

Challenges of postgraduate students at the University of the Western Cape
2009 - 2013

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ABSTRACT

In South Africa, postgraduate education is a catalyst in national development and poverty alleviation that is widely acknowledged by the state and higher education institutions, such as the University of the Western Cape (UWC). Previously disadvantaged universities in South Africa were systematically moulded by apartheid planning and the prevailing social-economic-political order of the time. The structural legalised differences between historically white and historically black institutions created the key inequities between them. Unjust laws and institutionalised racism caused historical black universities (HBUs), such as the University of the Western Cape, also known as the University for the left, to lag behind with the intake of postgraduate students.

Prior to 1994, students, who were fortunate enough to attend university, were mostly limited to studying towards an undergraduate degree, diploma or a certificate course, in the fields of teaching, nursing or law enforcement. The dawn of democracy opened up new possibilities; however, a major sphere of concern, was the need to speedily transform the education system, to make it inclusive for all. Systematically, institutions of higher learning focussed more on postgraduate education, as it was a stepping stone to improve enrolment growth research output, and collaborative partnerships, at national and international level. However, socio-economic factors, such as the lack of funding, were major constraints, as most postgraduate students were challenged to pay registration fees, or accommodation deposits, upon registration.

The aim of this study was to identify key obstacles that hindered or prolonged the successful completion of postgraduate studies at the University of the Western Cape between 2009 and 2013. Furthermore, university policies governing postgraduate studies were studied in order to provide possible solutions or proposed policies to alleviate or eradicate the identified obstacles. In order to understand barriers that hamper and delay the completion of Masters' and PhD studies, a sequential explanatory mixed methodological design that consisted of two different phases, was used in this study. In 2013, Masters' and PhD students from various faculties were requested to complete an anonymous questionnaire on their postgraduate experiences at UWC. At the time of the questionnaire planning in 2013, a total of 2307 Masters' and PhD students

were registered at UWC and a total of 606 (26.3%) of the registered students completed the questionnaire. The second phase, the interview phase, comprised of forty-five Masters' and PhD students. The quantitative, numeric questionnaire data, were analysed, using the International Business Machines (IBM) Statistical Package for Social Sciences (SPSS) and the Statistical Analysis System (SAS), for descriptive and inferential statistics. The qualitative data analysis, using thematic analysis, was used to build-on and enrich the understanding of the results of the initial quantitative phase. The two phases were conducted separately, data were triangulated, and the findings of these two phases are combined in the discussion.

The results revealed that UWC had made tremendous strides towards growing the number of students, enrolling for postgraduate studies, annually, as well as striving to retain existing students in postgraduate programmes and encouraging them to complete their studies. Although mechanisms are in place, a long-term solution is needed, forthwith, to address the overall registration conundrum, in terms of funding, that students encounter each year during the registration process. UWC needs to revisit and broaden its scholarship support. Guaranteed scholarship support is important, to lure academic deserving honours degree candidates, to continue with Masters and doctoral studies, without the anxieties of additional financial burdens. The results revealed that, as a result of the implementation of systems, postgraduate students were mostly satisfied with departmental and administrative support, supervision, as well as with assistance provided when they felt inadequately prepared for certain research aspects. However, it was evident that much was needed to deal with the challenges of funding and postgraduate accommodation on campus. Other areas of concern, but not reported in this current study, but still relevant, were the reasons for dropout or stop out, during the study period.

This study investigated the reasons for the various impediments that have affected postgraduate students negatively at UWC from 2009 to 2013. The challenges, as mentioned above, that postgraduate students experienced at UWC poses a threat to the successful completion of their studies, and consequently, throughput and graduation rates. The study findings might provide new insight to the management of UWC, to identify and eliminate impediments hampering successful completion of postgraduate studies at UWC.

KEYWORDS

Accommodation

Administrative services

Attrition

Completion

Departmental services

Dropout rates

Enrolment trends

Finances

Graduation

Inadequate prepared students

Mentor support

Retention

Supervision



LIST OF ACRONYMS

ANC:	African National Congress
DHET:	Department Higher Education and Training
CHE:	Council of Higher Education
DoE:	Department of Education
DHET:	Department of Higher Education and Training
DST:	Department of Science and Technology
EDU:	Education
EMS:	Economic and Management Sciences
HESA:	Higher Education South Africa
HBU:	Historical Black Universities
IBM:	International Business Machines
IOP:	Institutional Operation Plan
KAIST:	Korea Advance Institute for Science and Technology
MHET:	Minister of Higher Education and Training Report
MoE:	Ministry of Education
MOA:	Memorandum of Agreement



MOU:	Memorandum of Understanding
NDP:	National Development Plan
NHEP:	National Higher Education Plan
NRF:	National Research Framework
NSFAS:	National Student Financial Aid Scheme
OECD:	Convention on the Organisation for Economic Cooperation and Development
RSA:	Republic of South Africa
SAS:	Statistical Analysis System
SPPS:	Statistical Package for Social Sciences
STEM:	Science, Technology, Engineering and Mathematics
TEFSA:	Tertiary Education Fund for South Africa
UWC:	University of the Western Cape



DECLARATION

I solemnly declare that the research study, *Postgraduate students' challenges at the University of the Western Cape: 2009-2013*, is my own work, that it has not been previously submitted for any degree or examination at any other university, and that all the sources I have used, or quoted, have been indicated and acknowledged with complete references.

