barriers to learning in the teaching and learning environment.

In this study, the support services available to ECP students are investigated. The research is aimed at understanding the challenges that students are experiencing, as well as the challenges experienced in addressing the needs of the under-prepared students. The research investigates the support services in a South African university and a support unit in one faculty at the same university.

The study provides evidence of support services in the university and the support unit. It also elucidates the challenges experienced by ECP students in the articulation gap, as well as challenges the support services in the university and unit are experiencing in addressing the needs of the students.

1.3 Aims of the research

This study aims to investigate how the needs of students in an ECP are addressed within a faculty at a South African university. To determine the needs of those in the Extended Curriculum Programme, their challenges had to be identified and then the support services available to address those had to be established. The challenges experienced by the support services in addressing those needs will be highlighted.

1.4 Research questions

1. What challenges are first year Extended Curriculum Programme students experiencing?

2. What support services are available to support first year Extended Curriculum Programme students?

3. What challenges are experienced in addressing the needs of first year Extended Curriculum Programme students?

1.5 Rationale of the study

The need for academic support units are on the increase. This is due to the broadening of access to higher institutions since 1994, resulting in a diverse populace entering these institutions internationally and in South Africa (Bawa, 2001; CHE, 2013). Higher education offers this opportunity to diverse groups because tertiary education builds the foundation for the growth of an intellectual culture, which is the core frame of reference of a democratic philosophy (Agar, 1991; Bawa, 2001; CHE, 2013). Tinto and Pusser (2006) claim that an opportunity to post-schooling at a tertiary institution is not valid if the support provided is not efficient. To support students from diverse groups means that an institution should have a well-established academic and social system. The rationale of this study was because holistic, quality and comprehensive support is essential for students who enter higher education from disadvantaged educational environments. It was important to ascertain the types and quality of support services offered so that services can be strengthened and improved. It became evident that there was insufficient reflection and evaluation of support services in the Extended Curriculum Programme and this research would provide important insights that could assist in enhancing support services in the future. Education support services encompass the whole curriculum and all human resources should be available to support a diverse cohort of students. On the one hand, educators should get the necessary support to teach a diverse group of students, and on the other hand, the barriers to learning in the teaching and learning environment should be identified and reduced.

1.6 Theoretical framework

Two theories will underpin the theoretical framework of the study, the bio-ecological system's theory and Tinto's Institutional Action. These two theories, Bronfenbrenner's bio-ecological model (PPCT) and Tinto's Institutional action will be discussed briefly below, but will be expounded on in chapter 2.

1.6.1 Bio – ecological System

Bronfenbrenner, a developmental psychologist and researcher, argues that there are ecological systems an individual can interact with whilst developing. System's thinking involves particular elements including - process, person, contexts and time (PPCT) which an individual engages with to grow. The PPCT model operates throughout the development of the individual. The interconnected systems are the microsystem, mesosystem, exosystem, macro-system and chronosystem. The core of this module is the process, which can result in progress or a hindrance after interactions with persons, symbols or objects. The characteristics of the person can influence the form, power, content and direction of the proximal process (Bronfenbrenner & Morris, 2006). Bronfenbrenner (1995) states that the context, which is the third influential factor, refers to the developmental systems an individual engages with whilst developing.

The first system, the microsystem, entails the initial interactions an individual needs to manage whilst developing. It entails relationships with primary caregiver, family, school and neighbourhood in the individual's immediate environment (Landsberg, Krüger, & Nel, 2005). The next educational ecological structure, according to Bronfenbrenner (1994), is the mesosystem. The mesosystem consist of the relationships and processes taking place between two or more microsystems (e.g., the relations between home and school) and the network of the supporting structures in the learner's immediate environment. The third influential system, the exosystem, impacts indirectly on a learner's development and the learner has no control over these circumstances. Sontag (1996, p.319) avows that the exosystem can be viewed as "problems outside of school - for example poverty, malnutrition, drugs, and gangs". Then the outer layer is the macro-system. Seals (2010) states that the macro-system can be viewed as the governing foundations, namely like the economic, social, educational, legal and political systems which frames culture or sub-culture for the learner. Lastly, the chronosystem entails two spheres namely the normative and the non-normative. Human Developmental Research viewed Time as equivalent to chronological age. According

Bronfenbrenner (1994, p.40) "change or consistency over time is not only in the characteristics of the person, but also the environment in which that person lives."

1.6.2 Tinto's Institutional Action

Institutional policies create guidelines for procedures and services rendered to the diverse student body enrolled at the institution. Policies at tertiary institutions should be aligned with the political context and educational policies designed by the government (Tinto & Pusser, 2006). Government's White Papers request support with throughput within higher education institutions (CHE, 2013). Tinto and Pusser (2006) clearly state that education without support does not equate a fair opportunity in higher education. When students enter universities, the academic system and social system should have developed the necessary infra-structure to support students from underprivileged communities. According to Lourens (2013), the academic system refers to the learning of the structured curriculum and of the social system consisting of student lifestyle and extra-curricular activities, academic advice, support and mentoring, and work experiences.
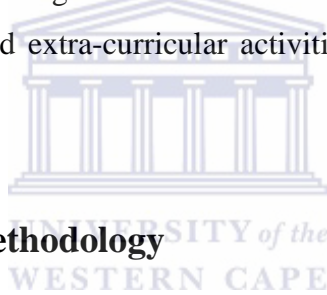
1.7 Research design and methodology

The qualitative research design served as a guide for the rationale of the study, clarification of what information is needed to answer the research questions, and what strategies will be used to collect this data most effectively (Denzin & Lincoln, 2005). An interpretivist paradigm was employed, and this paradigm constitutes capturing human experiences in their natural contexts (Henning, van Rensburg, & Smit, 2004). The participants in the study included senior management staff members, namely two staff members employed as senior managers and two working as managers at the university's student support centre; tutors who volunteer at the support unit in the faculty; and lastly the two staff members employed in the faculty's support unit. In phase one of the study, individual interviews were conducted with the four university management staff members to identify what the different support services are available to students in the institution. In phase two, one focus group discussion was conducted with tutors who volunteer in the support unit in the faculty. Phase two identified the challenges that the struggling students were experiencing, as these tutors work directly with the students who register at the support

unit in the faculty. In phase three, individual interviews were conducted with staff employed at the academic support unit in the faculty. The staff members of the support unit could identify the challenges that the students were experiencing, elaborate on how they were addressing the needs of the students as well as the challenges they experience in addressing the needs of the underachieving student. The interviews were recorded, transcribed and thematically analysed the findings of which are presented in Chapter 4.

The thesis sets out to show the challenges the first year underachieving ECP students experience within the articulation gap at a South African university. The dissertation provides evidence that explains how the lack of foundational knowledge in a first language leads to academic challenges. The thesis also explores the resultant underachievement at school level and then at higher education level due to various barriers to learning namely psycho-social challenges, cognitive barriers, language barriers and challenges in the teaching and learning environment. The support services available at the university are discussed. All the participants in the study stated a lack of institutional resources and the lack of skills were not enabling the staff members to empower students sufficiently to succeed academically.

1.8 Chapter outline of the study

Chapter one provides insight into the background and theoretical framework of the study. A statement of the problem is articulated along with its related research aim and questions. A rationale for the study is presented followed by the problem statement and then a presentation of the research design and methodology employed.

Chapter two expands upon the theoretical framework introduced in chapter 1 and the conceptual framework which guided the literature review. The theoretical framework discusses Bronfenbrenner's Bio-ecological Systems theory and Tinto's ideas on Institutional Action. The key phenomena of the dissertation are identified and clarified; the ways in which they are interrelated in this study are explored in the conceptual framework.

Chapter three reviews the literature that deepens the conceptual framework for the study. This allows the reader to understand the important role that support services can play in reducing barriers to learning that are faced by underachieving students in an Extended Curriculum programme within higher education. The literature review focuses on the

concepts of barriers to learning that result in the underachievement of students in an Extended Curriculum Programme. It also explains why support services were initiated and developed over three decades in higher education institutions in South Africa.

Chapter four frames the research design and methodology of this study. The paradigm within which the research was conducted is outlined and the approach adopted in this study is explained. The research aim and questions are reiterated and the details of the design portrayed. Research methods and instruments employed are described in detail and their appropriateness for the study is illuminated. The framework used for data analysis was outlined in accordance with issues related to the trustworthiness and ethics of the research.

Chapter five presents the findings from the interviews and focus group discussion conducted for the research study. A thematic analysis of the challenges students are experiencing in the Extended Curriculum Programme are detailed, the support services available at the university to support students with their challenges and the challenges the institution and the support unit experienced whilst attempting to support the students will be outlined. The findings capture the challenges the underachieving students are experiencing in the Extended Curriculum Programme. It also details the overburdened and underdeveloped support structures resulting from an articulation gap, the challenges the support service structures are experiencing in their attempt to support the multitude of underachieving Extended Curriculum Programme students.

Chapter six presents the discussion of the literature and findings. It will include a discussion of the challenges that students are experiencing in the Extended Curriculum Programme of a particular faculty at a South African university, the support services available to these students and the challenges the staff experience when assisting the underachieving students. Then, the limitations of the study will be articulated as well as recommendations to address the challenges identified in the study. The chapter will also illuminate the need for further research in this area.

CHAPTER 2

THEORETICAL AND CONCEPTUAL FRAMEWORK

This chapter presents the theoretical and conceptual framework of the dissertation. A theoretical framework consists of the relevant theories underpinning the knowledge regarding a specific phenomenon (Henning, van Rensburg & Smit, 2004; Sinclair, 2007). The theories providing the propositions and assumptions for this study are Bronfenbrenner's bio-ecological system's theory and Tinto's ideas on institutional action. The conceptual framework will attempt to illuminate the key concepts and propose relationships amongst them. The first concept to be discussed is barriers to learning. Intrinsic and extrinsic barriers will be described, and will also clarify how barriers to learning influence underachievement in higher education institutions. The support services made available at higher education institutions will then be detailed, focussing on the Extended Curriculum Programmes.

2.1 Theoretical framework

This section will detail Bronfenbrenner's bio-ecological system's theory. The paradigm has four major interactive dynamic components. The four components are referred to as *Process*, *Person*, *Contexts* and *Time* (PPCT) (Bronfenbrenner & Morris, 2006). The PPCT model within a system's thinking paradigm which argues for the inter-relatedness and interconnectedness of various aspects of human development.

2.1.1 Bronfenbrenner's Bio – Ecological System's Theory

The bio-ecological paradigm entails four major components with its emphasis on the dynamic, interactive relationships among them. The first component is the *Process*, and it is valued as the core of the model (Earnon, 2001). This construct embodies specific forms of interactions between the developing human being and its surroundings. These interactions are called, proximal processes (Bronfenbrenner, 1995). The interactions, not only with fellow beings but also with objects and symbols, are the primary mechanisms that need to operate over periods of time to facilitate human development (Bronfenbrenner, 1995). When the generative interactions take place, development of the individual will occur (Earnon, 2001). However, when negative interactions occur, stimuli for the individual to develop will be absent.

The next major component in the bio-ecological model is the *Person*. Bronfenbrenner and Morris (2006) claim that the characteristics of the person can influence the form, power, content and direction of the proximal process and consequently thus the developmental outcomes. Three types of personal characteristics can determine the development or regression of human beings over their life span (Earnon, 2001). Firstly, the *dispositions* (also referred to as *'force'* characteristics) characteristics can be viewed as the shapers of development (Bronfenbrenner & Morris, 2006). This characteristic can stimulate proximal processes in a specific developmental domain and continue to disrupt the developmental outcome. According to Bronfenbrenner and Morris (2006, p. 810) specific attributes like "*active orientations as curiosity, tendency to initiate and engage in activity alone or with others, responsiveness, to initiatives by others, and readiness to defer immediate gratification to pursue long-term goals*" will bring about development. On the other hand, characteristic traits like "*apathy, inattentiveness, unresponsiveness, lack of interest in the surroundings, feelings of insecurity, shyness, or a general tendency to avoid or withdraw from activity*" will not stimulate interaction in the proximal processes (Bronfenbrenner & Morris, 2006, p. 810). Individuals who show tendencies of the aforementioned attributes will find it difficult to engage in multifaceted patterns of shared interaction over extended periods of time (Bronfenbrenner & Morris, 2006).

The second characteristic is the individual's bio-ecological *resources* of ability that is also a shaper of development (Bronfenbrenner and Morris, 2006). This entails experience, knowledge, and ability required for the effective operating of proximal processes at a specified period of development (Tudge, Mokrova, Hatfield and Karnik, 2009). According to Tudge, Mokrova, Hatfield and Karnik (2009, p. 200), these characteristics link partly to "mental and emotional resources like past experiences, skills, and intelligence and social and material resources (access to good food, housing, caring parents, educational opportunities appropriate to the needs of the particular society, and so on). Healthy individuals who were stimulated in the microsystem in most the favourable socio-economic circumstances will develop faster than the impaired individuals raised in non-stimulating unfavourable socio-economic environments. Lastly, *demand* characteristics can be referred to as developmental influences (Bronfenbrenner and Morris, 2006). The *demand* characteristics stimulate or discourage reactions from the social environment that can promote or disrupt the functioning of proximal processes (Bronfenbrenner and Morris, 2006). Tudge, Mokrova, Hatfield and

Karnik (2009) assert that the demand characteristics function as a direct stimulus to another person's "…age, gender, skin colour, and physical appearance…." (p. 200). These types of characteristics may influence initial interactions because of the expectations formed immediately. Bronfenbrenner and Morris (2006) argued that when the individual's needs are met, a good perception of the self will emerge and an understanding of quality care is manifested. However, when an individual's needs are not met in the microsystem, then feelings of unworthiness of responsive care will be established.

Bronfenbrenner's third component of the PPCT model is *Context*. Bronfenbrenner (1995) asserts that the inter-related ecological human developmental systems an individual interacts with whilst developing can be referred to as the contexts within which development occurs. The development of a human being takes place through the "process of progressively more complex reciprocal interactions" between active, constantly evolving "bio-psychological" human beings and the individuals, objects and symbols in their environment (Bronfenbrenner, 1995, p.620). The first bio-ecological system is the microsystem. Here the developmental outcomes are influenced by proximal processes within microsystems or the direct environment that surrounds the developing person. The microsystems of the individual consist of the immediate environment- namely the home, peer group and school. The micro-system also constitutes the initial interactions a child needs to manage to enable for his or her development in the immediate environment. It entails an individual's relationships with parents, relatives, close friends, teachers, mentors, co-workers, spouses, or others who interact in the developing person's life on a fairly regular basis over extended periods of time (Bronfenbrenner & Morris, 2006). The proximal processes in the immediate environment can function as resources to facilitate or hinder development. According to Grzywacz and Marks (1999) the support structure at home, namely family life, should provide the necessary support and a quality life to develop the individual.

The next ecological structure is the mesosystem. According to Bronfenbrenner (1994), the mesosystem consists of the relationships and processes taking place between two or more environments containing the developing person (e.g., the relations between home and school). The mesosystem can be viewed as an integration of different environments such as home and school- it comprises of extended family such as aunts, uncles, cousins, grandparents and great-grandparents, faculty administrators and guidance counsellors who

also engage with the individual (Bryan & Simmons, 2009). The linkages and processes consist of a network of supporting structures in the individual's life.

The third influential system, namely the exosystem, encompasses the linkages and processes taking place between two or more settings, but at least one of the linkages does not include the developing person (Tudge, Mokrova, Hatfield & Karnik, 2009). Even though the developing person might not be present in one of the environments, the results of the interactions in the other settings will have an indirect impact on the individual. According to Bronfenbrenner (1994, p.40) the exosystem can be "parents' workplace, family social networks, and neighbourhood-community contexts." Furthermore Bryan and Simmons, (2009) explain that the exosystem is also the influential forces outside the individual's environment that affect development. The individual's neighbourhood, friends at home and peers in university, extended family, university administrators like academic advisors and staff identified as service providers during orientation and early intervention programmes, and the primary caregiver's workplace also plays a pivotal role in the development of the individual (Bryan & Simmons, 2009). The exosystem is thus the larger community system within which an individual does not interact directly during development, but rather two or more microsystems interact directly with the settings and it influences how the proximal processes will develop and influence the individual (Donald, Lazarus & Moolla, 2014).

The next overarching system is referred to as the macrosystem. Seals (2010) avers that the macrosystem can be viewed as the governing foundations like the economic, social, educational, legal and political systems which frames culture or sub-culture for the individual. Bronfenbrenner (1994, p.40) goes further and describes the macrosystem as the "belief system, bodies of knowledge, material resources, customs, life-styles, opportunity structures, hazards, and life course options that are embedded in each of these broader systems" available to a developing individual. It can also be the community norms like attending church regularly, expectations to succeed, the hardships their socio-economic circumstances bring and the shortage of economic opportunities in their neighbourhood (Bryan & Simmons, 2009). The macrosystem can thus be viewed as a societal scheme for a specific culture or subculture.

The final component of the PPCT-model is *Time*. Conventional human development research reported time as a synonym of chronological age. In more later discoveries, time is   not

merely as an attribute of the developing person, but also as property of the direct environment not only over the life course, but across historical time (Bronfenbrenner, 1994). Hence, in a chronosystem "change or consistency over time is not only in the characteristics of the person, but also the environment in which that person lives" (Bronfenbrenner, 1994, p.40). Changes in *Time* can occur in two spheres, namely the normative or the non-normative spheres. In the normative sphere, change in entering a new learning environment or different psychological stage can bring about generative or disruptive development. The non-normative transitions relate to the loss of a loved-one, severe illness in the family, marital discord leading to divorce and moving into a new environment (Bronfenbrenner, 1986). The different systems influence the development of each individual and it is crucial to determine which system needs an intervention to support the developmental process. The continuity or disruption in ongoing episodes of proximal processes is referred to as Microtime (Bronfenbrenner & Morris, 2006).
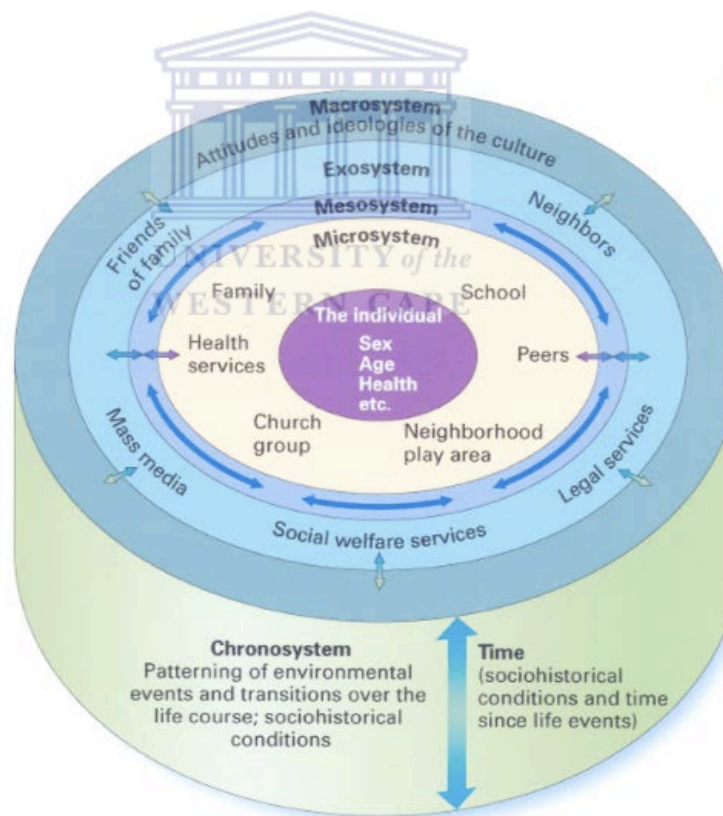
Figure 2.1 **Bronfenbrenner's Bio-ecological model.** *Source* **in Seals (2010).**

2.1.2 Tinto's Institutional Action

Tinto's ideas on institutional action propose two systems to support students in the process of widening access to higher education. The first system is the academic system and the second is a well-resourced and developed support structure, the social system.

Institutional policies create guidelines for procedures and services rendered to the diverse student body enrolled at the institution. Policies at tertiary institutions should be aligned with the political context and educational policies designed by the government (Tinto & Pusser, 2006). The educational policies in South Africa were influenced by international trends. According to Delors (1996), the gap between the rich and poor is widening and educating the poor is one strategy to narrow the gap. South Africa therefore designed economic and education policies in which it stipulates guidelines for governmental institutions and non-governmental organizations to uplift the poor. Tinto and Pusser (2006) contend that education without support does not equate a fair opportunity in higher education. When students enter universities, the academic system and social system should have the necessary infra-structure to support students from underprivileged backgrounds. The *academic system* should be able to direct students to a faculty that has well developed programmes and support structures to facilitate success. Tinto and Pusser (2006) noted how the classroom becomes one of the primary points of academic participation and where institutional policies are practiced. Thus, teaching and learning innovations become one of the imperative strategies to retain students.

The *social system* also plays a vital role in retention and throughput (Tinto & Pusser, 2006; Letseka & Maile, 2008). According to Lourens (2013) a social system would entail a student's lifestyle and extracurricular activities, academic advice, support and mentoring, and experiences at places of employment. The deficit model of student retention emphasises the shortcomings of students and thus the model ignores the social and power structures in higher education which also influence the academic performance of students (Earwaker, 1992; Lazarus, 1987). In recent years, institutional action plans to retain students have been highlighted as a key influence on students' academic performance (Tinto & Pusser, 2006). The diverse student body should be embraced by institutional policies; social communities like church organizations should be established at institutions of higher learning. In addition to feeling a sense of belonging, the financial policies at the institution should be aligned to promote student retention amongst the low income status students (Tinto & Pusser, 2006; Carroll, Berkner & Chavez, 1997; Letseka & Maile, 2008). Thus, the institutional action plan

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should be designed to promote student success by providing the necessary academic and social support systems in which students can perform academically.

These two theories provide an appropriate lens through which the research questions can be meaningfully investigated. Bronfenbrenner's bio-ecological system's theory details how contexts can influence the individual's development. The microsystem, at home and portrayed by a place of higher learning in this context, should be developed to support students (*person*) to develop holistically. The institution of higher learning, the academic system and social system also influence the student's development directly or indirectly. These two systems should be properly developed to support a diverse cohort of students. Thus, a low throughput level can be expected if the institution of higher learning fails to support the diverse group of students from micro-level to macro-level.

2.2 Conceptual framework

The conceptual framework of a study defines the main objects of the study and the network of relationships between them. The main concepts explored in this study are barriers to learning, underachievement, support services and Extended Curriculum Programmes. The first concept, barriers to learning, will describe how learning challenges can be identified in the learner, as well as encompassing a range of external educational and macro-environmental factors. Then underachievement as a result of barriers to learning will be defined and explained. Lastly, the support services and Extended Curriculum Programmes will be discussed.

2.2.1 Barriers to learning

A barrier to learning is a learning breakdown in which learners are prevented from accessing quality education. Engelbrecht (2001) states that barriers to learning arise from micro- to macro levels in an ecological framework, hence it can exist intrinsically or extrinsically. According to Walton, Nel, Hugo and Muller (2009, p. 107), intrinsic barriers include "physical, sensory, and neurological and developmental impairments, chronic illness, psycho-social disturbances and differing intellectual ability." On the other hand, extrinsic barriers to learning may arise in the external environment. Stofile, Raymond and Moletsane (2013)

assert that extrinsic barriers can be categorised as three factors. Firstly, the systemic factors at home, school and in the local community. Secondly, teaching and learning factors in the learning environment and lastly the broader systemic factors like inadequate psycho-social support or health and education support for students and educators. Barriers to learning can prohibit accessing quality education. According to Branson, Ardington, Lam and Leibbrandt (2013), quality education can be seen when the skills and productivity of individuals increase substantively. Thus, exclusion from quality education can be located within the learner (intrinsic), within the education system (extrinsic) and within the broader social, economic and political context (extrinsic).

2.2.2 Underachievement

Underachievement can be seen as the difference between a person's ability, expectations and their performance (Preckel, Holling & Vock, 2006). In the past psychometric testing would reveal an IQ-score and this would be compared to achievement test scores. When there was a discrepancy between the two scores and the achievement score was found to be lower, a student would be categorized as underachieving (Preckel, et al., 2006). More recent literature explains underachievement from three different perspectives. Firstly, when underachievement is directly related to achievement then underachievement will occur when students fail to meet assessment criteria (Gallagher, 2005). The second consideration could be when a student lacks the ability to transfer mastered skills from acquired information to an appropriate task (Cohen, 1990). Here an intrinsic learning challenge, such as control over personal learning, might be the primary reason for students' inability to transfer knowledge (Clark, 2002). The last perspective on underachievement could be the students who fail to "self-actualize" or experience difficulties achieving their personal objectives (Reis & McCoach, 2000). The root of this form of underachievement lies in the interlocking relationship between cognitive and emotional development. Cohen (1990) emphasises the importance of resilience after failure. Students should develop a positive attitude and learn from their failures and improve on the mistakes they made.

2.2.3 Support Services

Support services are specialized services that should improve teaching and learning in an education system (Mashau, Steyn, van der Walt &Wolhuter, 2008). The National Education

Policy Investigation (NEPI, 1992) argued that support services in education should address all aspects with challenges in an education system. Therefore support services should assist the educator, the student and the teaching activities, and the structures that govern the educational environment. Support services were introduced at higher education institutions in South Africa with the establishment of the oldest university, namely the University of Cape Town, when only white males were allowed to register for higher education (Mandew, 2003). The term student services refers to "providing support and welfare services and programmes for students in higher education institutions by various departments and units" (Mandew, 2003, p.3). The frameworks developed over a period of time, from the *In Loco Parentis* model to the German model, and currently the Hybrid or mixed approach model is the most preferred and utilised model at higher education institutions due to its flexibility for the African context (Mandew, 2003).

The first, *In Loco Parentis* model, prescribed the whole academic system to participate in taking care of the students' welfare and support. Thus, academics should "lead, guide, enable, unfold and equip" students with the necessary skills to perform academically (Mashau, Steyn, van der Walt & Wolhuter, 2008, p. 3). In addition, Harvey (2013) argued that the academic system should include academic aspects of teaching, learning and the curriculum. The paternalistic approach was designed for male students only, as they were the only students who could register for university studies. The German model of intellectualism followed after the paternalistic approach (Mandew, 2003). The German model suggests that academic staff should focus on their disciplines by doing research, while the focus of support moved to non-academic specialists. Due to the focus on intellectual ability, universities sifted rigorously through applicants and only top graduates from good high schools were enrolled at institutions of higher learning. In Germany, these universities were in the big cities and the student body comprised of mature students who had to seek their own living spaces and schedule their own after hours' activities. Students were viewed as independent and were not monitored during or after classes. This disintegrative approach did not link the primary functions of teaching, research and service of an institution (Mandew, 2003). Lastly, the hybrid model encapsulates inclusivity. This mixed approach combines the strengths of the paternalistic and intellectualism models. The model also acknowledges the diverse cohort of students at an institution of higher learning. It also stipulates that academic and support staff should play an active role in the development of the student body. The belief system underpinning this approach is that intellectual development takes place when students are

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"nurtured on an emotional, spiritual and social level" (Mandew, 2003, p.5). According to Muranskin (1997) the best practices for support services should entail a well-structured first year programme to engage students positively with the institution. Muranskin (1997, p.5) lists the following as essential aspects to facilitate a positive experience in higher education:

(i) project participation in the college admissions process for at-risk students

(ii) pre-freshman-year academic and social preparation

(iii) a major project role in participators' (students) initial course selection

(iv) an intrusive advising process throughout the freshman (first) year

(v) provision of academic services that buttress the courses in which the participators (students) are enrolled

(vi) group services that extend service hours and build cohesion among participants (students)

(vii) a powerful message of success through conscientious effort

Singh (2004) states that the well-structured first year orientation programme should be filled with academic and support activities. The academic and support activities designed for the students should be part of the day-to-day activities in the institution of higher learning. These day-to-day activities can include "financial aid; bursary and loan schemes; residences; student counselling; library services and resources; IT provision; health services; support for students with HIV/AIDS" (Singh, 2004, p.116).

2.2.4 Extended Curriculum Programmes

The Extended Curriculum Programmes' main purpose is to assist with throughput rates in higher education institutions. The need for the programmes emerged due to a low pass rate amongst students who often came from poor educational backgrounds (Malherbe, 1977; Mgqwashu, 2009; McKenzie & Kioko, 2010). During the Apartheid regime in South Africa, educational disadvantage was equated with race, due to a segregated education budget resulting in oppressed groups receiving education with far less funds than the other privileged groups (Essack & Quale, 2007; Young, 2010; Zaaiman, 1998). The lack of funds allocated to Bantu education and the House of Representatives resulted in a poor allocation of resources,

facilities and teachers in those schools (Lourens, 2013). Even though the schools under House of Representative's management, namely coloured schools, received slightly more funding than the DET schools, most of these schools had too many learners per educator in a class. Facilities such as libraries, laboratories and classrooms were also not well- funded and well-developed at coloured schools. In addition, most teachers were under-qualified and support systems were non-existent (Christie, 1986; Lockhat & Van Niekerk, 2000; Mashau, Steyn, van der Walt & Wolhuter, 2008). Currently, research has proven that learners from previously disadvantaged schools are still not fully prepared for higher education (Zaaiman, 1998; Taylor, Fleisch, & Shindler, 2007). Although the Apartheid laws were abolished after South Africa became a democratic state, many previously disadvantaged schools still lack infrastructure and resources to produce students sufficiently prepared for higher education (Essack & Quale, 2007; Taylor, Fleisch, & Shindler, 2007; Veraiva, 2012).

Boughey (2010) states that the extended curriculum programmes include all subjects which are accredited by the university. It is lengthens the course by an extra year of study to support students enrolled in the programme. Boughey (2005) also explains that the extended curriculum programmes should therefore have an integrated foundation phase to assist students enrolled in science, technology and commerce. A foundation phase would focus on skills required to be successful in higher education. Foundation courses should therefore teach skills such as reading and note-taking, various aspects of essay writing, referencing and examination preparation techniques to ensure academic success (Lees & Levy, 2012). Therefore, the focus of extended curriculum programmes is to provide under-prepared students with the necessary academic foundations that will assist and allow them to complete their degree (van Schalkwyk, 2008). According to DET (2006), the foundational provision should consist of modules, courses and other curricular elements that could prepare them to succeed in higher education.
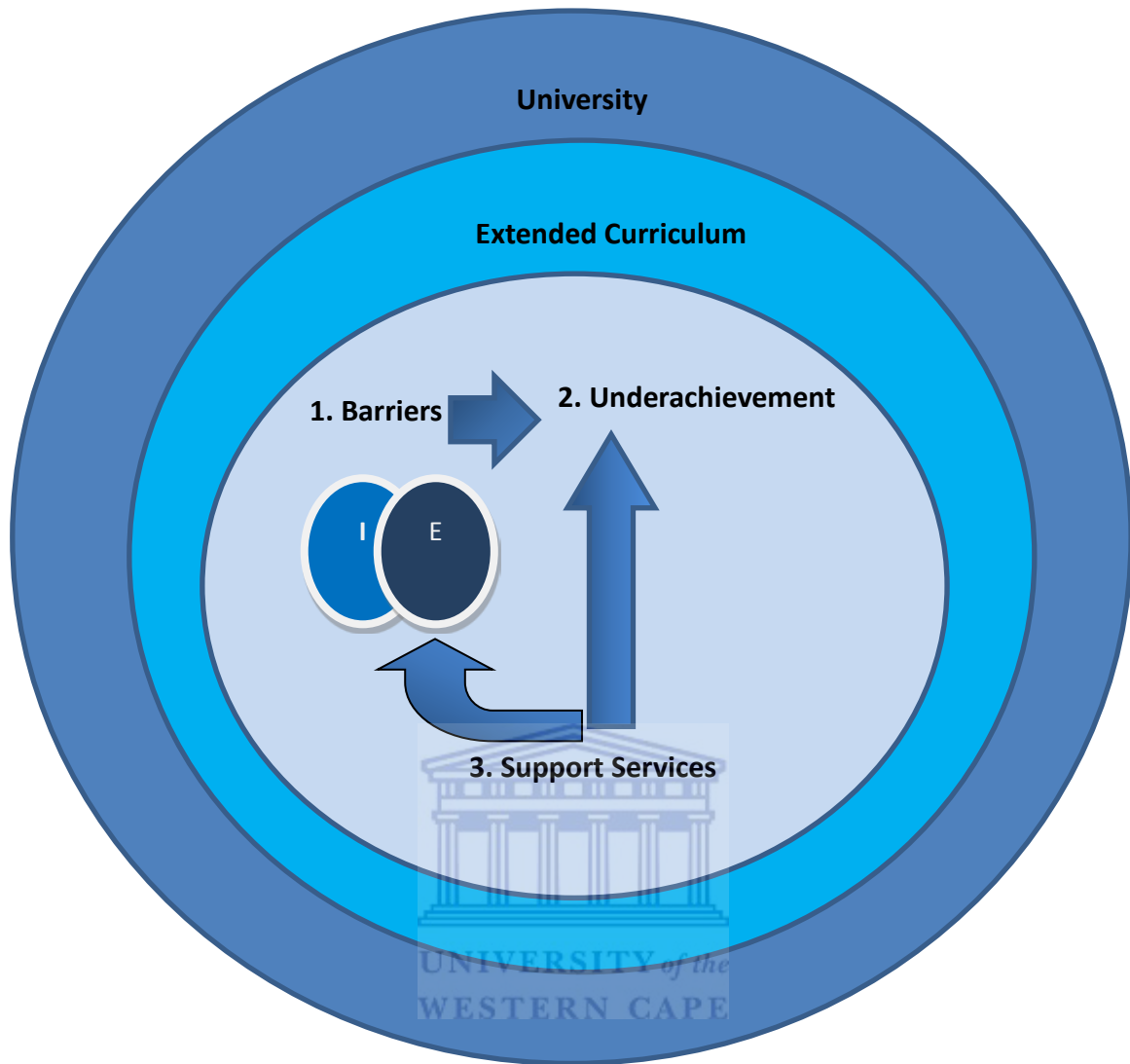
Figure 2.2 **Conceptual Framework of the study.**

Figure 2.2 illustrates the relationships between the key concepts in this study and how they have framed the study and assisted in maintaining its focus. Barriers to learning can occur from micro-level to macro-level which influence students' performance in higher education. As Tinto's institutional action plan suggests the academic system and social system in higher education should be well developed. The systems should address the intrinsic barriers to learning and decrease the extrinsic barriers to learning in the teaching and learning environment. Specialised support services in higher education should support students with intrinsic and extrinsic barriers to learning, thereby attempting to address all barriers to learning in the education system. Extended Curriculum Programmes should address the needs of the under-prepared students by focusing on skills not mediated or taught in schools which

are under-resourced. It is thus imperative for support services to provide feedback to academics and administration staff on barriers to learning arising from micro- to macro levels to address underachievement. In so doing, they can create interventions to reduce barriers in the teaching and learning environment in order for students to succeed in their studies. If the institution cannot address the barriers to learning, then the retention and progress of students, especially those from disadvantaged backgrounds, will be affected negatively (Prebble, Hargraves, Leach, Naidoo, Suddaby, & Zepke, 2004).

2.3 Conclusion

This chapter captured the theoretical and conceptual framework for the investigation. The theoretical framework consisted of two main theories, namely Bronfenbrenner's bio-ecological system's theory and Tinto's ideas on institutional action. These two theories present the researcher's understanding of the phenomena under investigation. The conceptual framework illustrates the links between the objects of the study, which also links directly to the theories in the theoretical framework. The concepts described are intrinsic and extrinsic barriers to learning resulting in underachievement in higher education institutions. Thereafter the support services were explicated and Extended Curriculum Programmes were detailed. The next chapter reviews literature that expands on concepts mentioned in the conceptual framework, thereby deepening understanding of these concepts nationally and internationally.

CHAPTER 3

LITERATURE REVIEW

This chapter will provide an overview of the literature relevant to the study. A literature review of a thesis illustrates the researcher's understanding of a phenomenon in context. Rocco and Plakhotnik (2009) state that the function of the literature review is to find out if a topic is researchable and to detail the information emerging from closely related studies. It should also report if the present research study links directly to studies completed about the similar topic (Creswell, 2003). In this dissertation barriers to learning will be explained as well as how these barriers result in underachievement in an educational setting. The intrinsic barriers to learning explored in the study are self–esteem, adjusting to higher education and language competence. The extrinsic barrier to learning that also influences students' academic performance is their socio-economic circumstances. Thereafter the development of educational support in higher education will be explored.

3.1 Barriers to learning

Barriers to learning create challenges for students who wish to access quality education to perform academically. Walton, Nel, Hugo and Muller (2009) avow that barriers to learning arise from numerous factors and can be intrinsically or extrinsically located. Engelbrecht (2001) states that barriers to learning arise from micro- to macro levels in an ecological framework, hence they can emerge as consequence of direct or indirect circumstances. Pepin, Segal and Coolidge (2009) argue that intrinsic and extrinsic barriers to learning do not function independently, but co-occur in a system. Barriers to learning can therefore be viewed as the interplay of challenges that students face during their development in their immediate or external environment. Thus, a barrier to learning can include a situation in which a student is prevented from accessing quality education to develop holistically (Lourens, 2013).

3.1.1 Intrinsic barriers to learning

Intrinsic barriers to learning are located in the individual. Walton, Nel, Hugo and Muller (2009, p.107) aver that intrinsic barriers include "physical, sensory, and neurological and

developmental impairments, chronic illness, psycho-social disturbances and differing intellectual ability." Although physical and sensory impairments are crucial to consider as barriers to learning, given the institution under study and its concerted efforts to address these, the focus of this masters in Educational Psychology is on the psycho-social barriers to learning experienced by students in ECP in a particular faculty.

Pepin, Segal and Coolidge (2009), in their study of mental health care for young adults found that young people do not seek assistance to address intrinsic barriers to learning. This can be due to modelling what they see in their own neighbourhood. In most of their neighbourhoods, older adults hold pejorative views of seeking help at institutions (Pepin, Segal & Coolidge, 2009). Intrinsic barriers to learning can thus hinder development when students do not seek support.

3.1.1.1 Psycho-social

 Psycho-social development can be viewed as the growth of the mind (psychology) in the social (relationships) context of a person. Green (2000, p. 40) asserts that the relationships a person engage with are his/her "primary caregiver, family, school, teachers, friends, neighbourhood, peers and group-influences". The regular interactions in the microsystem with these role-players influence the level of maturity of the individual. Students who come from low socio-economic backgrounds experience numerous challenges during their development to maturity and it can result in an intrinsic barrier to learning. Earnon (2001) contends that stressful life circumstances, like hardships or a loss of income will have a negative influence on a primary caregiver's ability to cope. This will result in a sense of powerlessness which can erode self-esteem, mastery of tasks and self-efficacy which can lead to disengagement of active problem solving. The negative emotional state caused by adverse financial conditions influences family interactions. Parents might develop depression, which might lead to "low levels of nurturance, uninvolved and inconsistent parenting and harsh discipline" which will impair the child's socio-emotional growth (Earnon, 2001, p.258). Hence, students who come from low income caregivers often underachieve due to their socio-economic status (Thayer, 2000). In South Africa, previously marginalized students have been identified as among those who are underachieving within higher education (Letseka & Maile, 2008). Boughey (2002) also found that students' poor performance can be ascribed to numerous inter-related factors such as: physiological, psychological, socio-cultural and

environmental conditions that are mainly caused by their exposure to underprivileged socio-economic circumstances.

3.1.1.2 Self-esteem

Self-esteem refers to "the individual's positive or negative attitude toward the self as a totality" (Petersen, et al., 2009, p.102). It has been identified as one of an individual's internal resources that are needed to adjust to changes in life situations. The individual's view of him or herself is established by social interaction and this determines the individual's behaviour in different situations (Petersen et al, 2009). The development of a healthy self-image and self-confidence can be influenced by socio-economic conditions and can become an intrinsic barrier to learning. Dass-Brailsford (2005) found severe psychological ramifications of the Apartheid legacy on the oppressed that experienced hardships. According to Earnon (2001) hardships can have a strong influence on an individual's adjustments because multiple life stressors have cumulative effects. It was found that socio-economic stress hinders the normal growth and development of an individual. The individual's "sense of trust, safety and security" is negatively influenced, resulting in them not performing optimally in academics (Dass-Brailsford, 2005, p.575).

The self-esteem of a student can also be affected by environmental factors at university. Davis and Rimm (1998) state that factors like an unwelcoming atmosphere, inflexible curriculum, along with negative expectations from members of staff and unrewarding teaching and learning experiences in the microsystem can affect the students' self-confidence. The proximal relations in the microsystem also have an influence on the student's self-confidence. According to Lowe and Cook (2003), unapproachable members of staff during a student's transition period can have a negative influence on self-confidence. Moreover, students who do not experience support from staff members can become demotivated when they see a lack of academic progress, and this also influences their self-esteem (Jones, et al., 2008).

When a student is identified as a potential university candidate, the student's family and community raises expectations of the potential student (Bojuwoye, 2002; Bryan & Simmons, 2009). Bryan and Simmons (2009) explain that if a student is from an underprivileged family they are often seen as the success of the family and an often deprived community; and everybody awaits the benefits through improving community services. According to Davis

and Rimm (1998), achievement creates a strong self-concept, but underachievement influences the student's self-belief and can also lead to depression because the family and community will view the person as a failure.

3.1.1.3 Adjusting to higher education

Adjusting to a new learning environment can be viewed as another intrinsic barrier to learning. Earwaker (1992) views adjustment as a state where an individual remains primarily intact but has to accommodate changes in a new environment. Petersen et al. (2009, p.100) define adjustment as the "multi-dimensional process of interaction between an individual and its environment, in an attempt to bring harmony between the demands and needs of the individual and his/her environment". Fisher, Cavanagh and Bowles (2011) avow that the distinct difference between the level of support in the schools and the new level of autonomy and flexibility in higher education raises challenges for the new student. The adjustment to the university environment holds extreme importance for the newcomer, as first impressions and experiences can be viewed as the foundation for the students' academic progress and success (Earwaker, 1992; Bojuwoye, 2002; Nel, Troskie-de Bruin & Bitzer, 2009). Petersen et al. (2009) found that students who come from economically and educationally deprived backgrounds are particularly vulnerable to adjustment challenges in making the transition from secondary school to university. Fisher, et al (2011) found in their study on assisting students in their transition to university, that students need more assistance in their academic work and life on campus to adjust successfully. Facilitating the first year student's experience is pivotal in establishing attitudes, expectations, motivation and approaches to learning in higher education (Fisher, et al, 2011). Academic performance can therefore be seen as a key indicator whether or not students were able to adjustment to the new educational environment (Petersen et al., 2009). Another challenge the at-risk students face is the lack of information of the bureaucratic systems of higher education (Tinto, 2005). First generation students are not familiar with the new learning environment, academic progress procedures or administration processes (Tinto, 2005).

Berkner, Cuccaro-Alamin, McCormick and Bobbitt (1996) and Porter (1990) state that the first four semesters during the adjustment period are crucial to retaining students. Students should be introduced to three components at the institution during the adjustment period. One

of the components is the administration, which includes finance, accommodation, registration on programmes and information access (Schofield & Sackville, 2010). Another component is the orientation around academic work. This includes discipline specific skills with the desired cognitive behaviour patterns that should be introduced by the methods of teaching and learning. A third component, namely social orientation, relates to relationships with peers, administration staff, tutors and even the staff at the residence (Schofield & Sackville, 2010).