Full names: Priscilla-Anne Lewis

Date: November 2019



A handwritten signature in black ink, consisting of a large, stylized initial 'P' followed by a long horizontal stroke.

Signature:

DEDICATION

Firstly, I thank God, The Almighty, for giving me health and strength throughout this journey, for me to obtain my goal and dream.

Secondly, I dedicate this thesis in the memory of my late parents, *Jack and Emily Lewis*, for their unconditional love, endless prayers, patience, support and guidance for me to become the responsible adult that I am today. Both of my parents were role models in my life and their love and support have guided me on this journey to work hard, to remain motivated and achieve my goals.



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I thank my husband, my daughter, my two sisters and brothers, for your countless prayers, unconditional love, encouragement, support and always believing in my ability to succeed.

I thank the departmental coordinators especially Mrs Lynette Festers who have assisted me with venues during this research project. Moreover, I thank Dr Karin Daniels and my friends at UWC for their motivation, encouragement and support.

I thank all the postgraduate students and staff, who had participated in this study.

Finally, as a postgraduate student and staff member of UWC, I want to salute and thank the previous Vice Chancellor *Professor Brian O'Connell and the Executive of his time for a job well done in the development at UWC. The postgraduate population that participated in this study are proud for the new postgraduate labs, infrastructure and other resources made available across faculties on campus in support of our studies and wellbeing. We thank all Faculty Professors, Academic Staff, and Administrative Staff* for a job well done in rendering of services and support to the postgraduate student population at UWC. With stern policies in place, you most definitely had improved the lives of so many students on campus. *Prof O'Connell* and all of your footsteps are visible and well cemented in the history, development and growth of UWC. You all would leave a legacy behind that cannot be forgotten. We sincerely believe that *Professor Pretorius, and his Executive Team*, will further build on UWC's legacy. We wish *Prof Pretorius and his team* the best of luck in their journey.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1. Introduction

Historical black universities (HBUs) in South Africa such as the University of the Western Cape (UWC) were established in 1959 by the apartheid government to serve students in a race category intake in general, for example Blacks could attend so called Black universities such as Transkei, Botswana, Venda, and Zululand and Coloureds could attend UWC, and Indians could attend Zululand and from 1972 Durban Westville University (Subotzky, 1997). These races were isolated from attending so-called white-only universities. Students were admitted to these universities with the permission of the Minister of Education through a permit system (Reddy, 2004). During the 1959-1960 period the separation of HBUs and the intake of students at the time was deep rooted with traditional and cultural groups. At the time racial segregation was a in a critical state and a serious issue not only in South Africa but across the globe (O'Connell, 2012).

UWC operated as a Constituent College of the University of South Africa (Leibowitz, 2009). The institution's purpose, as a higher education training provider, was to render a service to the "Coloured" student population of the Western Cape, South Africa. The first group of students, totalling 166, was enrolled in 1960 (University of the Western Cape [UWC], 2007a:16). Apart from these challenges Stake (2005: 451) explains that there were a host of other limitations such as career choices; since universities had few courses for students to choose from. These limitations applied only to HBUs and contrast greatly with other universities like Stellenbosch and Cape Town who did not have these restrictions. In a way, this turns to suggest and reveal some form of academic racism to provide non-white students with inferior education and to prevent them from acquiring a possible higher degree qualification (Reddy, 2004).

In addition, prior to 1994 students who were fortunate enough to attend university, were mostly limited to study towards an undergraduate degree, diploma or a certificate course in the fields of teaching, nursing or law enforcement (UWC, 2007a:6). The main obstacles of access to

institutions of higher learning were poverty, bigotry and too rigid admission requirements (Council on Higher Education [CHE], 2010). Essentially, socio-economic factors, such as the limitation of career choices, financial exclusion and a lack of transformation made it nigh impossible for poverty-stricken students of colour to study at postgraduate level (Bunting, 2006). The students who attended HBUs at the time mostly came from disadvantaged and rural communities. Socioeconomic factors, such as the lack of funding as mentioned above were major constraints, as most postgraduate students were challenged to pay registration fees upon registration, or accommodation deposits to secure their residence accommodation or could hardly afford to buy textbooks (Leibowitz, 2009). This was a serious problem which needed intervention to end this racial injustice in the higher education sector so as to ensure inclusive education for those who wished to pursue a university qualification (O'Connell, 2008). At the time UWC had no funding opportunities in place to support students who wished to study towards a qualification. Students were dependent on a Tertiary Education Fund for South Africa (TEFSA) loan annually to support them with study costs or successful parents made a bank loan in support of their studies (O'Connell, 2008). Subsequently, the loans impacted that students and their parents would end up with huge accumulated financial study debt annually. However, UWC started repelling the philosophy of racial segregation of the Coloured population, perceived as second-class citizens (UWC Self-Evaluation Report, 2007:18). UWC systematically started to act against the apartheid government as a form of academic activism to compel them at the time to end racism in the higher education sector (UWC, 2007a:6). These bold steps forced the government to rethink its strategy at HBUs such as UWC and others where similar practices were rolled out (CHE, 2010: 126).