The transitional phase during the first year of registration involves three developmental stages (Schofield & Sackville, 2010). In the first stage, students should experience orientation towards the new institution. According to Krause and Armitage (2012), an effective orientation programme should not be an information overload session. Primarily, students should be guided into striking a good balance between the academic and social life at university. Thus, it is essential for students to get acquainted with the academic and support staff who will facilitate learning in the first year. This team should also present information to students on how to survive on campus and what reference points can be used to survive (Krause & Armitage, 2012). Furthermore, university expectations regarding administration and academic performances should be clarified and students should be made aware of the challenges ahead of them (Earwaker, 1992; Schofield & Sackville, 2010). The expectations can be illustrated by sharing the latest data and examples of successful and unsuccessful stories in higher education. Then the focus should be placed on the diverse cohort of first year students by informing them about the different social activities such as socialising with peers, religious and cultural activities (Earwaker, 1992; Schofield & Sackville, 2010; Krause & Armitage, 2012). The socialisation with peers should also allow new students to engage in a practical manner with some of the university's expectations. Here the social system which students are introduced to, can play a pivotal role in them deciding on whether to persist with or disengage from campus life (Tinto, 2005; Fisher, Cavanagh & Bowles, 2011).

The second stage will be a test of a student's academic skills. Levy and Earl (2012, p.17) state that the academic skills include "reading and note-taking, various aspects of essay writing, referencing, and examination preparation and techniques". Schofield and Sackville (2010) argue that assisting students with their academic skills requires academics to scaffold activities. These activities should make students aware of how to think like an academic in a specific discipline, how to access information through reading and how to present thoughts in an academic way. The academic staff will therefore need to model the desired academic

process in their discipline by engaging students to read and construct coherent writing pieces. However, Van Schalkwyk (2008) found that students experience challenges with reading techniques. Students experience difficulty in understanding the deeper meaning of words in texts and consequently also experience challenges to write coherently. Ferris and Hedgcock (2005, p.36) state how "the construction of meaning, the development of complex cognitive and linguistic skills, the activation of existing knowledge and past experience, and the ability to solve problems to control thinking" have a direct influence on coherent writing. Support in higher education institutions should therefore include assisting students with effective reading and writing skills to 'survive'. If the institution provides the necessary support in the academic system and social system, then the student will be able to participate in academic practices and meet the required expectations. The necessary support is essential because after students' academic skills have been tested, Levy and Earl (2012) found that students contemplated about engaging or disengaging after seeing their first semester results.

In the third stage of the first year of enrolment, students need to re-shuffle their priorities and sharpen their skills. Students should utilise the period to reflect and redefine their friendships, evaluate their shortcomings and strengths gained in the previous semester and search for a sense of belonging. According to Krause and Armitage (2012), students begin to become comfortable, develop a sense of belonging and have expectations of returning only in the second half of semester. Even though time and energy was scheduled to reflect on the benefits of a tertiary qualification, the final stage can be seen as a phase where more than thirty percent of South African students would lose interest in their studies, attend classes unfaithfully, neglect to submit assignments or make an attempt to work hard and consistently to keep good grades (Letseka & Maile, 2008).

3.1.1.4 Language competence

Language skills have been identified as a factor that can present as an intrinsic barrier to learning, a challenge that influences academic success. Jackson (2005, p. 205) claims that the language skills required at tertiary level are "fluency in the language of instruction, including language of specific disciplines or areas of learning in the secondary levels; the ability to construct meaning from text; and the ability to communicate the meaning constructed from

the text." Thus, language skills comprise of reading, writing and oral expression (Delors, 1996; Mgqwashu, 2009).

Reading and writing skills are needed to complete assignments in order to be successful at university. Reading is a multi-layered, cognitive-linguistic process with its roots in basic education (Pretorius, 2002). To read with comprehension at tertiary level, requires basic skills such as decoding of linguistic symbols, identifying a central argument and the supporting information, and to understand the structure and coherence of the text (Pretorius, 2002; van Wyk & Greyling, 2008; du Plessis, 2012). Van Wyk and Greyling (2008) claim that for an additional language speaker to access academic texts, it is vital to comprehend the primary and secondary meanings of words (denotation and connotations), anaphoric and cataphoric referencing in articles, synonyms and substitution, cohesive devices and textual organization. Furthermore, a reader needs to have the necessary cognitive ability to decode symbols and fully comprehend at the same time (Pretorius, 2002). Dubin, Eskey and Grabe (1986, p. 38-39) state that the cognitive skills required to read with comprehension are:

- Fitting new incoming information into existing information;
- Noticing, understanding, and integrating meaningful relationships within the text;
- Distinguishing the important from the trivial;
- Determining the main idea;
- Recognizing and evaluating supporting information;
- Separating fact from opinion;
- Detecting the author's purpose or bias;
- Evaluating the soundness of generalizations;
- Detecting hidden assumptions, values, beliefs and attitudes; and
- Analyzing the logic and relevance of arguments

Learners who come from under-resourced schools with poorly qualified educators, often do not have the reading ability for their maturity level (Jackson, 2005; Delors, 1996). Pretorius (2002) found educators at educational-training centres that do little reading and score poorly on inferential skills, thus transferring their poor reading skills to their learners. Inferential skills require a reader to read beyond what is written in the text. According to Tisani (2004),

comprehending information that is not in an article or the reader's socio-cultural framework will lead a poor reader to confusion or misinterpretation. This will occur if they do not read regularly about issues in the knowledge system required in higher education. Schofield and Sackville (2012) argue that students can only be 'encultured' into knowledge of a discipline when the subject specialists guide students to read, write, think and analyse in the discourse. Tisani (2004) claims that this can take place when lecturers take cognisance of students' backgrounds and culture, which is rich with knowledge systems, and then integrate these new knowledge systems into different modules. Jackson (2005) contends in her study on underachieving minority students that the integration can take place through a mediation process in which students' vocabulary, standard language use and inferential thinking improves in their disciplines.

Furthermore, Lebowitz (2004) states the importance of language proficiency in acquiring academic literacy. According to Jackson (2005, p. 208) literacy can be described as "an individual's ability to construct, create, and communicate meaning in many forms". Challenges arise in students' academic work due to their lack of vocabulary, standard language use and inferential thinking, challenges arise in their academic work. Pretorius (2002) and Lebowitz (2004) avow that some of the underachieving students will develop cognitive academic language proficiency challenges. Van Schalkwyk (2008) claims that students develop cognitive academic challenges due to their lack of understanding the language of instruction. This entails students misinterpreting information due to unfamiliar discipline specific concepts presented in a language they cannot comprehend (Steenkamp, Baard & Frick, 2009). Due to the lack of understanding of content specific information, the students are experiencing challenges in generating knowledge in oral or written forms of assessments. Therefore, the low level of language competence of students impacts on their progress at higher education levels.

3.1.2 Extrinsic barriers to learning

Extrinsic barriers to learning generally arise in the external environment. According to Stofile, Raymond and Moletsane (2013) extrinsic barriers emerge from three factors, namely systemic factors at home, in the school and the person's local community. Lourens (2013) contends that the local community should be a safe place for students to travel from home to

school. Where a student has to travel daily, it is important that the home should be a safe haven to come from and that the university should be an institution where learning and development takes place. Secondly, teaching and learning factors in the learning environment can also have an impact on the students' academic performance. Pedagogical factors such as an educator's ability to organise a module and manage the classroom have a direct impact on the student's academic performance.

Teaching and learning as well as broader systemic factors are extrinsic barriers to learning that can prohibit accessing quality education and consequently hinder the process of learning and development. The extrinsic barriers to learning entail exposure to inappropriate teaching methods to accommodate different learning needs (Stofile, Raymond & Moletsane, 2013). Appropriately trained educators, with sufficient teacher knowledge, should present information in a module and be able to design flexible assessment strategies for the diverse group of students. A lecturer should therefore be able to organise and present a module to a diverse group of students who come from different ethnic groups, race, class and gender or speak a language other than that of the lecturer (Singh, 2008). Lastly, the broader systemic factors like inadequate psycho-social support or health services, educational support for students and educators also present as barriers to learning (Stofile, Raymond & Moletsane, 2013). In certain cases, a language policy at an institution of learning can also create learning challenges. Students who are expected to learn in a second or third language will experience this as a barrier (Van Schalkwyk, 2008). The ineffective management of intrinsic or extrinsic barriers to learning will result in students disengaging from their academics.

3.1.2.1 Socio-economic circumstances

One of the extrinsic barriers to learning the students experienced is their low socio-economic circumstances (Thayer, 2000; Letseka & Maile, 2008, Lourens, 2013). According to Thayer (2000) only 5% of low income students obtain their Bachelor's degree compared to 74% of students from families with a higher income in America. Letseka and Maile (2008) also documented similar results in South Africa. In South Africa an average of 70% of the dropouts come from low economic statuses. The high financial demands of higher education can be viewed as a primary reason for low-income status students to dropout. In certain cases it has been noted that their parents earn an income between R1600-R3200pm to support their academic needs (Letseka & Maile, 2008; Breier, 2010).

Socio-economic circumstances can refer to the living conditions and circumstances students endure during the period that they are attending and residing at an educational institution. The living environment includes access to basic services such as clean water, electricity and safe reliable transport (Lourens, 2013). According to Sirin (2005), an individual's socio-economic circumstances are influenced by their socio-economic status (SES). SES has three main indicators namely, "parental income, parental education, and parental occupation" (Sirin, 2005, p. 419). The parent's income can reflect the social and financial resources available to the student. The second marker, parental education, is seen as one of the most stable factors of SES because it remains over a period of time. Parental education is also associated with a parent's income. Occupation is graded on the basis of the qualifications needed to earn a certain income in a particular profession. The type of professional occupation also represents the social and financial status of the household and indicates the prestige and culture of a given socio-economic stratum (McLoyd, 1998; Sirin, 2005). Zaaiman (1998) asserts that the indicators of SES used in most research include the educational, occupational and economic achievements of the student's parents. However, other studies done by Duncan and Brooks-Gunn (1997) and McLoyd (1998) found a fourth indicator for SES, namely home resources. Resources at home could be household possessions such as books, computers, a room to study, and access to educational services after school and during vacations. The socio-economic circumstances of students influence their academic performance (Sirin, 2005). According to Tinto (2012), students from low socio-economic circumstances have a lack of shared knowledge and cultural capital in higher education compared to more affluent students who come from university-graduated families. The lack of financial support can serve as a contributing factor for students to disengage from tertiary education (Tinto, 1982; Letseka and Maile, 2008).

The shortage of financial resources acts as a barrier to performing optimally at university. The financial constraints most disadvantaged families are experiencing in South Africa, has its roots in the segregated South African education system which existed under the Apartheid regime (Fataar, 1999). In South Africa, the former government empowered a minority group at the expense of a majority of the population. Subsequent to democratic election in 1994, policy changes to favour the oppressed were approved, but the lack of infra-structure in poor communities left the majority of poor people in the same ill-equipped schools with the same educational and financial challenges as prior to 1994 (Lourens, 2013). Letseka and Maile

(2008) aver that the average income of many black families in South Africa is R1600pm. Students are dependent on their guardians to support them financially during their studies. Funds are needed to purchase course material, travel to and from university, buy clothing and eat healthily (Flisher, de Beer & Bokhorst, 2002; Jansen, 2009; Breier, 2010). The lack of finances leads students to reconsider attending classes faithfully or pursuing their academics (Tinto, 1982).

Even though some of these students have scholarships and bursaries, poverty and unemployment at home and in the communities they come from, often results in the use of these funds to assist with the basic needs of their families (Bojuwoye, 2002). According to Letseka and Maile (2008), the South African government's financial scheme, the National Student Financial Assistance Scheme (NSFAS), provides funds for essential living expenses only; students sometimes have to augment their income with part-time employment. Part-time employment eases the tension of financial constraints and assists with the rising cost of higher education but reduces the time for students to spend with their studies (Tinto, 2005, Letseka & Maile, 2013). The part-time employment can distract students from their academics, especially with 70% of drop-outs indicating that the lack of finances influenced their priorities on campus (Letseka & Maile, 2008). Bojuwoye (2002) also noted how financial challenges affect the students' level of concentration which in turn impacts negatively on academic performance. Tinto (1993) in Breier (2010) concur that financial problems can be one of the primary concerns for most poor and working class students. Thus, financial constraints with its ramifications can be viewed as a barrier to learning when students underperform.

A number of studies have attempted to understand why students underachieve once they enter university. Students who were recipients of education in an under-resourced educational environment in certain underprivileged communities are often at risk when entering higher education (Delors, 1996; Morrow, 2003). The scarce resources in the educational environment in underprivileged communities result in under-prepared students who lack the necessary information and abilities on which a higher education is based (Nel, 2008). In addition to educational under-preparedness and a lack of funds to support and sustain their higher education studies, psycho-social development was also considered as one of the reasons for students' underperformance within higher education (Petersen, et al., 2009).
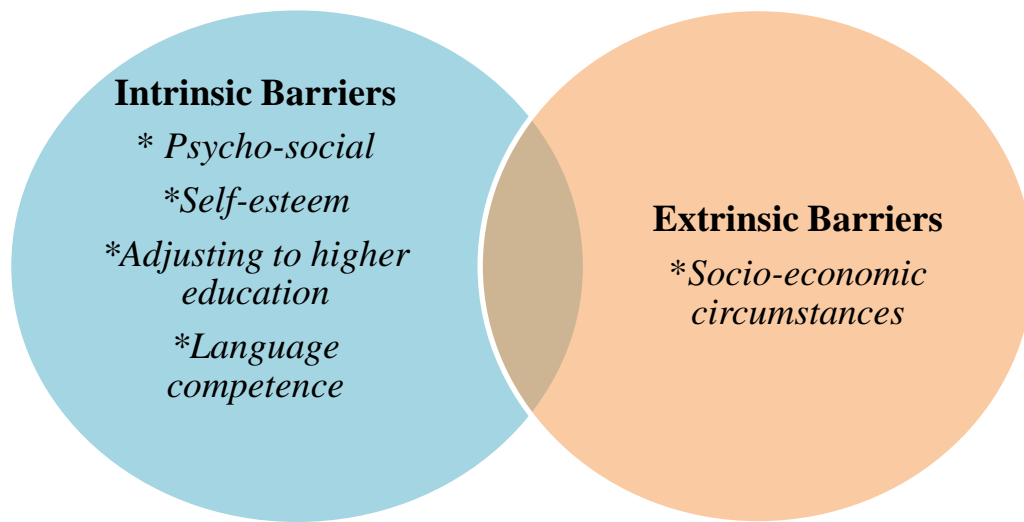
Figure 3.1 **Influence of extrinsic barriers to learning on intrinsic barriers to learning**

3.2 Underachievement

Academic underachievers usually have a good to average intellectual ability, but their academic achievements do not reflect that ability (Preckel, Holling & Vock, 2006). Underachievement is evident where there is an interplay of multi-layer complex circumstances in a student's life. According to Preckel, et al. (2006, p.401), there are numerous intrinsic and extrinsic barriers to learning that can interplay and influence the academic performance of a student, namely:

- the personality of the student,
- family variables,
- school environment, or instruction practices, and
- preferred learning styles.

Underachieving students can be identified as those students who do not live up to their potential, who can perform better at a learning institution than they actually do. Underachieving students can also be viewed as those students who are struggling to pass their modules at university, due to being placed at-risk (Gallagher, 2005).

Balduf (2009) and Preckel et al (2006) found intrinsic factors such as certain distinct personality traits amongst underachievers. The first personality trait is the lack of ability to link prior knowledge and internal attributions about self-efficacy. According to Clark (2002) underachieving students also have an inability to transfer mastered skills from acquired information to an appropriate task. Here an intrinsic learning challenge such as control over personal learning might be the primary reason for the students' inability to transfer knowledge.

Another factor of underachievement is the display of low self-esteem and negative attitudes towards an educational environment or educators who are responsible for teaching and learning. Carr, Borkowski and Maxwell (1991) in their study of motivational factors of underachievement found that underachievers have "low self-esteem and external attributional orientations" (p.108). The external attributional orientations can be ascribed to students who do not fully comprehend strategic knowledge about the amount of effort needed to complete difficult assignments. They also fail to use appropriate strategies to complete complex tasks and can easily underestimate the demands of particular tasks, because they form poor strategies that lead to underperformance. This could be because students who lack self-belief do not hold a strong metacognitive motivational system, which results in failure to "self actualize" or experience difficulties achieving their personal objectives (Carr, Borkowski & Maxwell, 1991; Reis & McCoach, 2000).

The root of this form of underachievement lies in the interdependent relationship between the cognitive state and emotional development. According to Baker, Bridger, and Evans (1998), the educational difficulties underachievers experience during schooling often result in feelings of frustration with undiagnosed cognitive challenges and possibly ineffective interventions. One of the primary reasons for the negative attitude towards educational environments and educators by underachievers is the need for cognition. The need for cognition can be described as an individual's inclination to look for, engage in, and get pleasure from effortful cognitive activity (Preckel, et al., 2006). An individual, who has a low need for cognition, does not seek or find pleasure in cognitive activities (Preckel, et al., 2006). Consequently, when there needs to be a positive effort made by the brain when learning needs to take place, an individual with a high need for cognition will engage fully

during the learning process. Preckel et al. (2006) study of academic underachievement has shown that the need for cognition and how anxiety is facilitated does not provide the most meaningful explanations of underachievement. However, research done by Clark (2002) and Delisle and Galbraith (2002) found that underachievement was a set of behaviours that can be transformed. Sometimes, underachievement can be content or situation specific, so it is possible to transform the behaviours of students and change their achievement patterns in the new educational environment.

The low socio-economic status (SES) of students can sometimes generate ineffective behaviour patterns and implement poor strategies to succeed at higher education. According to Earnon (2001), this can be due to the lack of stimulation in under-resourced schools where poor classroom environments increase behaviour problems. In these conditions, individuals who view their school environments as less supportive are also more likely to display signs of psychological distress. In unsupportive disadvantaged school settings, it was found that these patterns are carried over to the higher education institutions which results in underachievement. This is a result of shortcomings in strategic thinking and understanding the effort needed to perform in academics (Preckel, et al, 2006; Carr, Borkowski & Maxwell, 1991).

Accordingly, some students function with internal motivational factors and others with external locus of control depending on the proximal processes in the microsystem. The internal cognitive motivational factors lead to academic performance due to a strong self-belief and understanding that academic tasks need effort to complete successfully. Underachievers who use an external locus of control have a misconception of the effort required to complete complex tasks. This results in academic underperformance and students developing a poor self-concept. Thus external motivational factors should then be utilized to support the learner in the education environment because underachievers feel they are powerless over their own patterns of learning (Gallagher, 2005).

3.3 Education Support in Higher Education

The broadening of access to higher education stimulated the development of education support. In order for an efficient education support system to function, the relevant

curriculum and appropriate human resources should be available to support a diverse group of students. Academic support was the first initiative to support under-prepared students. The support focussed on the shortcomings of the student and not the curriculum or the institution's policies. Subsequently, assessment practices and the curriculum content were reviewed when Academic Development Departments were established. Academic Development initiated the Extended Curriculum Programme, a programme for students who were underprepared for higher education due to disadvantaged backgrounds. The section that follows explores each of these approaches to education support in higher education as they have developed over the last few decades.

3.3.1 Education Support

Education support entails the complete curriculum and human resources that are available to support and address the diverse needs of a student (Mashau, Steyn, van der Walt & Wolhuter, 2008). According to Lazarus (1997) education support should reduce the barriers to development and learning, and attempt to prevent the same challenges continuing to exist in the teaching and learning environment. Therefore, the members of staff in the teaching and learning environment should not view a diverse group of students as individuals with problems, but rather view the diversity of students as an opportunity to reduce barriers to learning in an enriched teaching and learning environment (Motitswe, 2014). Students should therefore not only receive assistance with their academics, but the support should cover the social and emotional well-being of the student (Arendse, 2010; DoE, 2001; NEPI, 1992). The Education White Paper 6 (DoE, 2001) require education support services within learning institutions, including higher education and district offices to reduce learning challenges in the education system. These structures are referred to as Institutional level support teams (ILST) and District based support teams (DBST). Although the focus has been implementation of inclusive education at schools, structures in higher education would be expected to perform a similar function (DoE, 2001). According to Motitswe (2014, p. 260), the ILST should be "centrally involved in identifying 'at risk' and vulnerable learners in the learning process" to provide them with the necessary support. The ILST should support teaching and learning activities for students, academics and the institution, and should collaborate with professionals like counsellors, psychologists, social workers and health care workers to ensure the provision of holistic support to students (DoE, 2001). Jacklin and Le Riche (2009, p. 738) contend that there are three significant elements of higher education support namely the "support for learning in the curriculum processes, academic tutoring and

specialist student support services". The three elements can be complemented with faculty level support teams and inter-departmental collaboration and various university structures (Levy & Lees, 2012). According to Tinto and Pusser (2006), institutional level support is crucial for the retention of students. Institutions of higher learning should therefore create an enabling environment for teaching and learning, so that barriers to learning can be reduced.

3.3.2 Academic Support

Academic support is an integral part of the institution's support system. The purpose of academic support units was to provide assistance to students who were experiencing academic challenges in higher education due to their poor educational background (Tinto, 2005; Boughey, 2010). Hunter (1990, p.24) attempts to define academic support as the "structured teaching arrangements which are supplementary to the mainstream provision of lectures, tutorials and practicals or which constitute enriched forms of mainstream courses."

Academic support services in higher education were initiated in the early 1980s in South Africa. Boughey (2010) asserts that academic support had to assist the small amount of black students who were accepted in white liberal universities. The Apartheid government agreed to the "University Amendment Act (Act 83 of 1983), also known as the 'Quota Act'" (Boughey, 2010, p.5). The Act was an attempt to register a particular number of black students at white liberal universities. The Act was influenced by the United States of America, who adopted an affirmative action policy stipulating conscious efforts to admit and graduate minority students in the field of engineering (Jawitz, Kotecha, & Setiloane, 1990). Since the mid-1980s, academic support units attempted to assist those who came from educationally deprived backgrounds in South Africa. These units assisted students with academic literacy, namely reading , writing, thinking and oral communication at tertiary level and focused on developing social and emotional skills as well (Jawitz, Kotecha, & Setiloane, 1990). This means that academic support services focused on "filling the gap" caused by a lack of conceptual knowledge during basic education, and it was intended to enable students to cope with the demands of tertiary education (Boughey, 2010). Therefore, the skills developed included study methods, English language proficiency, critical thinking ability skills and life skills to develop personal growth (Lazarus, 1987; Boughey, 2002; Boughey, 2010). However, Kloot, Case and Marshall (2007) agreed with Lazarus (1987) that these programmes were a 'reactive response' to the poor academic performance of minority students at predominantly white universities. Lazarus (1987) argued that the institutions used

a student deficit model when they analysed the poor performance of minority students at English-speaking white universities. The model identified the following challenges with poor performing minority students (Lazarus, 1987, p.11):

(i) the problem is located in the student

(ii) the problem is primarily manifest in communicative (e.g. English Language), cognitive (e.g. study, learning and conceptual), and subject specific (e.g. physics and mathematics etc.) deficiencies; and finally

(iii) the problem can be cured through academic support programmes such as additional tutoring, language courses, foundation years, and slow streams.

However, in the late 1980's a new discourse emerged regarding previously disadvantaged and underachieving students. Access to higher education was not primarily about assisting students with language development and study skills, but to also scrutinize the westernised curriculum and assessment practices forced onto a diverse group of students (Boughey, 2003). The new discourse expected support units to assist academic staff with the development of flexible curricula, assessments and teaching methodologies. Support units were expected to conduct the necessary research on flexible curricula, assessments and teaching methodologies, and to share findings with academics on how better to address the needs of under-prepared and underperforming students.

In South Africa, 'weak students' became a synonym for black students who did not get the necessary support and quality schooling that ought to have prepared them for tertiary education (Masenya, 1995). The need to assist the previously disadvantaged who are the majority of the population in South Africa, during and after Apartheid, became a reality due to their deprived education under the Department of Training which often resulted in their consequent poor performance in higher education (Kloot, Case & Marshall, 2007). Masenya (1995) also states that "an Academic Support Programme claims the provision of educational quality but does not offer much in terms of educational equity, the latter refers to the provision of equal educational opportunities to all citizens of South Africa" (Rabie, 2008, p. 36). Branson, Leibbrandt and Zuze (2009) found that equity in higher education is still a concern. Equity in South African higher education has always been calculated in terms of race and gender differences (Branson, Leibbrandt & Zuze, 2009). Gender and race discrimination in accessing educational opportunities still remain in South Africa, and are

strongly linked to socioeconomic profiles which is the ashes of the Apartheid regime (Branson, Leibbrandt & Zuze, 2009). According to Jansen (2004), an equal educational opportunity can be viewed as quality education during the foundation years of schooling, where the "foundational competences to improve later learning" (p.3) should be a priority because without the necessary foundation our society will perpetuate the inequalities of our segregated past. He also argues that (2009) the foundations of "...custom, creed and culture through generous and warm adults...." are shared in a "...bond of language which is secured...." and this creates an "...emotionally rich and rewarding environment in which South African children can experience wholeness...." (p. 98). As a consequence, good quality basic education for all South Africans will provide access to quality education and ensure better throughput rates in higher education.

As wider access in higher education was requested through the new political order, diversity amongst students increased and the need for academic support units became clearer (Van Schalkwyk, 2008). The support given had to address academic challenges that the students were facing and give them "epistemological access" (Boughey, 2003, p.70). According to Morrow (2003) and Boughey (2003, p.70), epistemological access is the "…development of a set of skills which will allow students to engage with tertiary study…" Therefore, extra academic contact sessions are not the only form of support students need to succeed academically. Prebble, et al. (2004) states that academic support activities should include supplemental instruction, peer tutoring and mentoring. In addition, they argue that systematic monitoring of first year students who are placed at risk in higher education is strongly recommended.

Furthermore, Prebble, et al (2004, p.72) identified a comprehensive list of services regularly used by students:

- Child care;
- Pastoral/religious care;
- English language resource/support services;
- Financial aid;
- Counselling service;
- Health service;

- Library support service;

- Support for international students;

- Women's resource/support centre;

- Student housing service;

- Employment service;

- Study skills assistance;

- Student union clubs;

- Student union sports facilities; and

- Student union cafeteria/catering service.

In addition, Mandew (2003, p.70) identified categories in which students needed assistance. The categories are as follows:

- Study Skills,

- Learning about Learning,

- Employability Skills,

- Leadership and Governance,

- Technical Committee Skills,

- Diversity and Boundary Crossing,

- Entrepreneurship Skills,

- Democracy and Citizenship, and lastly

- Life skills

Initially academic support was essentially about the provision of additional contact sessions to support under-prepared students. It became evident over the years of development that under-preparedness is caused by a lack of quality basic education, in which basic academic skills are stimulated. Due to the students' backgrounds, support had to expand and also focus on diverse skills and diverse support services to prepare students for mainstream education. This realisation resulted in reviewing the support given to students but also to reflect on the content of the subjects that students are exposed to in higher education.

3.3.3 Academic Development

Academic development evolved as a result of the realisation that barriers to learning are not exclusively intrinsic. Barriers to learning can also develop in the teaching and learning environment of the student. Academic support, as expanded in the previous section, focused on supporting the student during the articulation gap, while Academic Development (AD) is seen as a step towards scrutinizing curricula, assessment practices and teaching strategies that have origins in European or highly developed communities that make it difficult for disadvantaged students to succeed (Boughey, 2003). Even though research-based evidence was limited that confirmed teaching practice had an impact on students' performance was limited, Volbrecht and Boughey initiated academic development in South Africa in 2004.

Academic developers had two primary goals. Firstly, academic development focuses on improving the teaching practice of tertiary teachers and secondly, it is intended to enhance the learning experience of students attending the academic programme in higher education (Prebble, et al., 2004). Thus, academic development should have a positive influence on 'teacher knowledge, values and practice' in order for students to have a more enriching learning experience during contact sessions. Ben-Peretz (2011, p.4) postulates that teacher knowledge can be defined as "content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts, knowledge of educational ends, purposes, and values and their philosophical and historical grounds."

Furthermore, Boughey (2002) and Agar (1991) explain that since disadvantaged learners often come from poor educational backgrounds, institutions of higher learning should democratise the learning material. This meant that curricula had to encompass material that would acknowledge and develop the African identity so that an "indigenous intellectual culture" could be the foundation of the post-apartheid society (Bawa, 2001). This could only succeed after tertiary institutions gradually began to accept ownership of the phenomena of 'disadvantage' and 'under-preparedness' of the majority of students (Boughey, 2002; Boughey, 2010). When the change from academic support to academic development occured, the concept 'foundation programme' was developed to describe a set of courses that attempted to lay the necessary academic foundation for continuing studies at tertiary level. Therefore a foundation programme is:

the structured teaching arrangement which takes the form of

a year of study and/or practical training which is completed

before entry to a tertiary curriculum (Hunter, 1990, p. 24).

Later the Department of Higher Education and Training (DHET) referred to this programme as the 'Extended Curriculum Programme' meaning a "modified first-year but to a full degree or diploma that includes foundation courses" (Kloot, Case & Marshall, 2007, p.12).

Prebble, et al. (2004) found that academic development programmes have made quite an impact on throughput levels within higher education. Du Pré (2004) suggests that the goals of Academic Development Departments should be to assist underprepared students, while Teaching and Learning Development units need to be established to assist academic members of staff who are expected to teach these students. In addition to the two new structures, a Cognitive Development programme has to be implemented. Such a programme would focus on the development of critical thinking and overall thinking skills (Du Pré, 2004). Lastly, lecturers who needed assistance with the teaching of basic thinking skills would need help. Therefore, the desire for a Curriculum Development centre would be requested (Du Pré, 2004). The Curriculum Development unit's mandate would then be to assist academic staff to develop curricula, programmes and syllabi to help the teaching staff.

3.3.4 Extended Curriculum Programmes

The Department of Education (2002) stated that tertiary students needed assistance, and therefore Foundation Programmes, later referred to as Extended Curriculum Programmes (ECP) were introduced to broaden access and success in higher education (Boughey, 2007). According to Jones, Coetzee, Bailey and Wickham (2008), all higher education institutions provide some form of foundation or extended programmes which serve as another route to post-schooling education for students who passed matric with a Bachelor's pass but are under-prepared to enter mainstream university programmes. The need for Foundation programmes started from 1990 (McKenzie & Kioko, 2010). This was due to the change in the political sphere, but also because of the identification and concerns around access and throughput rates in higher education. Jones, et al. (2008, p. 54) states that extended learning programmes are usually based in academic development departments and they include

"relevant development components such as associated foundation work, language and academic literacy and study skills" for specific subjects.

The Foundation students could be identified as -the underprepared first-year students who experience barriers to learning and are at risk, but are placed in an educational setting and expected to participate optimally in higher education studies. Van Schalkwyk (2008, p.5) claims that underprepared students in her study of Extended Degree Programme students acquiring academic literacy in a particular South African university are:

- black (all non-white),
- come from an impoverished educational background with a lack of resources and educated teachers (Nel, Troskie-de Bruin and Bitzer, 2009),
- are second or even third language speakers of the medium of teaching and learning,
- are possibly first generation students; and
- lack the necessary academic skills such as effective study methods, time management and academic writing skills.
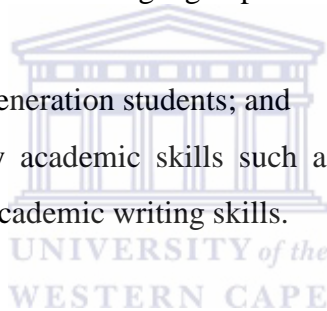
Thus, students who were accepted in various extended programmes can be identified by their matric results (Van Schalkwyk, 2008). Foundation students are therefore those weaker students who arguably need time to adapt to the university atmosphere and will benefit from preparatory courses before entering the mainstream. However, a stronger student could also be assisted in an extended programme.

Titlestad (1998) however, found that the term "educationally disadvantaged" should not be alluding to just one race group. Titlestad's (1998) study found that both white and black students accessing universities have challenges in succeeding. Hence, all students who were exposed to underprivileged schooling should be recipients of extra support in a Foundation course. Lourens (2013) confirms this and argues that being educationally disadvantaged includes three dimensions, namely a student's socio-economic circumstances, educational circumstances and lastly the personal circumstances that the student experiences during his/her studies. According to Young (2010), a *student's socio-economic circumstances* refer to the student's neighbourhood and basic living conditions during schooling years. A

student's living environment will automatically give access to a specific quality of life, which might include clear running water, electricity and reliable transport. The *educational conditions* refer to the school's atmosphere and goal to promote access to learning, qualified teachers with reasonable learner-to-teacher ratios, good quality resources and infrastructure to facilitate learning. The third dimension, namely *personal circumstances*, refers to aspects directly influencing the student's daily existence. This includes the nuclear family's income or any psychological traumatic event a student may have experienced (Young, 2010). A family's income will automatically categorise a student's socio-economic status (SES). According to Sirin (2005), in his study of socio-economic status and academic achievement, a fourth indicator also influences academic achievement. *Home resources* include "household possessions such as books, computers, and a study room, as well as the availability of educational services after school..." (Sirin, 2005, p. 419). Thus- the educational, occupational, economic achievements and home resources of the student's parents it is argued, will have an impact on the student's performance in higher education (Sirin, 2005; Lourens, 2013).

Levy and Earl (2012) found that underprepared students made use of sessions where they could engage with lecturers and tutors who were willing to assist them on life skills and critical academic abilities. Jones, et al. (2008) argues that students in extended learning programmes should be presented with non-academic support, like life skills modules as well as mentoring and counselling. Consequently, an extended programme refers to a degree or diploma extended or augmented by certain academic development components, courses and modules which could include practical skills in subjects like engineering, effective study skills, quantitative reasoning and thinking skills taught through language (Kloot, Case & Marshall, 2007; Hunter, 1990). The academic and non-academic support is thus intended to provide the student with a holistic support service.

Students acknowledged the additional academic year in extended programmes was helpful but they had to endure ridicule from fellow students and staff (Jones, et al., 2008). Therefore new descriptions and labels like 'bridging course' and later 'Foundation Programme' and 'Introduction to...' were created to minimise the stigma of extra tuition at university (Du Pré, 2004). To assist students who were on the Foundation programmes, successful Foundation programmes needed to employ dedicated staff members who were willing to reflect on improving their teaching and learning practice (Lees & Levy, 2012). Staff members are led by one full time Head of Programme and assisted by a full-time programme administrator.

These staff members also availed themselves for regular staff meetings, attended workshops to develop their skills and engaged with mentors and the Student Support Officer to optimize support for at-risk students (Lees & Levy, 2012). Foundation programmes should therefore focus on the lack of academic skills and conceptual knowledge that these specific students have, and ensure that they are facilitated in a non-threatening environment so that the students can engage and succeed at the tertiary institution (Boughey, 2010).

3.4 Conclusion

The literature review presents concepts and ideas from researchers who document concerns about the articulation gap for students who come from underprepared educational environments. The chapter explains how intrinsic and extrinsic barriers to learning can influence underachievement. The identified intrinsic barriers to learning are psychosocial, student's self-esteem, adjusting to higher education and language competence. The primary extrinsic challenge identified is the socio-economic circumstances the students are experiencing. This also influences the intrinsic barriers to learning. Due to widening access to higher education, the development of education support in higher education was necessitated. Education support was initially based on the student deficit-model and therefore academic support was initiated to assist the underprepared student. After realising that underperformance can be ascribed to intrinsic and extrinsic barriers to learning, academic support developed into academic development. Academic development is regarded as having two foci- firstly to assist lecturers to reduce barriers to learning through teaching and secondly, to enhance the student's learning experience. One of the initiatives to enhance the under-prepared student is the Extended Curriculum Programme. These concepts in the literature review link with ideas in the Theoretical Framework, namely Bronfenbrenner's Bio-ecological model and Tinto's ideas on institutional action.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

The research approach to the study was qualitative. The chapter begins with the research aims and questions, after which follows a discussion of the research approach that was used for the study. The chapter also provides an outline of the data collection process, describing the particular research instrument employed. Phase one focused on the background of support services where individual interviews were conducted with the senior management at the university. Phase two involved a focus group discussion with tutors who volunteered at the support unit. Phase three entailed individual interviews with the co-ordinator and administrator of an academic support unit at the university. The interviews were transcribed and a thematic analysis of the information will be presented in Chapter four (Findings).

4.1 Aim of the research

The main aim of this study was to determine the type of support services provided to underachieving students in the ECP. The purpose of this study was to ascertain the challenges that the ECP students are experiencing and to gain insights regarding challenges experienced when support is being provided and barriers to learning are addressed.

4.2 Research questions

The main research question of the investigation was *to ascertain the support services available to address the needs of underachieving students.* Additional questions had to be asked to ascertain the answer to the main research question:

1. What challenges are the first year Extended Curriculum Programme students experiencing?

2. What support services are available to support the first year Extended Curriculum Programme students?

3. What challenges are experienced in addressing the needs of first year Extended Curriculum Programme students?

4.3 Research design

A research design positions a researcher in the scientific environment. It also guides the investigator to specified sites, samples, groups, demarcated areas, institutions and appropriate information. The design also spells out how the researcher will deal with the two important matters of representation and legitimation (Denzin & Lincoln, 2005).

The context of the study, informed by the interpretive paradigm, guided the researcher to the methods and participants needed for individual interviews and for focus group interviews. According to Terre Blanche, Durrheim and Kelly (2006), the design also guides the researcher in the data analysis process.

4.4 Research Paradigm

A research paradigm constitutes the guidelines for questions asked and a method on how to find the answers. According to Denzin and Lincoln (2005) a paradigm consists of a belief system and assumptions that will direct thinking patterns and the investigation. De Vos, Strydom, Fouché, and Delport (2011) state that a "paradigm as a model or pattern contains a set of legitimated assumptions and a design for collecting and interpreting data" (p. 40). The paradigm will also guide the researcher to arrange the observations made during the inquiry and form the way in which knowledge about the phenomena is acquired. The research paradigm for this study is based on the interpretive paradigm. Interpretivism depends on human beings' "intentions, beliefs, values and reasons, meaning making and self-understanding" (Henning, van Rensburg, & Smit, 2004, p.20). The investigator is obliged to look in different places and at different things where meaning making about the phenomenon takes place. According to Henning, van Rensburg and Smit (2004), the interpretivist attempts to capture the participants' viewpoint of the phenomena being studied. The researcher then relies on their linguistic skills to construct social meaning in context with the participants in

the research study. Language is thus essential for the interpretation of phenomena, as the researcher is co-creator of the way the discourses function in specific context.

4.5 Qualitative research

Qualitative research methodology has achieved prominence in the social sciences (Meulenberg-Buskens, 2002). This research method finds out what participants in a study do, know, think and feel by observing and interviewing them, and analysing relevant documents pertaining to the study (Patton, 1990). It is also constructed to take account of the specific characteristics of human experience and to smooth the progress of the investigation of experience (Polkinghorne, 2005). Thus, the human experience cannot be compared to physical objects in nature that is rigidly ordered like mathematical patterns.

Qualitative research is also the process of comprehending why things occur, and not only a focus on what is occurring in a particular research area. The primary concern of this research method is to capture the meaning which humans convey to their experiences, thoughts and feelings on the subject-matter (Babbie & Mouton, 2001). In addition, the inquiry is done in the natural surroundings of the participants in the study. This is vital, as the focus will be on the participants' understanding of the subject-matter during the interviews. During the interviews, those working with the issue of investigation can provide the researcher with an in-depth understanding of behaviours and events. Their understanding will shed some light on the behaviours of those involved in the specific context. Details of the day-to-day experiences of the issues that the researcher wishes to comprehend will thus be shared by those who work with the phenomena (Babbie & Mouton, 2001). However, a disadvantage of this type of research is its potential subjectivity when data is analysed. Wimmer and Dominick (1997) accentuates the challenge that the data poses when drawing conclusions and generalizing the findings to a larger population. The challenges of the research design can be combated by incorporating techniques and gaining methodological insight through incorporating the triangulation of methods and data-sources and leaving an audit trail (Meulenberg-Buskens, 2002). The qualitative approach is therefore a communal process in which the participants inform the researcher but examination and approval comes from others. The meaning of phenomena is accrued through the mental processes of interpretation which can be influenced by others and social contexts.

4.6 Research Site

One university in South Africa established an academic support unit in a faculty. The support unit was established to ascertain the challenges the ECP students were experiencing, and to develop a structure to support the students. The ECP extends over four years of full time study where two sets of admission requirements have been approved by senate. ECP students were selected according to the National Senior Certificate (NSC) results from and after 2008. The students entering the programme with NSC from 2008 should have specific subjects at a rating of 4 and a score of 30 or more based on the university's approved points system. The following subjects are specific requirements to study in the EMS faculty:

- Level 3 (40-49%) in English (home or first additional language)
- Level 3 (40-49%) in another language (home or first additional language)
- Level 3 (40-49%) in Mathematics or
- Level 5 (60-69%) in Mathematics Literacy

The students who entered the programme before 2008 should have obtained a Matriculation Certificate or an exemption certificate thereof or an equivalent qualification with an aggregate of at least a D (50%) with the following subject requirements:

- HG (40%, E symbol) Mathematics or
- SG (50%, D symbol) Mathematics or
- A qualification or level of competence which the Senate of the University has deemed to be equivalent to the requirements.

The ECP requires fours years of full time study of all candidates. The additional year at the institution of higher learning has financial implications for students and their families. The student's, who are experiencing barriers to learning due to socio-economic circumstances, will have to endure an additional year of higher education fees even though their family income is of the lowest in South Africa. Parents are obliged to pay for modules and textbooks in the ECP, which is structured over two years. This can place enormous pressure on students and their family's minimum of R1600-R3200pm household budget (Letseka & Maile, 2008; Breier, 2010).

The university has an established centre to support students that provides therapeutic services and designs support workshops for all students. However, due to the low throughput in the faculty and the need to support ECP students, funding was procured to establish a support unit in the faculty. The mandate of the unit was to support underachieving students and then conduct research on the types of interventions to enhance throughput.

4.7 Participants

Participants were selected with explicit intentions in mind. Three criteria were used when the participants were selected. According to Babbie & Mouton (2001), the first criterion is referred to as enculturation. Enculturation mean that the person works in the environment and is encultured. Therefore, four senior management staff was individually interviewed to share their perception regarding the environment in which the phenomena functions. The second criterion is known as current involvement. It is imperative that the participants are presently involved with the issue under investigation. The two staff members who are engaging with the underachieving students and one group of tutors who volunteer at the unit were identified as those who are currently involved. The last criterion relates to conducting the interviews at the appropriate time. Due to all the participants' different schedules, individual interviews were scheduled but a focus group discussion was conducted with the tutors who volunteer at the support unit. Thus, purposive sampling was used for selecting the participants in the study. The researcher used professional judgement to select the best participants for the investigation, in order to share information about the subject matter in the inquiry (Neuman, 2003).

4.8 The researcher as instrument

In a qualitative approach, the researcher is used as the instrument for the collecting of data (Mertens, 2005). According to Polkinghorne (2005, p. 138), qualitative data can be perceived as the "...oral form ....product of the interaction between participant and researcher." The researcher decides on the questions to be asked during the interviews, the observations to be made during interviews with participants, all the information that should be transcribed and what is given preference. It is therefore important to note the values, beliefs, assumptions, opinions and experiences that the researcher brings to the investigation.

The researcher was an Academic Literacy tutor in the mainstream programme and on the Extended Curriculum Programme for two years. During the two years on the Extended Curriculum Programme, the tutors were trained in counselling and mentoring skills. The researcher became aware of the differences between the two groups of students and decided to apply for a lecturing position on the Extended Curriculum Programme. As the academic literacy lecturer, teaching first year students for eight years, it became evident that the students were underprepared for higher education and that more resources were needed to support the underachieving students. Two years before the researcher's resignation as academic literacy lecturer, she presented supplemental instructions including cognitive stimulation to struggling students and collaborated with the support unit in the faculty and other colleagues who worked in the Extended Curriculum Programme. The pass rate of the group who attended the sessions was very good, and this allowed her to conclude that efficient support should be provided to underachieving students.