1.2. Background and rationale

By the 1970s, UWC had gained university status, and was able to offer learning opportunities in broader and more specialised fields of study (Stake, 2005: 451). According to O'Connell, in the 2008 UWC Annual Report, the aim of the institution was to equip students with skills and knowledge to fully participate in the economic and socio-development on the continent, irrespective of their race, or creed (University of the Western Cape [UWC], 2008). O'Connell continued that the UWC's ethos was the transformation of higher education to create equality

and eradicate racism, to build an inclusive economy that addresses the developmental needs of a democratic society (UWC, 2008).

In the late 1970s, UWC as an institution of higher learning started fending off or repelling the philosophy of racial segregation of the Coloured population, perceived as second-class citizens (UWC Self-Evaluation Report, 2007:18). UWC systematically started to act against the apartheid government as a form of academic activism to compel them at the time to end racism in the higher education sector (UWC, 2007a:6). These bold steps forced the government to rethink its strategy at HBUs such as UWC and others where similar practices were rolled out (CHE, 2010:126). However, UWC's institutional drive for change at the time was the reason that it gained university status and was able to offer learning opportunities in higher degrees in broader and more specialised fields of study (Stake, 2005:451).

Subsequently, the South African government has introduced a programme for the transformation of Higher Education, as stipulated in the Education White Paper 3 (Republic of South Africa [RSA], Department of Education [DoE], 1997 & The Ministry of Education [MoE, 2001). The goal of this programme was to transform institutions of higher learning, by consolidating institutions, to diversify the educational system, thereby meeting the national and regional needs in socio-economic and cultural development (Council on Higher Education [CHE], 2012:7). In addition, the South African Government improved subsidised funding, by improving the Tertiary Education Fund for South Africa [TEFSA], currently known as the National Student Financial Aid Scheme [NSFAS] (Republic of South Africa [RSA]. The formulation of Act No. 56 of 1999), was to assist financially needy students, with a full cost study loan that includes accommodation cost and food (CHE, 2012:9).

Historical, outstanding study debt has always been a hampering factor for many students at registration in the ensuing year (UWC, 2007a:18). These difficulties made it almost impossible for impoverished students, who had completed their undergraduate degree, to pursue postgraduate studies. In most cases, their personal circumstances compelled them to find employment immediately after the successful completion of their undergraduate studies, to financially support their families, as well as to settle their outstanding study debt (UWC 2004: p. 11).

However, the dawn of democracy unlocked new possibilities, and the major sphere of concern was the need to speedily transform the education system, to make it inclusive for all (Leibowitz, 2009). This was a conundrum widely acknowledged by government departments, their agencies, as well as institutions of higher learning (Stake, 2005). According to the 2009 UWC Annual Report (UWC, 2009b:11), there had been a widespread de-radicalization of student bodies at universities, to restore what was withheld from most of the student population. University curriculums and programmes have changed, systematically with time, and funding mechanisms are constantly being assessed to ensure effortless availability and accessibility.

According to O'Connell, the funding was one of the primary incentives that encouraged non-white students, as well as staff, to pursue postgraduate studies (NRF, 2015-2016: 64 and UWC, Report, 2014). However, while the higher education sector was undergoing transformation, the funding models that were implemented to address the issue of postgraduate funding at universities, failed. This failure of the system deprived the 'missing middle' students of their right to fair and equitable scholarship support (Republic of South Africa [RSA], Department of Higher Education and Training [DHET], 2012a). The 'missing middle' students refer to those students whose parents earned a threshold annual income of R350 000 and above. Due to their financial constraints, the students were unable to pay outstanding debts, before they could register for the new academic year, as well as pay registration fees, or accommodation deposits, during the registration process. Students in residence accommodation could hardly sustain them with material cost, food and other living necessities. Frequently, some students would register for certain postgraduate programmes at UWC; however, later in the year they would *dropout* of university, for a while, to pursue employment in support of household financial constraints relief (UWC, 2009b). When they were again by means, some students would return to resume their studies, while others would opt not to return. Another obstacle was that some students switched courses after a few months of attending classes, due to the lack of departmental support during the selection of modules, whilst other students opted to *stop out* (RSA, DHET, 2013). These were huge predicaments, not only at UWC, but also, at universities country wide (Letseka & Maile, 2008).

UWC, therefore, systematically reviewed its policy frameworks, in line with the Constitution of the Republic of South Africa (Republic of South Africa [RSA], Act No. 108 of 1996) and

the National Plan for Higher Education (2001), to improve the function in its daily institutional operation. These policy frameworks allowed the institution to embark on transformation processes to review the performance standards of staff, students, faculties and departments (Leibowitz, 2009). This transformational shift was aimed at enhancing the quality of education and research practices, to stimulate critical thinking, and develop innovative ways to devise solutions to issues (Leibowitz, 2009). In turn, it would augment equal opportunities, which would boost economic and social development, as well as grow the postgraduate enrolment numbers at UWC (UWC, 2009a).