Bronfenbrenner's systems thinking gives clear guidelines in regard to how student challenges should be identified and addressed. As a lecturer and tutor for a decade on the Extended Curriculum Programme, it was evident to the researcher that most of the underachieving students were experiencing challenges in their microsystem and also at the university. Tinto's ideas on institutional action allows institutions to reflect on the academic system and social system they have established to support students in higher education. These two theorists influenced her method of analysis, interpretation and understanding of the data and the phenomena in the investigation.

Given her personal and professional interaction with staff and students in the Extended Curriculum Programme, it was imperative for the researcher to be reflective in the process of conducting the research. Her reflexivity had to apply to data collection which took place during her employment as an academic literacy lecturer on the ECP, the analysis of the data and the synthesis of the findings after she had resigned. It was very important to remain focused and for her to be critically self-reflective. She had to question her own biases and influences in the study. She used opportunities to debrief regularly with my supervisor and peers to maximise her objectivity.

4.9 Data Collection Methods

A proposal for the inquiry was submitted and approved by the University of the Western Cape after which ethical clearance was obtained from the University of the Western Cape's Higher Degrees committee. The first step in the data collection process entailed the researcher sending e-mails to the participants, to introduce the study. In the e-mail, an explanation of the nature of the study and the purpose of the investigation was given to the participants. The tutors who participated in the focus group were, however, informed by the administrator of the support unit in the faculty. She was the person who arranged the venue and the times that the group would be available for the focus group discussion. All the participants were notified that the interview would be recorded and they also signed a letter of consent before each interview. The interviews were recorded and stored on a computer.

The data was collected over a period of four months, from September to December 2011. The first set of individual interviews were conducted with the senior management of the university. Thereafter, the one focus group discussion was completed because tutors were on their way home after the examinations. The administrator of the support unit in the faculty was then interviewed and lastly the co-ordinator of the support unit.

The information collected by the investigator is referred to as data. Qualitative data is usually described orally or by non-numerical entities (Ogunniyi, 1992). The process of data collection may also be referred to as "data sources". This entails the mode in which the information "travels". It is acceptable to make use of at least two to three sources in an investigation, just to give variety to the material gathered. According to Henning, van Rensburg and Smit (2004) three data sources can be used for a qualitative investigation. The three different sources will grant the researcher variety from different sources of information. The participants or subjects in the investigation used their cognitive and linguistic skills to describe the phenomena in context during the data collection process (Thorne, 2000).

4.9.1 Individual interviews

Individual interviews are one of the methods of data gathering in a qualitative approach. Babbie and Mouton (2001) assert that a qualitative interview is basically an open exchange of ideas, whereby the interviewer establishes a general direction of the dialogue. The direction

of the conversation will also be steered by the interviewee when certain pertinent ideas are raised by the respondent. Therefore, the respondent needs to clarify statements and ideas mentioned in the interview. It is an open dialogue which provides an opportunity for a participant to share views according to his/her understanding of the object of the study. Whilst the interviewee shares information, the interviewer must be reminded to extract basic knowledge and not come across as someone knowledgeable about the subject-matter.

The researcher should also adhere to the seven phases of conducting a complete interview (Lofland & Lofland, 1996). The first aspect that needs to be considered is Thematising. This includes elucidating the rationale of the interview and the concepts that will be investigated. Secondly, the plan and design of the process should also be established. The designing phase should clearly state the complete procedure through which the inquirer will accomplish the purpose of the investigation, including thoughtfulness of the ethical dimension. The next step is the actual interview that needs to transpire with the participants who were selected. Thereafter, the recorded conversations need to be typed or written on paper (transcribed). The transcribed information has to be analysed. Meaningful interpretations need to be made of the data gathered through the interviews. The gathered material should directly relate to the purpose of the investigation. Then, the verification process begins in which the gathered information is verified for reliability and validity for the research study. Lastly, the findings have to be reported as well as a discussion thereof in the dissertation.

4.9.2 Strengths and limitations

Individual interviews were conducted with identified staff at the South African university. In the first phase staff members in senior management positions were interviewed individually. Thereafter a focus group discussion was held with volunteers at the support unit. The staff members at support unit were interviewed in the last phase of data collection. Individual interviews can be used as the main technique in qualitative research (Meulenberg,-Buskens, 2002). An interview is structured to meet the particular interests of a researcher, this directly relates to the research question of the research study. The purpose of an interview is to learn more about a person's thoughts on a specific topic. One of the challenges of this method of data collection is that bias may be caused by the interviewer's personal characteristics such as

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gender, age and ethnic group (Foster & Louw-Potgieter, 1995). The transcribing of the cassettes is another challenge faced by recorded interviews. According to Polkinghorne (2005), when interviews are transcribed information and nuances are lost during the process. To manage time effectively and to retain information shared in the interviews, the researcher transcribed the interviews herself.

4.9.3 Focus group interviews

Focus groups have emerged as a popular method of collecting data in qualitative investigations (Babbie & Mouton, 2001). Morgan (1996) and Babbie and Mouton (2001) state that focus groups allow participants to interact whilst sharing their views on the topic selected by the researcher. It is similar to an individual interview where the inquirer lays down ground rules after introductions and then starts with the questions of the interview. One of the key differences is that a dialogue will ensue between two individuals; the interviewer rather needs to facilitate a group discussion and be aware of group processes and dynamics. Therefore, selecting a suitable venue will be pivotal for the facilitation process. All participants in the focus group interviews meet in the same venue to discuss the subject-matter provided by the researcher. The researcher should also facilitate the discussion so that all members share their experiences. Dominant personalities should be managed so that the dynamics in the group allows everyone an equal opportunity to share. If there are friends in the group who rehearsed some responses, the interviewer needs to steer clear of them and allow rich discussions and interactions amongst all group members to take place (Morgan, 1996; Babbie & Mouton, 2001).

Another criteria highlighted by Babbie and Mouton (2001) relates to size of the group participating in the discussion. The researcher should select a sizable group, so that absenteeism will not hinder the collection of data. The same interview questions should also be put to all the groups participating in the study (Morgan, 1996). Some of the advantages of focus group interviews are that it is cost effective, data rich, flexible, stimulating to participants and elaborative over the individual answers (Fontana & Frey, 2005). Furthermore, participants in these discussions can also exercise a fair amount of control during the interview (Morgan, 1996). If the researcher is not capable of handling idiosyncratic responses from the participants, then possible difficulties will be experienced during the data collection. Morgan (1996) and Babbie and Mouton (2001) also found that

pairing focus group discussions with individual interviews can generate an in-depth understanding of a phenomenon. One of the weaknesses of this method, however, is that a group discussion may be dominated by one person and it might create challenges when talking about sensitive topics (Babbie & Mouton, 2001). To oppose this, a 'group think' strategy can be implemented and the group size will limited to not more than seven participants.

In the relevant investigation, the penultimate stage of data collection was the focus group discussion with the tutors who volunteered at the support unit. During this stage, the researcher put questions to the group of tutors' questions concerning the challenges experienced by the underachieving ECP students and the type of support that is offered by the support unit. The focus group questions for this study was developed and finalised after the interviews with senior management were concluded. The staff members at the support unit were asked to participate in the investigation. During the discussion, they agreed to co-operate and also to inform the tutors about the study. The twelve tutors who volunteered at the unit were informed via e-mail by the administrator, but only two arrived for the focus group discussion.
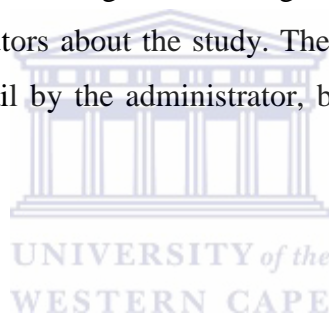
4.10 Data analysis

Data analysis requires the researcher to make meaning of the volumes of data gathered for the specific inquiry. Talja (1999) describes qualitative data analysis as using a theory-dependent method to describe, analyse and interpret data. In this process, the transcripts (textual data) were examined using content analysis. According to Pope, Ziebland and Mays (2002) there are five stages in the data analysis process. The first stage is to listen to the recorded interviews, transcribe the verbal data and then read the transcripts. The familiarisation of the data involves specific procedures (Talja, 1999). The inquirer needs to read the transcripts and highlight any inconsistencies or internal contradictions in the answers shared by the interviewees during the interview. It also allows the investigator to list recurring themes and key ideas. According to Attride-Stirling (2001), this results in a drastic reduction in information because whilst comprehension is established, textual data is scrutinized and divided into manageable and meaningful text segments. During the identification of themes, it should be noted how the respondents view the phenomena in their social context. The discourse used by the participants will not have single meanings or

interpretations, but will include knowledge formation and a scope about the phenomena (Talja, 1999). The end product of this phase has an index of the material, with labels attached to chunks of information. The first themes identified in this phase were referred to as abstract themes. Here, the information extracted was salient, common or noteworthy themes in the coded text segments.

The next phase involves annotating the transcripts to create index headings. According to Pope, Ziebland and Mays (2002), annotating allows the interpreter to make short descriptions next to chunks of information and this can be accompanied with numerical codes. This will record different themes that might be wedged in one single paragraph. Now regular patterns in the different experiences can be captured because duplicated descriptions or explanations or arguments about the phenomenon can be seen. The rearranging of the information according to its theme can now take place. The charting phase takes each main theme and lists all the respondents' information under an appropriate heading or subject. Here, the basic assumptions and starting points that underpin the specific way of talking about the phenomenon should be identified (Talja, 2000). The subject-matter of the investigation is spoken about in a particular manner by the respondents. This discourse is based on background assumptions referred to as statements. The statements are unspoken theories about the character of the phenomenon and it can be viewed as the implicit starting points that underpin the way the subject-matter is discussed in context (Talja, 2000). However, absences can also be identified in the analyses of the data. Absences are the interpretations or explanations that are not shared or thought of during the data collection phase. Finally, the interpretation and mapping surfaced from the data and guided by the original research aims and objectives need to be documented. At this juncture, concepts are defined, mapped and arranged according to the nature of the subject-matter. Typologies are also created and the necessary associations between the themes are identified in order to provide explanations for the findings (Pope, Ziebland & Mays, 2000).

There are also cognitive processes involved in analysing qualitative data. Thorne (2000) asserts that the cognitive processes need to interact with the raw data to derive findings and create new knowledge. This depends on the inductive reasoning processes of the researcher. It is the researcher's responsibility to understand and structure the meanings that can be derived from data. The first cognitive process will be to understand the phenomenon being

investigated. Then the synthesising of the underlying theories that create the linkages within the different aspects in the phenomenon needs to take place. Thorne (2000) postulates here the inductive reasoning uses the raw material to create ideas (hypothesis generating). This is followed by theorising about the reasons and how the links appear in the phenomenon, it is the beginning of the iterative testing phase. The last cognitive phase is the re-contextualising of the data. The inquirer needs to analyse data and create new knowledge indicating relations amongst themes in context.

When working with the raw data, or during the process of "analysing" it, calculating the number of times something has occurred is not necessary. What is essential in a qualitative study is to establish a pattern of occurrences or the reason why something happened (Henning, van Rensburg, & Smit, 2004). Thus, using a technique that will grant access to the information that will generate data for different means of analysis will be most suitable for a social inquirer. When the data is still in transcript form, it needs to go through a rigorous process of analysis before a conclusion can be drawn to answer the research questions of the investigation. The analysis of the data, also known as synthesising of information, is done by the researcher. She is used as the analytical tool and her acquaintance with the subject-matter influences how the data can be interpreted. The analytical instrument creates meaning from the collected data by looking at theories governing the study and then transforming "raw" transcript information from a thin description of the phenomena to a thick description. Pope, Ziebland and Mays (2002) indicate that a method of analytical induction ought to be done during this phase. This entails an "iterative testing and retesting of theoretical ideas using the data" (Pope, Ziebland & Mays, 2002, p.114).

4.11 Trustworthiness of the data

When developing a qualitative research approach, the trustworthiness is attained by capturing people's experiences as they make meaning in context. Krefting (1991) explains that trustworthiness can be found when Guba's methodological strategies are employed.

The first strategy employed in the methodology is truth-value (Guba, 1981). Truth-value is subject-oriented and cannot be prioritised by the investigator. Credibility is established when the researcher allows the participants to share their experiences. The researcher will then allow the interviewee to give thick accurate descriptions of participants' experiences in

context. When others with the same experiences are able to identify with those descriptions, then truth-value is obtained. In the interviews, the researcher allowed all the participants to explain their encounters and requested clarity where needed.

The second strategy is referred to as applicability. Applicability takes place when the findings of the study can be generalised to a bigger population group, namely being applied to other settings and people in other contexts. Guba (1981) argues that applicability should rather take the form of transferability or fittingness in qualitative studies. The findings will meet this standard and fit into other settings outside the investigation when points of similarity can be found between the two contexts (Babbie & Mouton, 2001). If another researcher would like to compare the findings of the study with other faculty based support units, it is important to understand the context of the investigation. In Babbie and Mouton (2001) the strategies for transferability are discussed. The first principle in transferability relies on the researcher's ability to collect detailed descriptions in the data from the informants. The researcher for the investigation possesses the relevant knowledge and skills to extract the necessary information from the participants. It should be kept in mind that, purposive sampling also influences the type of data that can be gathered. Collection of material from different sources in context-like senior management at the university, tutors who volunteer to support the students and staff who work at the support unit will suffice. An additional consideration is the dependability of the data collected. The reported findings should provide evidence that a replication of the study in a similar setting or subjects can produce the same results. The last strategy for transferability is referred to as confirmability. Confirmability is a checkpoint or measurement of the match between the findings and the purpose of the investigation, and not the partiality of the investigator which was dealt with when the researcher analysed the findings with the supervisor (Babbie & Mouton, 2001).

The third strategy of Guba's methodological strategies refers to consistency (Guba, 1981). Consistency of the data can only be established when the researcher's findings are the same even though the context or subjects are different. The challenges the ECP students experience are universal; the resources available to support students might be limited at the South African university, hence the challenges in providing sufficient support. Krefting (1991) indicated that qualitative research tools consist of the inquirer and the informant. It is therefore important to note that the human relations bear a quality of uniqueness during the data collection process, therefore differences in experiences should be investigated and not identical repetition. The last criterion is called neutrality. Neutrality occurs when the findings

captured in the study are only the informants' experiences, and no other biases or perspectives are added. The researcher transcribed the interviews using only the words of the informants as direct quotations in the Findings chapter, with no accompanying comments or critiques.

4.12 Ethics Statement

Ethics is directly related to morality, as both these concepts deal with issues of right and wrong. According to Babbie and Mouton (2001, p. 520), ethics can be defined as "conforming to the standards of conduct of a given profession or group." The ethics that guide this research is adapted from the ethical guidelines of the University of the Western Cape. The ethics number is 10/9/38 and the letter of approval is appendix A. The following declarations were thoroughly explained and used to frame this research project.

4.12.1 Informed consent

Only legal and psychologically competent participants were involved in the investigation. The advantages and disadvantages of the processes involved in the investigation were explained to the respondents. Their participation after the explanation would therefore be voluntary. The written consent form for participants will be obtained in understandable English.

4.12.2 Right to withdraw

The participants will be informed about the benefits of participating in this research project and also about their right to withdraw at any time. They do not have to give any explanation for withdrawal and the researcher will respect their actions.

4.12.3 Anonymity and confidentiality

A participant can be viewed as anonymous when the researcher cannot identify a given response by a given respondent. This implies that complete anonymity cannot be obtained during interviews because the investigator gathers data from an identifiable participant. The issue of confidentiality relates to the manner in which information will be dealt with. Respondents were informed regarding the extent to which the acquired information will be

revealed. It was explained to the participants in the individual interviews and the focus group discussion that their shared experiences will be documented in a thesis. The participants in the focus group discussion were bound by confidentiality. See Appendix C that refers to the consent form for the focus group discussion.

4.12.4 Recording

Permission to record interviews was requested from all respondents. If any discomfort was experienced during the recording, the process would be terminated and referral to support services would be provided. The tapes will be erased after completion of the thesis.

4.12.5 Storage and security

Records of the interviews would be stored and managed to prevent loss, unauthorized access or disclosure of the confidential information.

4.12.6 Reporting

The findings of the study are to be documented in a thesis. A copy of the thesis will be available in the university's library and will be written in a language that is understandable. The findings will reflect all the necessary information and will be accurate, objective, clear and unambiguous. The ethical obligations towards the participants will be adhered to when reporting on the findings of the investigation.

4.12.7 Integrity

The conduct for collecting data and interacting with participants was of a high standard. There will be no discrimination in choosing respondents to interview based on gender, race, age, religion, status, educational background and physical abilities.

4.13 Conclusion

The interpretivist approach requires the researcher to be actively involved in the meaning-making of the data collected. The investigator is then obligated to present the analysed data in a legible way, so that those reading it can create their own meaning. This chapter therefore outlined the research design and research paradigm that structured and

guided the investigator in the research context and the participants who formed part of the data collection process. Also included in this chapter were are the data analysis procedure, the trustworthiness and ethical considerations regarding the research participants. The next chapter will present the findings that emerged from the research process.

CHAPTER 5

FINDINGS

The data collected from the various members of staff at the university, highlighted the challenges that the ECP students are experiencing. The challenges that the students are experiencing, according to the data analysis, are twofold, namely, intrinsic and extrinsic. The services offered within the university and the unit therefore are largely designed to address these. Table 5.1 below captures the themes that emerged in the data analysis process, outlining barriers that students experience, the services offered to address these and the challenges in offering support and addressing the needs of students. Findings are presented in this chapter using the research questions as a framework.

Research question 1	Research question 2	Research question 3
5.1 What challenges are ECP students experiencing?	**5.2 Support offered to underachieving students**	**5.3 Challenges Experienced in Addressing the Needs of First Year ECP Students**
5.1.1 Intrinsic Challenges *5.1.1.1Psycho-social challenges* *5.1.1.2 Cognitive barriers* *5.1.1.3 Language barriers* *5.1.1.4 Underpreparedness* *5.1.1.5Poor time-management skills*	**5.2.1 Services to Address Intrinsic Barriers** *5.2.1.1 Support interventions* *5.2.1.2 Assisting with psycho-social challenges* *5.2.1.3 Developing writing skills*	**5.3.1 Organizational Challenges at the level of the university** *5.3.1.1 Lack of resources* *5.3.2 Challenges within the Support Unit* *5.3.2.1 Lack of Skills and Expertise within Unit* *5.3.2.2 Lack of Clarity regarding the Support Unit's Mandate* *5.3.2.3 Lack of co-operation from staff* *5.3.2.4 Lack of Co-ordination of Tutorial Programme at the unit* *5.3.2.5 Staffing Constraints at Support Unit*
5.1.2 Extrinsic Challenges *5.1.2.1 Challenges emerging from home* *5.1.2.1.1 Socio-economic circumstances* *5.1.2.1.2 Parents' expectations*	**5.2.2 Services to Address Extrinsic Barriers** *5.2.2.1 Extended Curriculum Programme* *5.2.2.2 Referring students to other support services and structures*	

	5.2.2.3 Tutor volunteers at support unit	
5.1.2.2 Challenges emerging in the university *5.1.2.2.1 Living in residence* *5.1.2.2.2 Students' Workload* *5.1.2.2.3 Teaching and Learning*	*5.2.2.4 Tutorial sessions at the support unit*	

Table 5.1. **Research questions with themes discussed in the findings**

The first category of challenges mentioned was the intrinsic challenges and the second was at the extrinsic level. According to Walton, Nel, Hugo and Muller (2009, p.107), intrinsic barriers include "physical, sensory, and neurological and developmental impairments, chronic illness, psycho-social disturbances and differing intellectual ability," whereas extrinsic barriers to learning may arise in the external environment. The intrinsic challenges in this chapter are psycho-social, under-preparedness, poor time management skills, language barriers and cognitive barriers.
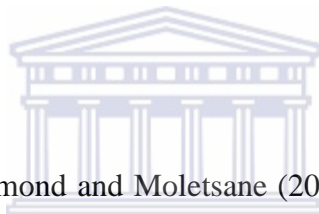
Lourens (2013) and Stofile, Raymond and Moletsane (2013) state that the extrinsic barriers can occur in the microsystem, namely the individual's home, school and neighbourhood and the macrosystem, namely the community, national debates, legal aspects etc. Extrinsic barriers to learning can also arise due to teaching and learning factors in the learning environment that can also influence the students' academic performance. The third barrier to the learning category is based on the broader systemic factors like inadequate psycho-social support or health and education support for students and educators (Stofile, Raymond & Moletsane, 2013). The extrinsic barriers to learning experienced by the students include teaching and learning challenges, workload and living at the residence. The students are also experiencing challenges in the external environment that affect them too. These barriers to learning are the socio-economic circumstances they have to deal with on a daily basis and the fact that they are first generation students trying to deal with their parents' expectations. Thereafter, the support services provided by the university and the support unit will be detailed. Finally, the challenges the university and the support unit experience in addressing the needs of the students will be documented too.

The findings would therefore exclude the voice of the student and ECP lecturers' perception of the challenges that students experience in the articulation gap. The emphasis of the study resides in the support provided in a faculty at a South African university and not in challenges experienced in higher education more broadly. The latter merely served to contextualise the main research question.

5.1 What challenges are ECP students experiencing?

5.1.1 Intrinsic Challenges

Intrinsic challenges are barriers to learning that are located inside the learner. The barrier cannot be easily identified when a student registers for a module, but traces of the barrier can be identified when students underperform. The intrinsic barriers experienced by ECP students are psycho-social challenges, under-preparedness, poor time management skills, language barriers and cognitive barriers.

5.1.1.1 Psycho-social challenges

Hardships can have a negative influence on the psycho-social development of an individual. Participants mentioned how the students' psycho-social development played an integral role in determining their performance in higher education. All the participants explained the lack of inner motivation or locus of control, and low self-esteem resulting in students reaching 'breaking point' or experiencing high levels of anxiety before they seek help at support services.

> *There are challenges that the Foundation programme students have that the*
> *mainstream students do not have.... they don't have an internal locus of control*
> *(senior management staff member).*

> *Only talk at breakpoint, they cry (support unit staff member).*

> *40% of them have anxiety (senior management staff member).*

> ***...****But there is a lack of intrinsic motivation...(senior management staff member).*

...students become anxious (volunteer tutors).

This may not be apparent, people might have a lot of swagger and attitude but their self-belief is low. So, when they start failing, they say 'I am hopeless' and give up. The youngsters' self-esteem...and she (support staff) will say that they may have the swagger, and look like they are full of themselves, but inside they are quite fragile (University management).

...and then the other dimension is also a very low self-esteem (senior management staff member).

Nine students in a workshop of 12 said they don't believe in themselves! (support unit staff member).

5.1.1.2 Cognitive barriers

The participants in the study felt that ECP students have difficulty in transferring new theories into practise. Students are expected to acquaint themselves with the new discourse in a very short period of time. They sit in lectures and are recipients of information, but have challenges in applying the information. Even though examples are given in the lecture, students are described as experiencing challenges when they need to apply it. The support unit's staff members mentioned the difficulty students experience when trying to understand new concepts.

Terminologies used at a university level is so broad, in order for them to narrow it down to bring these students on board.... especially in Accounting... (support unit staff member).

...it is the numerical side that they are struggling with...(support unit staff member).

Time Management and Study Skills, which I think ALB [Academic Literacy for Business] are also doing theoretically with them. To actually show the material what we do, check on how it correlates with what you are saying, implement it practically and the student can say during the session: You went to the support unit for a session

on Time Management, and we did the theory one week ago. Now we can show it to you (support unit staff member).

They don't think broader than what they are doing. How they apply the skills from one module to another module or to carry it over. For example, mind mapping taught in ALB should be applied in Management. I will show them how to do it practically (support unit staff member).

5.1.1.3 Language barriers

Reading and writing are two essential skills are necessary for academic survival. Most students, who come from neighbourhoods where language development was not sharpened at school, develop challenges when they need to succeed in their studies. As a result of not reading English texts for leisure or for academic purposes, their writing ability is affected. All support services staff and half of management said the students find tertiary level reading and writing very difficult.

Most of them do not have English as a first language (senior management staff member).

...reading English textbooks and they are not mother-tongue speakers of English (support unit staff member).

Many of them are coming from neighbouring townships where language is not such a big thing that they deal with at school (support unit staff member).

Coming to university, they are struggling to adapt to how to write (senior management staff member).

...imagine people having difficulty with reading and writing when they come here. And I would say it is across the board (senior management staff member).

This generation irrespective of their socio-economic standing, is not a generation of readers (senior management staff member).

5.1.1.4 Underpreparedness

All the participants at the senior management level, commented on how poor basic education at school level leads to the students' challenges in their higher education studies. It was argued that the previously segregated education system, and the currently under-resourced education system, does not adequately prepare students from underprivileged schools and backgrounds for higher education. Even though segregation has been removed from education policies, under-resourced schools and under qualified, inexperienced teachers are still seen as the primary causes for the students' lack of skills and poor performance at university.

Students are not well prepared for tertiary education (senior management staff member).

They are not really adequately prepared people for university. The students are coming, but they are not at a level where they can engage at a tertiary education level (senior management staff member).

The challenges have come from the South African schooling system as a whole (senior management staff member).

Outcomes Based Education, but it is in fact Income Based Education. It's only the privileged few that get the quality education. And even those privileged few are not operating at the same level as other people internationally. And then there is the matric results....you can actually predict where a child goes to school, what sort of matric pass he will get (senior management staff member).

Students who need access to knowledge: High school has its own culture and way of being, but at university level the knowledge is found, knowledge that is created and knowledge that is argued. It is a complete conceptual shift. University knowledge is quite relative and knowledge is found and created (senior management staff member).

It is because the schools that these students are coming from are not preparing them. And as you say, if students can't grasp the very basic Maths principles, then I think they have been given "erroneous" education (senior management staff member).

The idea of how lecturers need to determine what they need to do: Having to orientate somebody by changing their behaviour is part of the lecturers' job. For example, taking notes in a lecture is a challenge for most students (senior management staff member).

5.1.1.5 Poor time-management skills

Well- developed life skills are essential to successful studies. When students enter university, skills such as goal-directedness accompanied by time-planning are necessary for survival. The lack of these skills can result in them losing sight of their academic goals and spending time on unnecessary activities on campus. Half of those interviewed claimed that students were struggling to manage their time well and that they needed assistance.

But the first semester in the first year is particularly important. You set patterns that might carry forward.... e.g. Time management, planning your schedules (senior management staff member).

They don't plan things, they leave things to the last minute and they create their own pressures and the whole set of issues around it (senior management staff member).

They need assistance with managing a daily to monthly to a semester calendar (support unit staff member).

Ja, I think the students are not exposed to Time management techniques (volunteer tutors).

5.1.2 Extrinsic Challenges

Extrinsic challenges are not located in the individual, but in the environment that surrounds the individual. Extrinsic challenges can arise in the microsystem, the teaching and learning environment, and in the broader systemic factors surrounding the individual as they develop. The microsystemic challenges discussed below emerge from home. The second category of barriers to learning emerges from the university, namely place of residence during studies, the students' workload, and in the teaching and learning process.

5.1.2.1 Challenges emerging from home

The extrinsic barriers to learning in the microsystem can also influence academic performance. According to the participants, the socio-economic circumstances and parents' expectations influence the achievement and progress of the student in higher education.

5.1.2.1.1 Socio-economic circumstances

Low socio-economic circumstances influence the students' academic performance. Due to the parents' inappropriate working conditions and low income, they experience difficulties in catering for their children's basic needs. All the senior management and support services staff interviewed argued that the socio-economic challenges faced by students influence their daily functioning and academic performance.

We do underestimate a whole range of challenges which youngsters face when they come here. For example, broken homes and alcoholism...drugs, violence, very inappropriate working conditions, study conditions, crowded houses, noise, financial problems, sometimes even not having enough food to eat... (senior management staff member).

Many of them have socio-economic circumstances that we cannot deny. It severely affects their daily functioning as a student. They haven't eaten or do not have transport money (senior management staff member).

They are experiencing poverty and they haven't eaten. They come with HIV problems in the family, bereavement and just all the baggage of the Apartheid legacy; and their parents are barely providing (senior management staff member).

It is quite difficult to forget that this university has the poorest students in the country (senior management staff member).

Maslow's hierarchy of needs-if basics are not met... How can they focus on goals? Therapy isn't required, the child needs food and the child needs money and the child needs transport (senior management staff member).

...the need where students didn't have food (support unit staff member).

The support unit and some lecturers are running a feeding scheme. Students who do not have the necessary nutrition are asked to collect food items (volunteer tutors).

They don't have a computer at home...they go sit in the local library...(support unit staff member).

5.1.2.1.2 Parents' expectations

Findings suggest that the parents of students, who are experiencing difficulties, have high expectations of their children. Seventy percent of the participants who engage with the students stated that the parents expected their children to pass, without completely understanding the daily challenges that the students are experiencing. This lack of understanding and empathy can be due to them not having completed their own schooling and are now expecting their children to fulfil their dreams. This places pressure on the students as they feel the need to perform academically to keep their parents happy.

To come to university might be students fulfilling their parent's dreams. They do not want to be at university. The perception: only the cream of the crop can attend university (senior management staff member).

Parents really don't get what is happening at university (senior management staff member).

Parents don't understand the pressure that youngsters have. The communication between parents and students is not very good. There is a generation gap. The fear of parents not understanding or parents blaming them. An example would be because the fear is to say to myself that I am not bright enough. If you got into this university, then you are bright enough (senior management staff member).

Our parents finished standard two or even standard one. They do not understand the pressure of the amount of work these students get (support unit staff member).

The children are bombarded with expectations and it is mommy's expectation and daddy's expectations. You must get an A, you must do that. These kids are committing suicide (support unit staff member).

Our parents finished standard two or even standard one. They do not understand the pressure of the amount of work these students get (support unit staff member).

5.1.2.2 Challenges emerging in the university

The extrinsic barriers to learning emerging in the university system can also influence the student's academic performance. The participants are of the opinion that the students living in the residence, their workload in the particular faculty, and the teaching and learning process is a hindrance to the progress of the students.
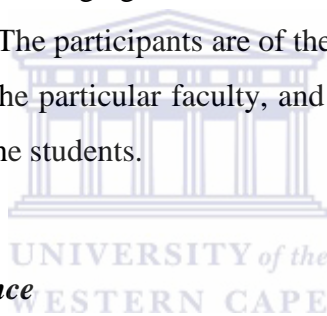
5.1.2.2.1 Living in residence

Living with strangers in university residences, can result in a test of students' fortitude at different levels. Most of them come from homes where they live with family, and than at university they are expected to share a room with a fellow-student who is not known to them. The tutors, who work directly with the students, mentioned that they complained about living in residence.

> *Students who live on residence share dorms. They're faced with a lot of challenges from their room-mate. Maybe the room-mate do not want to study, and they just want to party. So they come here and they ask for advice (volunteer tutors).*

5.1.2.2.2 Students' Workload

The difference between the amount of work covered per subject during matric and the first year at the university is enormous. The tutors who volunteer at the support unit revealed how the workload also influenced the students' academic performance.

Then there is another thing, like a grade where you at least get a year to finish a specific subject. When they get to university they will say: A year is condensed into six months (volunteer tutors).

They come here and they expect to study at a pace back at high school. There is too much work. Too many modules need to be completed at the same time (volunteer tutors).

5.1.2.2.3 Teaching and Learning

It is imperative to create an environment that is conducive to teaching and learning for students. First year lecturers need to scaffold new theories in order to assess students at university level. The scaffolding needs to be presented in a learning environment that the student understands and can relate to. The support staff members mentioned how students were experiencing teaching and learning challenges in the lecture halls, due to a lack of scaffolding of information and accents of lecturers.

The lecturers need to determine what they need to put into place and what they need to teach to enable the assignment to be completed. We need to think how we up-skill students to come out with what they are reading (senior management staff member).

Some lecturer... it could be where they come from, maybe another country. The way in which they bring about the lectures are different. You cannot understand. The sound, how they bring themselves about is very different. It is a bit difficult to understand...comparing it to someone from here, the Western Cape or Cape Town (volunteer tutors).

5.2 Support offered to underachieving students

The university offers support in various forms to assist the students with their studies. The services offered attempt to address both intrinsic and extrinsic barriers to learning. The university established a Support Services Centre. This centre manages a Life Skills

programme presented to the ECP students in different faculties. The centre also has an office that supports students with various disabilities; services that are therapeutic in nature and services for students who are infected or affected by HIV and AIDS. In addition, one faculty at this university established a support unit to support ECP students in their faculty. The section that follows will provide insights regarding the support services being rendered to the ECP students by the centre and the unit.

5.2.1 Services to Address Intrinsic Barriers

5.2.1.1 Support interventions

The primary objective of support services is to improve teaching and learning and reduce barriers to learning so that students can function optimally in their studies (DoE, 2001; Mashau, et al., 2008). The Support Service centre at the university prides itself on having qualified psychologists and trained mentors who facilitate services like academic support workshops, group mentoring and therapeutic services. The centre also supports students with diagnosed disabilities and those infected or affected with HIV. In addition, the ECP support unit in the faculty presents similar academic support workshops.

> *Life Skills workshops run once per week within a faculty for Foundation year students....Adjustment in the first term, Goal setting, Time Management, Stress Management, Personal branding component....personal branding for success....you carry yourself and the way you present an assignment....it is about personal value (senior management staff member).*

> *Extensive Emotional Intelligence component...research that shows that there is a disjuncture between students who are very good academically, (they excel academically)...when they are going into the world of work....their Emotional Intelligence (EQ) actually determines their success at work. It is a greater determinant of success than IQ (senior management staff member).*

> *We introduced the EQ component in that course, but very basic at their Foundation level (senior management staff member).*

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Like self- awareness and how you need to manage your emotions and manage your relationships, because peer pressure is also something that they have to deal with. So peer pressure we have integrated into the EQ component, group work, diversity, learning styles, study skills, we do exam-preparation workshops and motivation towards the end of the year. It is currently for South African Institution of Chartered Accountants (SAICA) students only, but in SCIENCE all Foundation students are recipients (senior management staff member).

One-on-one mentoring is moving towards group mentoring due to the lack of resources. We don't turn students away anymore (senior management staff member).

The support centre gives a more rounded assistance, they don't only look at academic issues but they look at social issues. As far as I can gather they have a Mentoring Service for students. If students feel there are people who show an interest in them, and then they will be able to flourish a little bit or even more (senior management staff member).

We have various workshops that run right through the year. It is in conjunction with the workshops that the support centre presents. For example, Time management, Study Skills, Library sessions, Presentation skills and Self-esteem (support unit staff member).

One-on-one consultation with a psychologist (senior management staff member).

Therapeutic services have a focus on individual work. Now they are moving more towards group work (senior management staff member).

We have an office for students with Disabilities (senior management staff member).

Many of our students are either infected with the virus or they are affected by the virus (senior management staff member).

5.2.1.2 Assisting with psycho-social challenges

Walton, Nel, Hugo and Muller (2009) assert that an individual's psycho-social barriers can be one of the reasons why students could underachieve and therefore experience academic challenges. One of the goals set by the support unit's mandate is to track and support underachieving students in the Extended Curriculum Programme. More than fifty percent of senior management interviewed acknowledged the importance of the support unit's mandate in the faculty.

The unit should understand the psycho-social dimension. It is a vehicle for struggling students to come and ask for assistance. That assistance we found was a culmination of things, but often the poor performance is a by-product of a deeper psycho-social problem... (senior management staff member).

…The initial intention was to understand and identify what the constraints and impediments were to youngsters advancing. To look and identify measures that can be used to support them. Sometimes it is financial, sometimes it is psychological, sometimes it is academic and sometimes it is all mixed together (senior management staff member).

…use the STRENGTH-BASED APPROACH - see what they have and identify the strength, and then generalise it over the other areas. That is how we work with the strength-based approach (senior management staff member).

…was working on a project to eliminate anxiety so they know how to adjust to the exams when they are under pressure (volunteer tutors).

5.2.1.3 Developing writing skills

The participants contended that well-developed essay writing skills were not taught at schools. The university established the writing centre to assist the students. In addition, the support unit was willing to support students with their written assignments. Post-graduate students are employed at the writing centre to support undergraduate students with academic writing skills, whereas the unit uses visual teaching methods to stimulate writing. Two of the

four senior management staff members referred struggling students to the writing centre for support with their academic writing, while support is also provided at the support unit in the faculty.

We have the Writing Centre that supports students who need to improve their academic writing skills. Their language skills improve. That is the feedback that I got from students: that my language improved because I am engaging with actual writing skills (senior management staff member).

Students need to look at pictures and write their own story (support unit staff member).

5.2.2 Services to Address Extrinsic Barriers

The university established resources to support students from disadvantaged educational environments. These support structures are the Extended Curriculum Programme, referral system to other support services and structures, tutors who volunteer at the support unit and extra tutorial sessions at the support unit.

5.2.2.1 Extended Curriculum Programme

The senior management staff members explained that ECP is designed to address under-preparedness of students who come from underprivileged educational environments. The ECP is academically less demanding than the mainstream but it prepares students for the mainstream courses that will demand more literacy and numeracy skills. All the senior management participants mentioned that ECP's are available in more than one faculty in the university.

The range of courses we offer in the Foundation programme. They are in its essence about Literacy and Numeracy (senior management staff member).

... you just do your Foundation courses during first year (senior management staff member).

In the FOUNDATION.... we are assisting them, but not supporting them. But I don't think the extent that they need support. Maybe they need more one-on-one time or that sort of thing, to really make a difference (senior management staff member).

5.2.2.2 Referring students to other support services and structures

Participants explained that ECP students, who are experiencing intrinsic and extrinsic barriers to learning, will go to the support unit in the faculty for support. Some ECP staff will identify possible barriers to learning during an individual consultation and then refer students to support services. ECP lecturers will also refer students to the unit when they realise the student needs additional academic support. The staff at the support unit, senior management at the student support centre and tutors who volunteer at the support unit emphasised the importance of referring students who are struggling to the various support services.

Two co-ordinators (at support unit) also tend to work very closely with the students. So they provide consultations and do the necessary referrals to other departments if they think it is necessary (senior management staff member).

We will consult and refer the student or help the student because they are struggling (support unit staff member).

Try to facilitate action on behalf of the student. Example, we facilitate between the Writing Centre and students from Academic Literacy for Business (support unit staff member).

You see, because the support unit is also a helping hand. I don't think the lecturers are only sending the failures. They would make an announcement in class. If a lecturer sees a student is always coming to him for consultation, he would refer the student to the support unit. His help is not too much, so he is referring the student to other people. So that the student can have another perspective or another view of how work is done (volunteer tutors).

Students who go to lecturers, also asking for advice and sharing their problems and then the lecturers would let the staff at the support unit know (volunteer tutors).

5.2.2.3 Tutor volunteers at support unit

The participants explained how the number of volunteers increased and the demographics of the tutor groups diversified as the support unit developed. One volunteer recruited a diverse group of tutors and the volunteer programme developed, more tutorial sessions then became available at the support unit to assist struggling first year ECP students. All the support unit staff members and tutors could clearly recall how the need for the support for a diverse group of students expanded over the years.

> *Volunteers increased from 5 to 10 to 15 in 2012. Our volunteers do not get paid (support unit staff member).*

> *I think there was a diversity change. At first, there were only African tutors. Now there is a mix. Now there are Coloureds and Africans. Not yet White, but we are planning on getting them too to help (volunteer tutors).*

> *At first, there wasn't as much tuts available. The students that are now tutors are more available. More tuts available, more classes available (volunteer tutors).*
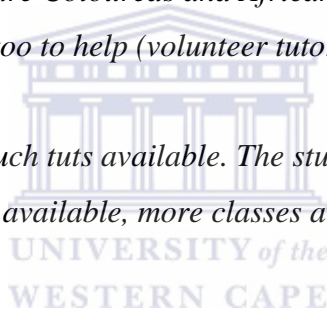
5.2.2.4 Tutorial sessions at the support unit

Tutorials are small group sessions where discipline specific theories and practices are integrated. The ECP tutors who present the tutorials facilitate learning by revising the information shared during lectures and then integrating theories and practical examples. In this learning process, students realise that they lack understanding and many questions usually surface. The constant increase of ECP students in the faculty resulted in tutorial groups increasing from 12 to 25. All the tutors pointed out how the big tutorial groups in the faculty created barriers to learning for ECP students. Hence, the students come to the support unit and register to receive a membership card to have access to smaller tutorial groups presented by the tutors who volunteer at the unit. The ECP students then use this tutorial contact session to ask questions regarding clarity of concepts.

> *The tutor room…when you go to the tutorial, there will be 25 people at most. So the tut is always full. So there is not always a chance for you to ask further questions to the tutor (volunteer tutors).*

Some students only come with their friends and they wanted to be part of the tutorial without a membership card (volunteer tutors).

Students from rural areas who struggle with the computers (Information Systems).... then one-on-one sessions are presented (volunteer tutors).

5.3 Challenges Experienced in Addressing the Needs of First Year ECP Students

As was evident in the previous section, multiple services are rendered to address the needs of students. The establishment and offering of these services is, however, not without its difficulties. Participants identified challenges at a macro level, namely organizational challenges related to lack of resources within the university. At a micro level, the support unit focused on in the study are also experiencing challenges when addressing the needs of the ECP students. Firstly, the lack of skills and expertise led to the university management to seek clarity in regard to the mandate of the support unit in the faculty. This resulted in staffing constraints, lack of co-operation between the unit and Information Service Centre and the unit and the ECP lecturers. The lack of co-ordination of the tutorial programme also emerged as a challenge.

5.3.1 Organizational Challenges at the level of the university

The only challenge identified at the level of the university was related to resource constraints.

5.3.1.1 Lack of resources

The university does not have sufficient resources to optimally support all the students. Due to funding restrictions and specific policy guidelines, there are constraints that prevent the expansion of support services. All the senior management staff and members of staff at the support unit affirmed the lack of resources to support the students optimally.

We have not as yet the resources to deal with under-preparedness. Resources are just inadequate (senior management staff member).

...due to budgetary constraints we are not providing enough tutorial support (senior management staff member)

In some faculties there are a lot of big classes. The staff-student ratio is not a good one. But I think in those types of faculties they are used to these student numbers. I am not sure if they can deal with all the students (senior management staff member).

Services and the resources are not growing with the numbers (senior management staff member).

Our support at the university should be more intense (senior management staff member).

Take Foundation students here and (imagine) you took them to better resourced university. You will find them different. Because those people, they got many more resources than we do. And they can work more one-to-one with students (senior management staff member).

Our resources are limited and all (lecturers) would like us to help (support unit staff member).

We will always have a shortage of resources, if we look at the number of staff especially the staff: student ratio in support services (senior management staff member).

5.3.2 Challenges within the Support Unit

A support unit was established to provide support services to underachieving ECP students. The Dean's vision was shared by the unit's co-ordinator but creating the infra-structure to achieve the unit's goals became problematic. A lack of clarity around the unit's mandate seems to have impacted on its overall effectiveness. This could be due to the lack of skills and expertise in the support unit, as reported by the participants, which resulted in a lack of co-operation from staff and a lack of effective co-ordination of the tutorial programme at the support unit.

5.3.2.1 Lack of Skills and Expertise within Unit

Some of the participants felt that the support unit's staff in the faculty does not have all the required skills and expertise to assist students. The university management stated that the unit does not have a professional employed. As a result, the university management claimed that the unit is functioning without a strong professional or theoretical base to support and justify interventions.