In the South African context, the transformational shift in higher education institutions was more about achieving social justice and economic equality, rather than focusing on growing the postgraduate enrolment numbers (Barroso, 2015 & Lange, 2006). This is based on the fact that during the apartheid era with limited educational programmes many HBUs combined political issues in their programmes, as part of their education and training curriculum (Reddy, 2004). It is for this reason that the government and universities initiated various policy frameworks because they wanted to achieve successful transformation in equity and level the playing field in growing enrolment rates especially those of the postgraduate population at universities (Barroso, 2015 and Lange, 2006). However, among South Africa's academic institutions, "UWC is a vanguard of hope, and played a distinctive academic role in helping to build an equitable and dynamic" student population, that has grown from 16 204, of which 1 842 were postgraduate students, in 2009b, to 20 384, of which 4 404 were postgraduate (Honours, Masters' and PhD) students, in 2013 (UWC Annual Report, 2013: 30-31). UWC had strived to provide affordable access to a diverse number of students (UWC, 2013: 16). The ratio of the student population was 80% at undergraduate level, and 20% at postgraduate level. The racial constitution comprised 47% Coloureds, 43% Black Africans, 5% Indians and 5% Whites (UWC, 2013: 16). The gender demographics were 61% female and 39% male of the total student population (UWC, 2013: 16).

Although UWC and other HBUs have made enormous strides in the history of South Africa, with both the enrolment of postgraduate and undergraduate students, financial support is still a barrier that plague most of these institutions. Incidentally, this is no different to Sub-Saharan African countries that have struggled with unjust laws. However, the majority of UWC students

originate from different socio-economic backgrounds in all the provinces in South Africa, and at international level from European and other Sub-Saharan-African countries (Letseka, Cosser, Breier & Visser, 2010).

Since the UWC transformational shift, the institution has thrived with postgraduate enrolment growth, and a diverse cultural student population on campus (University of the Western Cape [UWC], 2014). The institution's goals are as follows:

- To improve postgraduate enrolment and registration numbers; to improve departmental, administrative, supervision, accommodation services;
- To support inadequately prepared students.
- To form more collaborative partnerships with external stakeholders, to improve funding mechanisms and to render better scholarship support to postgraduate students.
- To review the current NSFAS funding system, which excluded the 'missing middle' students at undergraduate level of studies and recommend improved funding strategies.
- To review the limited scholarships that the National Research Foundation provides to postgraduate students and make the needed recommendations to improve the situation.

Moreover, the institution's focus was to enhance postgraduate education training programmes, infrastructure and resources. UWC aim was also to address inadequately trained supervisors, why students dropout or stop out, and why some Masters and doctoral students do not graduate in time. The preceding paragraphs presented the challenges, as well as the researcher's motivation to conduct this current study. The researcher anticipates that the findings of this study will assist in finding appropriate interventions to reduce the hindrances that postgraduate students experience at UWC. The findings could also inform the management of other higher education institutions with similar challenges.

1.3. Problem statement

The governments' national macro-economic and fiscal policy initiatives to support Masters' and PhD students' research innovation development needs at HBUs, such as UWC became essential to the progress of the institution (NRF Annual Performance Plan 2018-2021:65, Letseka & Maile 2008; Jenvey, 2013). The advancement of postgraduate education has become pivotal in the daily operation of UWC, to such an extent, that the institution has implemented mechanisms to eradicate hindrances to postgraduate education (UWC, 2017:29). Between 2005 and 2009, postgraduate enrolment numbers at UWC, has systematically increased each year (UWC, 2017:29). However, barriers such as funding, dropout, stop out, time-to-degree, completion of studies, departmental services, administrative services, supervision services, accommodation, inadequately prepared students, inadequately skilled supervision, depressive dispositions of students, and inequality, still dominates (UWC, 2017:26). The above-mentioned factors do not only affect UWC, but all other HBUs in South Africa (Van Zyl, 2015, Manik, 2014 and Govender, 2013).

According to the Council on Higher Education (NRF, 2018-2019: 64 and CHE, 2013), as well as Letseka and Maile (2008), a disturbingly large number of postgraduate students from disadvantage communities enrol at university, but would dropout without completing their degree, because of financial constraints and inadequate preparedness to cope with the pressures of study. (NRF, 2018-2019:61 and Letseka and Maile 2012) assert that the high dropout rates have a spiralling effect that does not only influence financial and socio-economic consequences, but to some extent causes the marginalization of postgraduate education at some universities. This marginalization has affected the successful completion of graduates in scarce skill fields, such as scientists, mathematicians, information systems technologists and professionals in the labour market and the economy of South Africa. According to the DHET (RSA, DHET, 2017:14), the domino effect of the dropout rates of students, who reside in campus residences and private accommodation, is that it inevitably results in a loss of revenue for universities like UWC, as well as the private landlords. According the National Student Financial Aid Scheme (NSFAS, 2017: 27) some students are not on scholarship support, because they fall into the 'missing middle' category of students, who do not meet the criteria of the scholarships they might have applied for. This causes huge frustration, among the

‘missing middle’ students, because their faculties and departments are also unable to assist them in their plight for funding towards their study costs.