This (support services) is a professional service and the staff at the unit are not professionals in counselling. Should that function not be a central university function?(giving)Professional advice to somebody who is....this must be done by professionals, because you never really know if someone has real psychological problems or is it somebody that is just beaten down by their circumstances (senior management staff member).

...there should be an investigation and it came from top structure. There should be an investigation to find out what the support unit is doing? And whether we are duplicating what the support service centre is doing? And whether we are competent in the things that we we're doing? We had that meeting.... the crux of the matter was that we do not operate according to theory (support unit staff member).

5.3.2.2 Lack of Clarity regarding the Support Unit's Mandate

The support unit's mandate from the Dean was to develop interventions with lecturers to assist the underachieving students. Even though the mandate was clear at the organisation's inception, the functions they performed were not clearly communicated to the ECP lecturers. The members of staff at the support unit acknowledged that a lack of communication with ECP academics created uncertainty and that ECP staff became hesitant to collaborate.

We are facilitating tracking on behalf of the lecturer. So we facilitate action on behalf of the students and the lecturers at the end of the day, if they are interested (support unit staff member).

…challenges with lecturers at the beginning. They were hesitant (support unit staff member).

5.3.2.3 Lack of co-operation from staff

Some participants mentioned that administrative and academic staff were not co-operating with the support unit in the faculty it which it is based. To identify and track students who are underachieving, background information and current academic records need be entered into the tracking system. The matric results and current academic records of students can be accessed at the Information Service Centre. After numerous requests to access the data, the administrator of the unit explained that the unit co-ordinator had to meet with the management of the Information Service Centre and the departmental marks' administrator to get access to the required information. In addition, the at-risk students were experiencing challenges when they want to attend the workshops of the support unit. A staff member at the unit explained that students had difficulty attending due to the academic demands of ECP. The lecturers are scheduling lectures and "gateway tests" during the extended lunch period during which extended curriculum support activities are generally scheduled.

We requested details of 50 students in the First semester. It entailed their schooling, marks, where they come from, their performance in the benchmark test.... we wanted to track the student with their continuous assessment mark (CAM) for their specific modules that they are doing per semester. The university's central mark's administration system presented challenges, as well as the mark's administrator in the department (support unit staff member).

When the support unit started, they had to do it (tracking) manually....and being able to track them, and then (create) an early warning (system).... If we can identify them, by getting a very efficient tracking system where you see they are failing and the red lights are flagging....for it to work, one needs a very effective marks' administration system and a good tracking system. To an extent there are systemic challenges for the work that the support unit does.... there was a delay in the administrators' responses after both support unit staff sent e-mails. Then the unit co-ordinator had to walk over to get the information (support unit staff member).

Only time when we can have the students on board are during lunch times or the extended lunch time period. But we found out that the lecturers are using that timeslot, but the university has given that timeslot for students to attend support workshops. It is extended, so now you've got Gateways during that time. Lecturers moving their lecture slots during that time, and it is very difficult for us as a unit to really get to and reach all these students (support unit staff member).

5.3.2.4 Lack of Co-ordination of Tutorial Programme at the unit

Some of the participants explained that the exercises in the tutorials at the university were designed by the module co-ordinator or the lecturer. The tutors, who were presenting voluntary tutorial sessions at the support unit, did not have access to the current module content or prescribed tutorial guidelines for ECP students. The tutors had to wait for questions during the tutorial sessions at the support unit from the students who attended the ECP lectures and tutorials. Tutors who were presenting the voluntary tutorials felt disadvantaged, as they could not prepare for the sessions. The sessions were primarily for first year students and the senior students who are supporting the students could not always recall the content of the first year modules. Some of the senior management staff and tutors at the support unit indicated a more formal structure would be more effective.

…it needs close discussion with Foundation programmes. And I think it also needs to be formalized (senior management staff member).

Our tutor programme is not the normal tutor-programme. The other tutors will get the material from the lecturer. And the lecturer will provide them with the solutions and how to go about it. But, when it comes to us: we don't get the solutions (volunteer tutors).

…it is not always that you can remember all the stuff. But then I will pose the question: Can I come back to you? I will do my research and will tell them in the next tut. (volunteer tutors).

We would not have the preparation so we would not know what to prepare ourselves with. So, I think for us as tutors we get it a bit more heavy, because we don't even know what the students need help with. They must tell us (volunteer tutors).

5.3.2.5 Staffing Constraints at Support Unit

The staff members at the support unit are not in permanent positions. The university management and support unit staff declared that their salaries were paid from the Dean's discretionary budget.

...Funded out of the faculty's strategic funding (senior management staff member).

Dean offered Staff member X a 6 month contract and Staff member Z a 3 month contract (support unit staff member).

5.4 Conclusion

This chapter presented the findings as it emerged from the analysis of the data. The descriptions and examples were drawn from the transcripts of the interviews. The findings captured the intrinsic and extrinsic barriers to learning that the underachieving students are experiencing on the ECP in a particular faculty at a South African university. The participants' views of support services available to ECP students at the student support centre and support unit were also documented. The macro-level barriers to learning, like a lack of resources in the organisation when rendering services to the students were highlighted. At micro-level, the support unit's challenges were also identified. The next chapter will discuss the findings in relation to the theoretical framework, contextual framework and the reviewed literature.

CHAPTER 6

DISCUSSION AND CONCLUSION

This chapter presents a discussion of the three research questions which were focussed on in the study. The research questions are:

- What challenges are first year Extended Curriculum Programme students experiencing?

- What support services are available to support first year Extended Curriculum Programme students?

- What challenges are experienced in addressing the needs of first year Extended Curriculum Programme students?

The discussion will be structured in the following order: firstly, the challenges the ECP students are experiencing, which are captured as intrinsic and extrinsic barriers to learning. Thereafter, the support offered by the university and the unit in the EMS faculty will be discussed. Here a discussion of the university's student support centre and the services provided by the support unit, to address intrinsic and extrinsic barriers to learning, will be highlighted. Lastly, the challenges experienced in addressing the needs of the ECP students at organisational and microsystemic level will be expounded on.

6.1 Challenges experienced by ECP students

The challenges experienced by the ECP students can be divided into intrinsic and extrinsic barriers to learning. Intrinsic barriers refer to those barriers located in the individual and extrinsic barriers to learning that emerge from home and the university.

6.1.1 Intrinsic barriers to learning

As outlined in the previous chapter, intrinsic barriers to learning include psycho-social challenges, under-preparedness, cognitive barriers, language barriers and poor time management skills.

6.1.1.1 Psycho-social challenges

The psycho-social challenges experienced by some students include low self-esteem, lack of inner locus of control and anxiety. Bronfenbrenner and Morris (2006) argue that the perception of one-self is determined by social interaction with your immediate environment in the microsystem. The environment, for many students, reflects low socio-economic circumstances which have a negative influence on an individual's concept of self (Dass-Brailsford, 2005). Hence, a low self-concept will often deter students from seeking help from academic or administrative staff. Anxiety levels of students will be elevated who do not understand the bureaucratic system in higher education and need to contemplate whether to engage or leave the institution. All the participants mentioned the low self-esteem of many students who enter ECP. It is thus important that those who are engaging in teaching and supporting students are made aware of the backgrounds and circumstances that the students come from. It is evident that the backgrounds of students are not clearly communicated to academics or administrative staff members. The necessary interventions in collaboration with academic and support staff, to address the psycho-social challenges, should be introduced as early as during orientation.

6.1.1.2 Cognitive barriers

The staff in the support unit highlighted cognitive barriers experienced by ECP students, in their contact sessions with the academic staff, especially when related to Maths. Staff explained that the students are present in lectures and listen to the information shared but experience challenges when having to apply it to tasks. Clark (2002) argues that underachievers usually have an inability to transfer mastered skills from acquired information to an appropriate task. Nel (2008) question the importance of subjects on higher grade at school level. If a matriculant passed a subject in grade 12 on standard grade, then that student's cognitive ability is far less developed than a matriculant who wrote the higher grade examination. Higher grade examination papers tests analytical ability and language competence, whereas standard grade papers expect regurgitation of information acquired in the subject. Although higher grade and standard grade Mathematics no longer exists in the Basic Education system, students enter ECP with Pure Mathematics and Mathematical Literacy. Schofield and Sackville (2010) emphasise the importance of academics having to scaffold subject-knowledge when they introduce the subjects as early as orientation. During these activities, the students should be made aware of how to think in the respective disciplines and how to access information to assist with learning. The earlier activities are

scaffolded, the sooner those students who registered early realise that different disciplines require different cognitive skills and academic engagement. Students' awareness of the different cognitive and academic skills required in subjects like Accounting and Quantitative Skills, can prepare them for the lectures and tutorials in the different subjects.

6.1.1.3 Language barriers

In this study, language barriers are experienced by most first year students who come from environments that did not stimulate language skills. The language skills required in higher education are reading, writing and speaking skills (Delors, 1996; Mgqwashu, 2009). Jackson (2005, p.205) claims that the language skills required at higher education are "fluency in the language of instruction, including language of specific disciplines or areas of learning in the secondary levels; the ability to construct meaning from text and the ability to communicate the meaning constructed from the text." Van Schalkwyk (2008) states due to a lack of comprehending the medium of instruction at an institution, a student can develop cognitive academic challenges. This is because of the student's inability to interpret information due to unfamiliar discipline specific concepts presented in a language they cannot comprehend (Steenkamp, Baard & Frick, 2009). Schofield and Sackville (2010) contend that academic reading and writing skills should be introduced during orientation. Levy and Earl (2012) concur and add that discipline specific academic reading and writing provide better support to first year students who come from print-poor environments. The need to assist students' cognitive academic language proficiency in higher education in different subjects should be initiated and managed by the subject-lecturer. Lecturers of first year students should therefore engage in discussions and develop academic literacy in their subjects and present it in their lectures and tutorials; currently ECP students are exposed to a generic academic literacy course developed by staff that majored in Linguistics and Language Studies.

6.1.1.4 Underpreparedness

The findings indicated that poor basic education results in students' under-preparedness for the academic demands in higher education. According to Nel (2008) under-prepared students are those who lack the necessary information and abilities on which a higher education module is designed. In South Africa, 75% of the schools are under performing and only 25% are functioning (UNISA, 2011). This leads to many students being underprepared for their

matriculation examination, resulting in underperformance in the final examinations. Sixty six percent of students, who were accepted in 2010 by the South African university focused on in the study, achieved less than 60% for their Mathematics mark in matric (CHEC, 2013). The matriculant's Mathematics mark is one of the pre-requisites for entering the ECP programme. When students are inadequately prepared in Mathematics and language skills, it will be very difficult to teach or mediate their understanding of basic concepts in subjects because language is the vehicle of thought. In addition, ECP students have a backlog of knowledge in subjects because of their disadvantaged educational settings and this should be addressed in the first year modules, especially during orientation. Cognitive barriers and Cognitive Academic Language Proficiency can be reduced when lecturers scaffold information during a well-structured orientation programme. This will prepare students for the different subjects in ECP, and the workload can be managed more appropriately.

6.1.1.5 Poor time-management skills

Goal-directedness and time-planning are essential life skills in order to be successful in higher education. The lack of these skills can lead to students losing focus of their academic goals and spending time on unnecessary activities on campus. Lazarus (1987) and Boughey (2002) identified a life skill such as time management, as one of the skills underprepared students are lacking when they enter higher education. Participants pointed out during the interviews how the lack of goal-directedness influences students' time planning. Even though the academic literacy course at this institution teaches time management and the support unit assists, there are students who do not understand the concept. It is pivotal that the students' micro-environment, the family in the home, assists with planning. Being a full-time student, assisting with the raising of siblings, doing daily chores, and working on weekends to assist with fees can influence academic performance. The non-academic activities are time-consuming and can slow down learning and development, resulting in students not focussing on their academic goals at an institution of higher learning. It is clear that even though time-planning is incorporated in the ECP curriculum and the support unit assists students, they will be in need of more assistance if the home environment is not supportive.

The intrinsic barriers to learning as discussed in this section are psycho-social challenges, under-preparedness, cognitive barriers, language barriers and poor time management skills. It is evident that ECP students are in need of more support to address their intrinsic barriers to

learning. In the following section, the extrinsic barriers to learning arising in the environment of these students will be discussed.

6.1.2 Extrinsic Barriers to Learning

The extrinsic barriers to learning arise from the environment with which the individual needs to engage on a regular basis. In the microsystem, socio-economic circumstances and parents' expectations can create challenges for students. The challenges emerging in the university environment also hinders the progress of ECP students. The challenges they experience are living in residence as well as the teaching and learning process.

6.1.2.1 Challenges emerging from home

6.1.2.1.1 Socio-economic circumstances

The findings revealed how socio-economic factors play a pivotal role in the academic performance of students. Socio-economic circumstances resulting from parents' poor or limited schooling career, leads to low income with inappropriate working conditions. According to Bronfenbrenner and Morris (2006), unfavourable socio-economic circumstances can lead to a lack of stimulation in the microsystem, namely the home of the individual. The lack of appropriate proximal processes due to inappropriate working conditions can lead to an individual developing a low self-esteem and then struggling to adjust to new environments (Earnon, 2001; Dass-Brailsford, 2005). Preckel, et al., (2006) and Carr, Borkowski and Maxwell (1991) state that the students' disadvantaged background influences their ability to think strategically. They often hold onto inappropriate problem-solving techniques which result in underachievement in higher education. The underachievement and lack of finances to support academics also influences the stress levels, which has a direct impact on the students' self-esteem (Bojuwoye, 2002). Breier (2010) and one of the participants argued that the students at this university are of the poorest in South Africa. The only assistance the government offers is in the form National Student Financial Aid Scheme (NSFAS), which in essence only covers living expenses. Students are therefore indirectly forced to find part-time employment to pay for expenses at university, and then still send some money home to their parents whose household income is often not more than R3500pm (Breier, 2010). When students are struggling financially, they struggle to focus on

their studies and will often consider disengaging from their studies (Thayer, 2000). If the South African government wants to allow students from disadvantaged backgrounds to participate fully in higher education, they will need to revisit their policies regarding support to students who come from low socio-economic circumstances. The university focused on in the study prides itself on accepting students from the poorest backgrounds in South Africa and who are underprepared for higher education- but when reviewing the graduation figures and failure rates (drop-out and stop-out) at the institution, it is clear that students are not adequately supported in the established academic system and social system.

6.1.2.1.2 Parents' expectations

Parents are placing immense pressure on their children whilst they are studying at institutions of higher learning. Participants thought that the parents' low education level and lack of experience in higher education studies might be cause of their unrealistic expectations- and unsupportive behaviour. According to the Council of Higher Education (CHE, 2013) report, the university being focused on in this study has 69% of graduates' parents without post school qualifications and 45% who do not have matric. Some participants also revealed that students enter higher education without social capital. According to Tinto (2006), these students- also referred to as first generation students- are unfamiliar with the new learning environment, academic progress procedures and administration processes in higher education. In addition, the parents' social and cultural capital is not present to support the students in higher education. If these graduates of the focused on university have 69% of their parents without a post school qualification, then it possible that those who disengage in their studies have parents with lower levels of schooling- as the level of schooling and socio-economic status are directly linked. Graduates at this South African university depend on the systems in the institution to help them cope with the demands of higher education. If students are accepted and enrolled at the university, the necessary resources should be available to support them. Tinto and Pusser (2006) found that if the academic and social systems do not provide the necessary support to all students, then students will disengage from their studies; because their parents are not equipped or experienced with the know-how to support them through higher education studies. It is evident that parents should also be enlightened of the new rules in the new learning environment, as they are also stakeholders in their children's education.

6.2.2 Challenges emerging in the university

The extrinsic barriers to learning also emerge when the individual needs to engage in the microsystem. The extrinsic barriers emerge when students engage with peers, when they live in residence and with lecturers in the teaching and learning environment.

6.2.2.1 Living on residence

The findings indicate that students experience challenges when they need to share a living space with a stranger for the first time. The students come from homes that present challenges and are then expected to share a space with an unfamiliar student. Schofield and Sackville (2010) assert that students should be introduced to staff members who manage residences during orientation. It is important that students understand the rules and also know how day-to-day procedures are structured (Singh, 2004). This will enable students to negotiate better living conditions with their roommates. In order to commence negotiations, the student's life skills will be tested. It is important that the support within the university system should strengthen the life skills of students living in residences, as these students need to learn to deal with their circumstances in the new living conditions during a semester.

6.2.2.2 Teaching and Learning process

The study found that the teaching and learning process in ECP presents challenges for some students. ECP students' matric results indicate they lack subject knowledge, language skills and life skills to enter a first year module. If the student is presented with new concepts and theories, unfamiliar assessment methods from a lecturer that the students have difficulty in understanding- it can easily lead to underperformance in the course. According to Lazarus (1997), the education support team should task themselves with reducing the barriers to learning in the teaching and learning environment. Mashau, et al. (2008) state that the support services are specialized services that should improve teaching and learning in an education system. It is evident from the participants' perception, that there is a lack of co-operation between the specialised support services and ECP lecturing staff. If the support services team and ECP lecturing staff can collaborate, then lecturers can be made aware of the challenges experienced by students to complete assignments successfully. Therefore, constant feedback

and interventions should be designed by both teams, in collaboration, to support students holistically.

The extrinsic barriers to student learning emerge when they engage with peers in the university's residence and engage in the teaching and learning environment. The life skills programme for students can be extended to students living in residence, so that students can learn to deal effectively with their circumstances. The ECP teaching and learning environment should be sensitised to the student's under-preparedness through collaboration between the support team and ECP lecturers. In the next section, the services offered to address the intrinsic and extrinsic barriers to learning will be discussed.

6.2 Services to Address Intrinsic Barriers

The university and the support unit in the faculty offer services to support the ECP students. The university's centre for support services offers support interventions to address intrinsic barriers to learning and refer students to develop their writing skills. In addition, the ECP lecturers refer underachieving students to support services whilst the staff employed at the support unit utilises visual stimulation to support students with writing skills.

6.2.1 Support interventions

Support services are established at learning institutions to improve teaching and learning, and to reduce barriers to learning. The Education White Paper 6 (DoE, 2001) recommends education support services within learning institutions (further and higher education) and district offices to reduce learning challenges in the education system, in order for students to perform optimally at the institution. Support services cannot be offered by an individual but should be offered in collaboration with other professionals. According to Jacklin and Le Riche (2009, p. 738), there are three elements of higher education support, namely the "support for learning in the curriculum processes; academic tutoring and specialist student support services". This can be complemented with faculty level support teams, inter-departmental collaboration and various university structures working together (Levy & Lees, 2012). The student support centre at the South African university prides itself with qualified psychologists and trained mentors, who facilitate services like academic support workshops, group mentoring and therapeutic services to develop Life Skills but not academic skills.

6.2.2 Assisting with psycho-social challenges

An individual's psycho-social challenges can be a contributing factor to students experiencing academic challenges and consequently underachieve. According to Petersen, Louw and Dumont (2009) psycho-social development was also considered as one of the reasons for students' underperformance within higher education. Psycho-social development can be viewed as the growth of the mind (psychology) in the social (relationships) context of a person. The regular interactions with role-players like "primary caregiver, family, school, teachers, friends, neighbourhood and peers" influence the level of maturity of the individual (Green, 2000, p.40). Students who come from low socio-economic circumstances experience numerous challenges during their development to maturity. Earnon (2001) contends that stressful life circumstances like hardships or a loss of income, will have a negative influence on a primary caregiver's ability to cope. This will result in a sense of powerlessness which can erode self-esteem, mastery of tasks and self-efficacy which can lead to disengagement of active problem solving. The student support centre and the support unit in the faculty focus on uplifting the self-esteem of students through workshops or therapeutic contact sessions. Tracking the students' academic performance after attending the workshops or therapeutic contact sessions is vital, because if students are underachieving and assistance is given with self-esteem then there should be feasible results.

6.2.3 Developing writing skills

Findings indicate that students who register for higher education studies are not fully prepared by the school system. Higher education demands good writing skills in order for students to submit assignments and write examinations. Schofield and Sackville (2010) argue that classroom activities should make students aware of thinking like an academic in a specific discipline, how to access information through reading and how to write thoughts on paper in an academic manner. The academic staff will therefore need to model the desired academic process in their discipline by engaging students to read and construct coherent writing pieces.

At the South African university, a writing centre was established where post-graduate students are employed to assist undergraduate students write assignments. The ECP support unit also uses visual stimulation to trigger thoughts and then requests students to structure their thoughts on paper. The ECP students lack foundational knowledge (Jansen, 2009) and it

is evident that the writing centre and support unit are not addressing this need. The post-graduate students employed at the writing centre also come from different disciplines; it is important that they are aware of all the specific writing requirements in all disciplines in the different faculties at the university. If not, meetings to collaborate with lecturers in specific disciplines need to be arranged, so that students get the same writing guidelines from all the support services. At the support unit, visual aids are used to stimulate thoughts to assist with the challenges ECP students are facing with academic essays. Visual aids are good stimuli for brainstorming and free writing- but structuring thoughts in academic writing demands an academic vocabulary and requires more assistance from the respective subject lecturers.

6.3 Services to Address Extrinsic Barriers

The university and the support unit in the faculty are offering services to support the ECP students. The support services offered to address extrinsic barriers to learning are the Extended Curriculum Programme, referring students to support services and structures, tutors who volunteer at the support unit and small group tutorial sessions at the support unit.
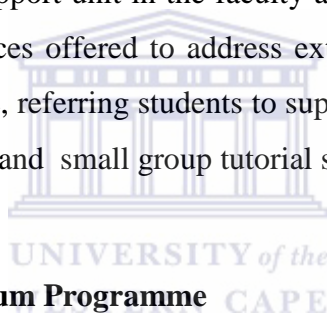
6.3.1 Extended Curriculum Programme

The findings indicate that the Extended Curriculum Programme (ECP) should address the under-preparedness of students who come from disadvantaged educational backgrounds. Boughey (2005) states that the extended curriculum programmes should therefore have an integrated foundation phase to assist students enrolled in science, technology and commerce. It should teach skills such as reading and note-taking, various aspects of essay writing, referencing, and examination preparation techniques to ensure academic success (Lees & Levy, 2012). According to DET (2006), the foundational provision should consist of modules, courses and other curricular elements that could prepare them to succeed in higher education. Even though numeracy and literacy modules are presented in the ECP, the findings reflect that students are experiencing cognitive challenges in numeracy and subjects requiring a combination of language and numeracy skills, like Accounting. The DOE (2006) suggests other curricular elements to prepare students, - it seems that cognitive skills need to be presented by subject specialists to improve holistic development of ECP students.