In addition, some of the ‘missing middle’ students become poorer than the poor students that meet the NSFAS criteria, because their monthly household income often had to go towards their studies rather than to pay other household expenses which often is the cause for them to dropout (Letseka and Maile, 2012). Subsequently, (Mouton, 2015 and Letseka and Maile) concur that, in most circumstances, poverty, debt and inadequate preparedness of students are the major causes that some of them dropout at postgraduate level, during the period of study, causing low retention and low graduation rates. Postgraduate research requires the existence of well-functioning research programmes and infrastructure (Republic of South Africa [RSA], Department of Higher Education and Training [DHET], 2017). While the number of Masters’ graduates at all universities have increased from by 45%, from 4 179 in the 2009 academic year, to 6 076 in the 2012 academic year, and PhD graduates increased by 36%, from 1380 PhD graduates, to 1 879 over the same period.

Another problem that causes students to dropout of university is the fact that some supervisors are ill equipped in certain fields of study to supervise students at PhD level (DHET, 2017). When students struggle with the research process they become demotivated which eventually leads them to dropout during the study period. Universities must consider improve their organizational development and human resource management capacity to be well aligned with strategies, to facilitate processes and procedures for training and development of supervision, academic development and leadership of middle management (UWC, 2016-19 and O’Connell, 2013). Subsequently, the Council of Higher Education (CHE, 2017) suggests that universities must review and strengthen their existing policy frameworks and adopt a new model that benchmark donor funding in line with the economy of the country as well as international standards.

1.4. Aim of the study

The aim of this study was to identify and assess the root causes hindering postgraduate success and to determine which mechanisms could be developed to address the identified problems.

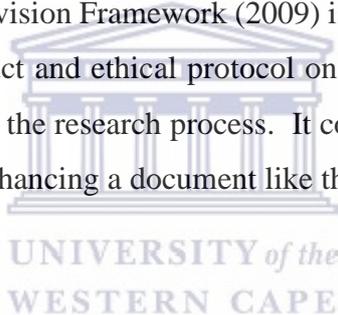
Such a comprehensive study has not been conducted at UWC and will provide valuable information to guide higher education institutions.

1.5. Objectives of the study

The main objective of this current study was to assess the root causes of the impediments to successful completion, in line with institutional policy frameworks and the National Development Plan, (2012). The secondary objective of this study was to assess the effectiveness of existing mechanisms that are in place at UWC, and to propose improvements to support the postgraduate student population to overcome the identified impediments.

1.6. Significance of the study

The significance of the study is that the findings of this current study could motivate UWC to review the institutional mechanisms and to aid the development of new policies to alleviate identified barriers. UWC's Supervision Framework (2009) is such an institutional guiding tool that presents clear code of conduct and ethical protocol on the expectation and behaviour of the supervisor and student during the research process. It could be that some of the identified barriers could be addressed by enhancing a document like this.



1.7. Research Questions

The overarching research question this thesis seeks to address is what are the challenges militating against the successful completion of Masters' and PhD studies at the University of the Western Cape. In order to identify the challenges the following questions will be investigated:

1. What were the obstacles that postgraduate students experienced during the enrolment and registration process at UWC, and what measures were implemented to address these issues?
2. What were the challenges that postgraduate students experienced, regarding administrative, departmental, accommodation and supervision services?

3. How did students cope with partial scholarships/loans, or no scholarship/loan while studying at UWC?
4. How did inadequately prepared students cope with the existing gap in research skills and knowledge, after being promoted from Honours level to Masters' level, or from Masters' level to PhD level?
5. How did postgraduate students cope, after experiencing depressive episodes, during their study period at UWC?
6. What were the internal or external socio-economic factors that affected the time frame, within which postgraduate students were expected to complete their degrees?

1.8. Research setting, population and sample

The research setting for this current study was the University of the Western Cape and the focus was on postgraduate students who were registered in 2013. The population for the interviews and survey was Masters' and PhD students from different study disciplines, in the various faculties at UWC registered in 2013. Of the 2307 Masters' and PhD students registered in 2013 (at the time of the study planning), 606 (26.3%) completed the survey, and 45 students were selected for the interviews.

1.9. Research methodology and design

A sequential explanatory mixed methods design, consisting of quantitative and qualitative data collection and analyses, was selected as suitable for this current study. More information will be provided in Chapter 3.

1.10. Data collection tools, data collection and analysis

Data collection tools used in the study were a self-administered questionnaire for the quantitative phase, and an in-depth, one-to-one, semi-structured interview for the qualitative phase. Seven-hundred (700) students were randomly selected and six-hundred-and-six (606)

completed the survey. Another forty-five (45) students were purposively selected to participate in the in-depth, semi-structured interviews. The IBM Statistical Package for the Social Sciences (SPSS) and the Statistical Analysis System (SAS) were used to analyse the quantitative data of the study. Thematic analysis was used to analyse the qualitative data of this current study.

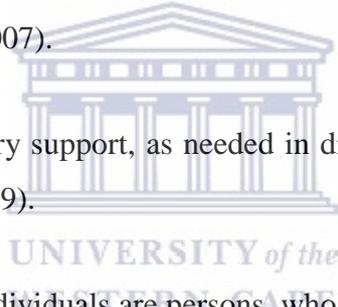
1.11. Research scope and limitation

The study, is limited to the challenges experienced by Masters' and PhD students at UWC from 2009-2013. Although the study is limited to UWC and to a specific group of students, the results might guide postgraduate programmes in similar situations because the postgraduate conundrum not only affected HBUs in South Africa but other universities across the globe.

1.12. Definitions of terms

- *Postgraduate studies or education* is defined as advanced studies, pursued by students after graduation from a bachelor's or other undergraduate degree (Neville & Chen, 2007).
- *Enrolment* is an act, or process of a student, who will have a relationship with the institution of his/her choice; for example, a student, who enrolls at UWC, has a relationship with the institution (Kuhn, Douglas, Lund & Ramin-Gyurnek, 1994).
- *Registration* refers to the enrolment of students for a course of their choice that is active in the university system. The student, therefore, maintains the right to attend lectures and has access to its facilities and resources (Republic of South Africa [RSA], Higher Education Act, Act No 101 of 1997 [as amended]).
- *Departmental services* at an institution provides effective and efficient services, or information to individual students, or the public at departmental level (Fowler & Pryke, 2003).

- *Administrative services* is the effective running of the daily operation of an institution, or organization (Cooke, 2000; Estes & Wang, 2008; Ndlovu, 2006).
- *Supervision* refers to the responsibility of a skilled knowledgeable individual, who oversees overall education, or career guidance, and supports the mentee, or who can facilitate the mentee's research (Moses, 1985; Mouton, 2001).
- *Accommodation* is a place where people can live, stay or work, as the need requires (Brownrigg, 2006).
- *Dropout* refers to an action by students, who withdraw permanently from enrolment at a university, without completing their studies (Zewotir, North & Murray, 2015).
- *Stop out* refers to an action by students, who change from one course to another, or withdraw temporarily from enrolment at a university, due to various circumstances (Robinson & Bornholt, 2007).
- *Finances* refer to monetary support, as needed in different circumstances (Callender, Wilkinson & Hopkin, 2009).
- *Inadequately prepared* individuals are persons, who do not have the experience that is required to perform a task adequately, without supervision (Bettinger & Long, 2007).
- *Depression* is a health ailment that makes a person feel unhappy, despondent, unfavourable or frequently incapable of living an ordinary life (Barrett, 2012).
- *Time-to-degree* is the length of time allocated to a student by an institution to complete a certain degree (Garibali, Giavazzi, Ichino & Rettore, 2012).
- *Completion* is when students completed the prescribed studies at a university, graduate and obtained their qualification (Lyttle-Burns, 2011).



1.13. Chapter structure/outline of the thesis

Chapter 1: In this chapter, the researcher presents the introduction, background, rationale and significance of the study. The problem statement, research questions, as well as the aim and objectives of this current study is submitted. The researcher provides definitions of terms used in this study and attempts to contextualize the problem, in terms of social economic challenges of postgraduate students that had been enrolled at UWC between 2009 and 2013. A brief overview of the research setting, population, sampling, methodology, data collection tools, data collection and analysis is offered.

Chapter 2: Comprises the literature review of published scholarly articles, relevant to this current study. An overview of the importance of postgraduate education as well as services that deal with enrolment and registration, funding, administration, supervision and accommodation will be explored. Furthermore literature on inadequately prepared students as well as students with depressive dispositions will be reported.

Chapter 3: Comprises the research approach selected for this study. The mixed methodology used for the current study consists of fieldwork through a survey and interviews with postgraduate students at UWC. The researcher discusses the paradigm that guides the research approach, research design, research strategy framework, in terms of setting, population, sampling, data collection and, data analysis. An indication of the quantitative analysis and findings of a perception score system was applied to determine questions used to calculate the financial needs perception score, administrative services perception score, departmental services perception score, supervision perception score and the inadequate prepared perception score. Thematic analysis was used to analyse the qualitative data. The requisite ethical considerations were adhered to, in terms of validity and reliability for the quantitative phase, as well as trustworthiness for the qualitative phase (employing the strategies of credibility, transferability, dependability and conformability). Finally, the chapter culminates with the limitations of the study and ethical considerations.

Chapter 4: This chapter presents a statistical analysis and discussion of graphs, tables and figures that outline the results from the survey of this study's quantitative phase.

Chapter 5: The researcher presents an analysis and discussion of the fieldwork data that had been collected from interviews conducted with Masters' and PhD students at UWC during 2013.

Chapter 6: This chapter comprises the conclusion, recommendation and possible reforms. The data collected on various challenges that Masters' and PhD students experienced are summarized. The outcomes and findings of this study provide possible solutions to the difficulties that were highlighted amongst postgraduate students.

1.14. Conclusion

This chapter examined the conceptualisation of the study, its aims and objectives and the significance of the study. The overarching research questions within its context at UWC were provided. In the next chapter the literature review of published articles and reports, relevant to this current study, will be reported.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher highlights the various challenges experienced at higher education institutions, such as UWC, which prevent greater postgraduate intake and on-time completion rates. The comparative theories and opinions, identified in the literature, seek to provide insight to the identified challenges of postgraduate students, as well as the socio-economic phenomena at higher education institutions, such as UWC.