6.3.2 Referring students

The study found that ECP students experience barriers to learning and sought assistance from the staff. The members of the ECP staff identified the required support during individual consultations, and thereafter would refer students to support services. According to the National Education Policy Investigation (NEPI, 1992), the support services should assist the educator, the student and the teaching activities, as well as the structures that govern the educational environment. When students share their challenges with lecturers or staff at support services, it is essential that they determine whether the challenges are related to the student, the teaching process or the structures that govern the educational environment. The participants in the study identified the lack of resources as a hindrance to rendering quality service. If they continually refer students to support services, this implies that the challenge lies within the student only, and then the improvement in teaching activities and structures that govern the educational environment will not occur. In addition, if the students are comfortable in opening-up to lecturers, then it is important that lecturers understand the process of the referral system as formulated within the university.

### 6.3.3 Tutor Volunteers at support unit

The findings indicate that as the unit developed, more diverse volunteers offered their time to support struggling students. One tutor could only help a few underachieving students that registered at the support unit, but volunteer assistance made more tutorial slots available. According to Naidoo, Suddaby and Zepke (2004), academic support activities can include peer tutoring and mentoring. The volunteers at the support unit are ECP students who passed their first year modules very well. They claim to understand the possible barriers to learning that the first-year students are facing, as most of them come from the same schools and neighbourhoods, and probably had the same subject lecturers presenting the same modules. The tutors who volunteer at the unit have to wait for students to ask for clarity about subject matters. Tutors have to assume that they can identify the intrinsic or extrinsic barriers to learning without the subject lecturers' guidance, and then to provide the support that they think is best for the student. The absence of the subject lecturer in the teaching and learning process can result in the student's barriers to learning not being addressed.

6.3.4 Tutorial Sessions at the support unit

The study found that ECP students encountered the difficulties of sitting in overcrowded tutorial sessions during the scheduled ECP tutorials. The participants mentioned that the number of students per ECP tutorial session increased from 12 to 25. Tutorials should have environments that are conducive to teaching and learning where students can integrate theory and practice (Hunter, 1990). Effective tutoring involves students' active participation where they can ask questions in a safe environment. If tutorial groups have increased from 12 to 25, then students with a low self-concept will not engage with peers or tutors. ECP students who come from under-resourced educational settings with over-crowded classrooms are being placed in a programme with over-crowded classrooms again.

6.4 Challenges experienced when addressing the needs of ECP students

It is evident that support services are in place within the university to address extrinsic barriers to learning challenges. Rendering support to the students presents available resource challenges to the university. There is only one challenge at the level of the organisation, according to the findings, namely a lack of resources.
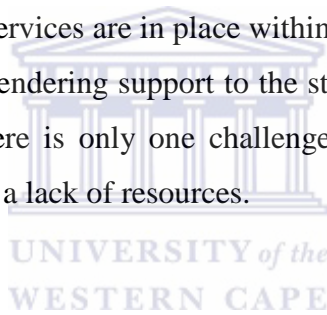
6.4.1 Organisational challenges

6.4.1.1 Lack of resources

The study found that the lack of resources hinders the development of support services. Many students are underprepared when they enter higher education; the participants stated that funding restrictions and policy guidelines do not make adequate provision for holistic support. Tinto and Pusser (2006) explained that institutional policies should be aligned with the political context and educational policies designed by the government. Furthermore, it is essential that a functioning academic system and well-resourced social system should be established if access has widened at an institution of higher learning. One of the participants pointed out that although the number of students increases every year, more staff are not employed to support the students. If the staff to student ratio is unhealthy and the ECP students that matriculated are underprepared from dysfunctional schools, enter higher education to sit in overcrowded lecture halls with a lack of support-then the university is not widening access for students who come from under-privileged circumstances. Additionally,

Boughey (2005) states that the extended curriculum programmes should have an integrated foundation phase to assist students enrolled in science, technology and commerce. The DET (2006) policy requests that the foundational provision should consist of modules, courses and other curricular elements that could prepare students to succeed in higher education. If the DET policy stipulates modules, courses and other curriculum elements should be designed to assist under-prepared students, then the university management are clearly not following all the stated guidelines relating to the funding for ECP students or in developing the necessary interventions for success.

6.4.1.2 Challenges at the support unit

The support unit developed services to address the extrinsic barriers to learning of the ECP students. The findings indicate that the unit is experiencing challenges in their attempts to support underachieving students. The first challenge relates to the lack of skills and expertise within unit, which resulted in a lack of clarity regarding the unit's mandate. Due to the aforementioned, a lack of co-operation from staff developed, lack of tutorial programme co-ordination and staff constraints emerged at the support unit.

6.4.1.3 Lack of skills and expertise within unit

The findings indicate that the senior university management requested clarification of the unit's mandate. They argued that the university had an established centre for student support. The services offered at the centre were presented by professional staff, and the question to the support unit was whether they were adequately trained to provide the support that the students required. According to the Department of Education (2001), support services cannot be offered by an individual, but should be offered in collaboration with professionals. This can occur in higher education when faculty level support teams and inter-departmental collaboration occurs within the various university structures (Levy & Lees, 2012). The staff members employed at the support unit does not hold formal qualifications and are thus not perceived by the university management to be professionals trained to offer or co-ordinate support services. The participants shared that the student support centre operated according to a strength-based framework led by professionals, and they therefore needed clarity on the theory or framework that the support unit operated in.

6.4.1.4 Lack of clarity regarding the support unit's mandate

The findings indicate that the unit's mandate was not clearly communicated to the ECP lecturers. According to Arendse (2010) the support a student receives should cover the social and emotional well-being of the student. Tinto and Pusser (2006) explain how important it is to establish the necessary infra-structure to support students. The support unit in the faculty was mandated to track students on behalf of the lecturers. The support unit co-ordinator shared how ECP lecturers were hesitant to communicate with the unit's staff, because they did not understand the purpose of the unit. If the ECP lecturers were not clear on the purpose of the support unit, then concerns need to be raised about the ECP lecturers' understanding of the needs of ECP students sitting in their lecturers. If ECP lecturers did not know the mandate of the unit, then how could they identify and address extrinsic barriers to learning in collaboration with a specialised support service team.

6.4.1.5 Lack of co-operation from staff

The findings suggest that the academic staff and administrative staff did not fully co-operate with the support unit. According to Mashau, et al. (2008), education support entails the complete curriculum and human resources that are available to support and address the diverse needs of a student. In this study, the participants mentioned how ECP lecturers were offering additional contact sessions during lunch hours, while this timeslot was utilised by the support unit to present life skills workshops and to offer additional tutorial support. In addition, the mark's administrator in the Academic Development Department and administrator at the Information Service Centre hindered the development of the unit's database. It is evident that all resources were not made available to support underachieving ECP students. The lack of co-operation from staff could have emerged due to the uncertainty about the unit's mandate and the lack of communication between the unit and staff. If support staff could have sessions during the allocated time-slot, they could identify and keep track of the academic challenges that students are experiencing in the new teaching and learning environment.

6.4.1.6 Lack of co-ordination of the tutorial programme

The findings indicate that the tutors' voluntary service could only benefit the students after they were informed by the students of their challenges in the classroom. The participants

revealed that the tutors did not work with a structured lesson plan and do not collaborate with the subject lecturers who were appointed to co-ordinate and present the ECP modules. The tutors indicated that they were having difficulty in supporting students because they could not recall all information during their first year of study. Schofield and Sackville (2012) assert that students can only be 'encultured' into knowledge of a discipline when the subject specialists guide students to read, write, think and analyse in the discourse. Furthermore, they suggest all tutors should be introduced to students during the orientation programme. Tinto (2006) also states that students show endurance and engage in their studies when they receive effective tutoring. When tutors are willing to engage with students as early as possible, the working relationship improves. Levy and Earl (2012) also found the at-risk students made use of sessions where they could engage with tutors who were willing to assist them with life skills and critical academic abilities. When the tutors at the unit work collaboratively with the subject lecturers, then structured contact sessions at the unit can be presented. If they go into contact sessions unprepared by the subject specialist, they will present classes with only first-year knowledge of a subject. This can be detrimental to the student's development because the tutors volunteering at the unit are not graduates or senior students in the discipline they are tutoring.
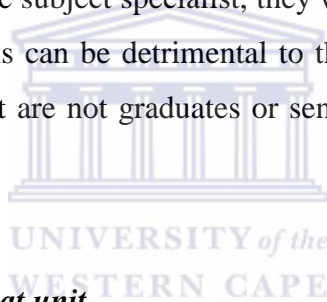
6.4.1.7 Staff constraints at unit

The participants stated that the Dean gave the mandate and funding to the support unit in the faculty. The participants also mentioned that funding constraints in the faculty resulted in the unit staff receiving short term-contracts. Tinto's ideas on institutional action stipulate a well-developed and well-resourced support system (Tinto & Pusser, 2006).   The insecure positions at the unit can create difficulties around planned resources and infra-structure to support the students. Short-term contracts will also not keep the professionals focused on the mandate of the unit, but it can result in them seeking full-time employment. To support students throughout their academic career, stability in the employment opportunities in the support unit need to become a pre-requisite.

The challenges experienced with the services to support students deemed to be twofold. The university has a lack of resources to address the needs of the students. The support unit in the faculty has more than one challenge. They are experiencing challenges due to senior management's position on requiring professionals to provide the support services to students

because of the lack of skills and expertise within unit. The challenges emerging from this standpoint regards clarity of the unit's mandate, since the university already has an established student support centre managed by professionals. The aforementioned could also have resulted in a lack of co-operation from staff, a voluntary tutorial programme being presented by tutors without any guidance from ECP subject-lecturers and lastly staffing constraints caused by a lack of funding from the university.

6.5 Limitations of the study

The first limitation of the study was that students were not included in the data generation process. It was not possible to identify students who had received support from the unit due to the inaccessibility of the database at the support unit in the faculty. The administrator of the unit mentioned the challenges they experienced in accessing the matric results and current academic progress reports, of the students who register at the unit. The information management system of the unit during the data collection period could not reflect how many students were still registered in the ECP or at the university. This information would have given clearer insights regarding the students who are underachieving in ECP. Although the administrator of the support unit sent an electronic mail to students who could be tracked, to request participation in the study, only a few replied stating that they were not available to participate in the research project.

The second limitation was the voice of the lecturers who engage with the students and the support unit. The lecturers are responsible for scaffolding the subject-knowledge and referring the students to support services. Some ECP lecturers refer students to the unit and others do not. Clarity regarding the reasons for non-referral of students to the unit would have provided guidance with the evaluation of the unit's mandate and functions. Furthermore, a questionnaire to the students who registered at the unit would have given the ECP students a voice in the study.

Lastly, even though the administrator of the support unit e-mailed twelve tutors, only two tutors who volunteer at the support unit could participate in the focus group discussion. This limited the information gathered from their experiences as ECP students and tutors who volunteer to support underachieving ECP students.

6.6 Suggestions for Further Research

- One of the first suggestions would be to access the database at the support unit. The information of those who underachieve could assist the university to create interventions for students who are at-risk.

- The voice of the lecturers who scaffold the subject-knowledge to the students is also imperative. Their criteria for referring students to the support unit would shed some light on the challenges they are experiencing with underachieving students.

- The students' lack of foundational knowledge should also be researched, as the medium of instruction is English during the contact sessions at the university but the census indicates that most citizens in South Africa are not English First Language speakers.

- Lastly, ascertaining the students' reasons for underachieving would also enlighten ECP lecturers and the support services of the intrinsic and extrinsic barriers to learning that the students are experiencing during the articulation gap.
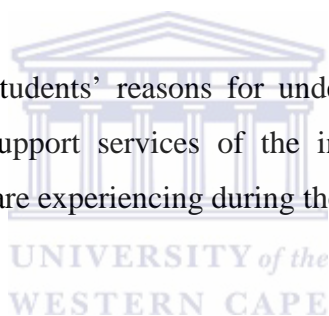
6.7 Recommendations

The recommendations are presented by looking only at key challenges that emerged from the study:

6.7.1 Psycho-social challenges

ECP students from low socio-economic circumstances enter higher education with a lack of resources. Their psycho-social challenges cannot easily be identified due to a lack of resources at an institution. After diagnoses by the team working in support services, holistic interventions should be designed by support staff and ECP academic staff in the faculty.

6.7.2 Cognitive barriers

Cognitive barriers develop during the foundation phase during early childhood development. Bloch (2009) argues the lack of adequate literacy in a learner's first language is one of the primary causes for cognitive barriers. If students enter higher education with such barriers, then the university should have resources allocated to the offering of cognitive skills courses

to assist students with their cognitive challenges. The staff presenting the cognitive skills course should collaborate with the subject lecturers.

6.7.3 Language barriers

Language is the medium through which thoughts are processed and effective communication takes place. If the medium of instruction is not the first language of most enrolled students, then the university needs to design modules to assist students with language barriers. Academic Literacy, a module presented to ECP students in the first and second semester, focuses on epistemological access to knowledge systems in academia and does not address language barriers created due to students sitting in lectures where their first language is not the medium of instruction. Students' foundational knowledge should therefore be addressed before they can access the knowledge systems in academia.

6.7.4 Teaching and Learning

Tinto and Pusser (2006) avers that the classroom is one of the primary points of academic participation and where institutional policies are practiced. Lecturers are thus responsible to engage students by scaffolding new concepts, in order for students to comprehend and complete assignments successfully. Teaching and learning innovations should become imperative to retain students. If ECP lecturers are unable to identify barriers to learning in the classroom or in their module, then the support services team should assist them. Support services should function as specialised services that should improve teaching and learning in an education system (Mashau, et al., 2008). It is strongly recommended that the support service team, headed by teaching and learning specialists in faculties, collaborate with academic staff to identify barriers to learning in the classroom by using students' feedback or looking at the results of assessments. They can then design interventions to decrease barriers to learning in the teaching and learning environment and together focus on developing the students holistically.

6.7.5 Lack of skills and expertise

The lack of skills and expertise has been identified as one of the shortcomings of the support unit in the faculty. The staff could not render all services expected from an education support unit, including identifying the intrinsic and extrinsic barriers to learning in the educational environment. The undergraduate ECP tutors who volunteer at the unit did not engage with the subject-lecturer or the faculty's tutor programme co-ordinator for guidance when they assisted the underachieving students. Bryan and Simmons (2009) found that factors such as staff identified as service providers also influences the development of the individual. In addition, the lack of skills and expertise at the university's student support centre confirmed that feedback on barriers to learning in the teaching and learning environment is not shared with the ECP lecturers. The team at the student support centre are trained in counselling and qualified to present life skills workshops. They do, however, not form part of a support service team who can identify barriers to learning in the teaching and learning environment and then collaborate with ECP lecturers to create interventions to reduce barriers to learning in the educational environment.
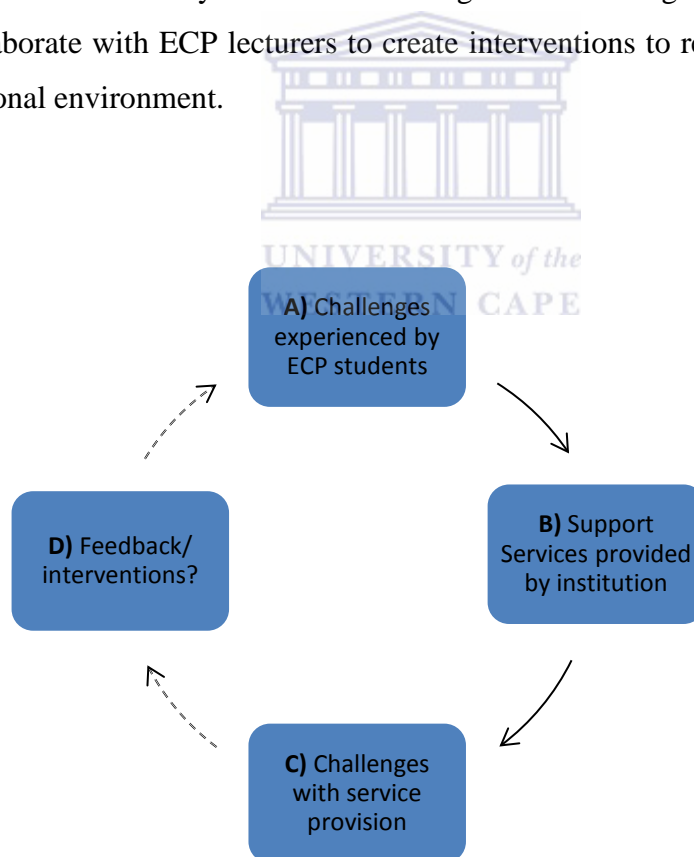

Figure 6.1. Illustration of challenges being addressed by the institution without feedback or interventions

6.8 Conclusion

In this chapter, the challenges experienced by the first year ECP underachieving students during the articulation gap were discussed. It is evident that most of their academic challenges are due to a lack of foundational knowledge in their first language, which resulted in underachieving at school level due to various barriers to learning. Thereafter, the support services available to the students who need additional support were discussed. The participants clearly stated that the lack of institutional resources and lack of skills in the support unit were not capacitating the staff members to enable students to progress academically. Thus, the university focused upon in the study need to evaluate the efficacy of the support service at the institution.

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APPENDIX A: Permission to conduct research

UNIVERSITY *of the*
WESTERN CAPE

OFFICE OF THE DEAN DEPARTMENT OF RESEARCH
  DEVELOPMENT

28 November 2014

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape, at its meeting held on 22 October 2010, approved the methodology and ethics of the following research project by Ms G Hans (Education)

 Research Project: **ADDRESSING THE NEEDS OF UNDERACHIEVING STUDENTS IN AN EXTENDED CURRICULUM PROGRAMME**

Registration no: 10/9/38

 Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.
The Committee must be informed of any serious adverse event and/or termination of the study.

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

Private Bag X17, Bellville 7535, South Africa
 T: +27 21 959 2988/2948 . F: +27 21 9593170
E: pjosias@uwc.ac.za
www.uwc.ac.za

APPENDIX B: Consent Form

UNIVERSITY OF THE WESTERN CAPE

FACULTY OF EDUCATION

CONSENT FORM

Dear …………………………………

I am conducting research for my M.Ed thesis, pertaining to the study of *Addressing the needs of underachieving students in an Extended Curriculum Programme.* I am a student at the University of The Western Cape, South Africa and would like to request your permission to conduct and record an interview with you as part of my data. Your participation in this research is entirely voluntary. Should you grant me this permission, you still have the right to withdraw from this exercise at any time and to ask that any information already recorded be deleted. Your identity will not be revealed in the course of the research to anyone else part from my supervisor and me. A copy of the transcription of the interview will be available to you on request. I pledge that your privacy will be respected. Should you agree to assist in this research, please kindly sign below the following statement of consent.

Statement of Consent

The researcher Ms. Garelda Hans has explained what she needs from me clearly. I understand that my name will not be used in this thesis and that I can withdraw from the interview and have the recording deleted at any time. I hereby give my permission to be **interviewed and recorded and or / for my assignment to be used by her.**

(Signed) …………………………………………………….

Date …………………………………   Place …………………...

APPENDIX C: Final Letter of Consent

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ADDRESSING THE NEEDS OF ACADEMICALLY UNDERACHIEVING STUDENTS IN AN EXTENDED CURRICULUM PROGRAMME.

1. I agree to participate voluntarily in the project, which encompasses participating in a conversation with the research/interviewer, for a period of maximum one hour, focusing on how the academic support unit assists students in the Extended Curriculum Programme in a faculty at a South African university.

2. I understand that I have the right to withdraw from the study at any time without fear or penalty, including having records withdrawn from the study. I also understand that I may choose at any time not to answer a particular question or set of questions.

3. I understand that I will be protected through anonymity. This means that my name will not be revealed on any public documentation, unless specifically indicate that this may occur.

I have read and understood the above agreement and am willing to participate in the project and to have the findings used as was stipulated in the information letter.

Date: 15 December 2011

Interviewee's signature: _____

Researcher's/ Interviewer's signature: _____

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INTERVIEW SCHEDULE

Individual interviews senior management.

1. What challenges do first year Foundation students' experience?

2. Are these challenges specific to particular faculties or is your perception that they are generalised across the university?

3. What services are offered at the university in an attempt to address the needs of underachieving students?

4. What specific assistance do Foundation students get from academic support units, like the support unit in the faculty?

5. What are the challenges that emerge in attempting to address the needs of academically underachieving first year Foundation students?

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INTERVIEW SCHEDULE

Focus group discussion with support unit staff

1. What challenges do Foundation students experience?

2. Why do students come to the support unit?

3. Are lecturers referring students to the unit? Why do they refer them?

4. What services are offered by the support unit to students?

5. How has the service offered by the support unit changed over years? What has changed or improved?

6. Have you encountered challenges in attempting to address the needs of foundation students at the support unit?

APPENDIX F: Interview schedule for staff members employed at support unit

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INTERVIEW SCHEDULE

Individual interviews with support unit staff

1. When did the support unit open its doors for ECP students?

2. Why was the unit established in the faculty?

3. What challenges do ECP students experience?

4. Why do students come to the support unit?

5. Are lecturers referring students to the unit? Why do they refer them?

6. What services are offered by the support unit to students?

7. How has the service offered by the support unit changed over years? What has changed or improved?

8. Have you encountered challenges in attempting to address the needs of Foundation students at the support unit?

9. Explain the challenges you experience in your attempts to address the needs of the first year Foundation students?