2.2. Postgraduate education

2.1.1. National perspectives on postgraduate education

In 2001, the percentage of postgraduates in South Africa was the lowest in the world, at 15% (Republic of South Africa [RSA], Ministry of Education [MOE], 2001). In order to boost the economy of the country, and to compete in the job market, globally, it has become imperative to prioritise postgraduate studies at Higher Education Institutions (Centre for Research on Science and Technology [Crest], 2009). Statistics reveal that the overall graduation rate at Higher Education Institutions in South Africa for Masters' studies was 21%, and PhDs, 13% (RSA, DHET, 2013a:17). However, the main objective of Higher Education Institutions is to grow postgraduate graduation rates to 50% by 2018. This is with specific reference to increase the PhD intake at HBUs in the country (MacGregor, 2009).

Currently, universities endeavour to attract deserving postgraduate students who excelled on merit, by offering them scholarship support towards the studies, that creates competition among institutions (CHE, 2010). However, the persistent levels of inequality in postgraduate studies, between the low-income households and middle-class households, as well as between various race groupings, remain a cause for concern (CHE, 2012). According to Letseka and Maile (2008), the root cause of the problem is poverty and the lack of adequate funding. A review of the postgraduate funding models for students is required to bolster enrolment, retention and

graduation rates, and to ensure that future generations have sufficient numbers of qualified professionals and academics, in line with the demographics of the country (HESA, 2014a).

Advancing postgraduate education is much more than a simple instrument of economic development; it is important to flourish citizenry, socio-economic improvement, and to develop world class infrastructure on campuses (UWC, 2012a). The aim of the Department of Science and Technology is to focus on the annual increase of Masters' and PhD studies in scarce skills vocations, such as Science, Technology, Engineering, Mathematics (STEM), and medical specialists, to alleviate the shortages in the South African workforce (Pandor, 2007; Harris, 2011). In addition, statistics reveal that the qualifications of academic staff, with a Masters' or PhD degree, have steadily improved in recent years, but it remains short of the target of at least 90% (RSA, DoE, 2001). The government's expectations are for universities to work in accordance with development policy of the National Plan for Higher Education (RSA, DoE, 2001) and Department of Higher Education and Training (RSA, DHET, 2012a). It is also to equipped professionals and entrepreneurs, to address the shortfall of skilled graduates in STEM fields, to contribute in the economy of the South African workforce.

Consequently, the improvement of completion and graduation rates is essential to reach this goal, and the advance equity and opportunity for Black students across the divide (Republic of South Africa [RSA], Department of Higher Education and Training [DHET], 2011b:23). The overriding focus should be on Black women and women of colour. However, the lack of funding to support these women's studies remains a major obstacle. Many progressive academics, namely, O'Connell (UWC, 2012a) and Phakeng (2017) were at the forefront of ventures that encouraged especially marginalized Black women and women of colour, to study towards a postgraduate qualification, to augment their development in the workplace. Henceforth, funding should be prioritized, and made more easily accessible to women from poverty-stricken backgrounds, who, academically, have the potential to succeed in the working environment (Higher Education South Africa [HESA], 2014a:26). In addition, effective stakeholder investment from the private and public sectors is also crucial, to support postgraduate students, especially at PhD level, as they are likely to become the next generation of academics, and knowledge base workforce, to fill the scarce skills gaps (HESA, 2014a:22).

Specifically, a great deal of improvement is required in STEM fields to address the *brain drain* in the country (Kritzinger & Loock, 2012; Mouton *et al.*, 2008).

However, in the South African context higher education institutions also made tremendous strides with the implementation of postgraduate departments, to drive the development in top-level research projects in knowledge intensive fields (such as STEM), as well as to address the underperformances of time-to-degree and completion of Masters' and PhD study projects (Harris, 2011). Subsequently, universities in South Africa and in particular UWC systematically had established postgraduate research centres, divisions or departments of excellence to streamline and strengthen postgraduate studies on their campuses (O'Connell, 2013).

2.1.2. International perspectives on postgraduate education

Essentially, all universities in South Africa do their utmost best to improve doctoral output, in a similar manner as to how universities across the globe such as Korea and Brazil, had achieved. A comparative report by Higher Education South Africa (HESA, 2014b) advises that "Korea and Brazil, respectively, produce 187 and 48 PhD graduates per one million of their population, compared to South Africa's 28 PhD graduates per million of its entire population" (MacGregor, 2013). Korea Advance Institute for Science and Technology (KAIST) has signed global cooperative agreements with other universities, and agreed to dual Masters' and PhD programmes. Over the past 30 years, KAIST had produced 17 762 Masters' and 6 726 PhD students, of which 2 920 (43.4%) were doctors under 30 years of age. One of their requirements, though, was that all PhD candidates must publish their dissertations in internationally accredited academic journals (Bunting, Sheppard & Cloete, 2010). According to (MacGregor 2013c) Brazil showed remarkable achievements in PhD training and development of PhD students that had increased from 800 to 12 000 doctorates a year in three decades. The author continues his statement by saying in 2010, Brazil produced 12 000 PhDs and 41 000 Masters' graduates, which is a ratio of 3.4 Masters per doctorate. Through this magnificent performance of PhD graduations in Brazil could provide a model for African countries trying to expand its doctoral production.

Marginson *et. al.*, (2007) stated that at universities in Adelaide, 65% of Masters' and PhD students were between the age of thirty and thirty-five years old. However, (Shutterstock, 2017) concurs during the period 2010-2016, 437,030 national and international students enrolled in postgraduate research programmes in Australian public universities of which only 65,101 completed within the same six year period. In addition 37% of PhD students in Australia are from other countries (Maslen, 2013a). It also happened that the proportion of international students starting a PhD increased from 21% in 2002 to 37% in 2011 (Manathunga, 2012). Australia had more than 4 000 international PhD in 2011 (Maslen, 2013a). According to (MacGregor 2013:7-8) reporting on Norwegian doctoral training, 59% had graduated after five years and 76% after eight years. Furthermore, (MacGregor 2013:7-8) stated the completion rates between the various fields of study differed. Of the 2002/3 cohorts, 84% of the doctoral candidates in the natural sciences had graduated with a PhD within eight years, compared to 82% in medical sciences, 78% in agricultural sciences, 76% in the humanities, 71% in technology and 67% in the social sciences. In the United States the (Council of Graduate Schools, 2008) concur that the overall cumulative ten-year completion rate for PhD students was 57%. The completion rate for men (58%) was 3% higher than that of women (55%). Statistics reveal that the overall cumulative ten-year completion rate for international students was 67%, compared with 54% for domestic students. In terms of race, whites scored highest in completion rates at 55%, compared with 51% for Hispanic Americans, 50% for Asian Americans, and 47% for African Americans.

The completion rates by field of study also varied considerably, with a ten-year cumulative completion rate of 64% in engineering, followed by life sciences (62%) (Council of Graduate Schools 2008). The study found that gender affected the completion rates minimally, with men finishing slightly faster than women. In the case of full-time students, 72% of men completed compared to 70% of the women, and for part-time students, 34% of men completed compared to 35% of women (Rodrik, 2007 and Wisker, 2005:22). According to (Bitzer, 2012:1183) the younger the student age group, the better the completion rates, with older students dropping out more frequently in both full-time and part-time programmes. A confounding factor for completion rates is whether students study full-time or part-time, and this is evident from the United Kingdom data which revealed that more than double the percentage of full-time doctoral students graduated (71%) compared to part-time students (34%) (Bitzer, 2012:1183).

In South Africa, 48% of the 2006 cohort graduated after seven years, the country had come closest to the 57% completion rate of the United Kingdom (Du Toit, 2012). Essentially after collecting statistics for ten years in the United Kingdom presented a 71% completion rate for full-time doctoral students after seven years, but only 34% for part-time studies after seven years (Bound, Turner & Walsh, 2009). Two countries that proved more efficient than South Africa were Canada with a 71% completion rate after nine years, and Norway with 76% of students graduating after eight years, of which these are full-time students (Eggins, 2008). What became apparent is that South Africa has too many part-time students, however, South Africa does not seem to be more inefficient than the UK (Maslen, 2013a). Furthermore, it is visible that South Africans manage extremely well with full-time and part-time PhD registration and studies (Cloete, 2012). Subsequently, it became evident that there has been a tremendous increase in the (*ratio of PhDs produced by academic staff with doctorates*) to such an extent that over the past few years, it shows that there has been an increase in the overall efficiency in the South African postgraduate higher education system (Cloete, 2012). However, in 2011, the average age at commencement of a PhD was 30, while currently more than 10% of research students are aged between 50 and 60 (O'Connell, 2014). However, despite the lack of sufficient funding for doctoral studies, regular interruptions of studies for work- and employment-related reasons, and hence an older-than-average doctoral cohort (compared to the age of students completing in Europe and North America), completion rates compare favourably with international benchmarks (MacGregor, 2013b & Manyika & Szanton, 2001).

Despite high teaching loads and the increasing 'burden of supervision', academic staff at the top South African universities have increased their PhD per capita output in recent years (Harle, 2013). This confirmed that South African universities and supervisors has improved and operate in a most efficient manner in the production of graduates that are in the system (Mouton, 2015). Thus, the university support and supervision of doctoral students is not a major problem in their system. The structures and mechanisms are quite effective and efficient particularly for the throughput and completion rates Cloete, 2013). The efficiency challenge seems quite obvious, thus universities need to ensure that larger numbers of postgraduate students are able to study full-time, with adequate funding and without interruptions to their studies (Abiddin, *et. al.*, 2011). Abiddin's research group mentions that students in South Africa in some cases, lack motivation, lack English language proficiency, have relationship

problems with supervisors, lack critical thinking skills, have inadequate knowledge of thesis structure, lack financial and family support, and have inadequate technology and research support (Abiddin, *et. al.*, 2011:206-207). However, these institutions also drive top level research projects in STEM fields with relatively good outcome effects (Hovels, 2003).

At Melbourne University, there has been a strong diversity growth in the number of PhD enrolments and awards, alongside a corresponding expansion in various topics since the transformational shift in 1990. The shift has brought about subject choices and improved curriculum design and programmes as well as an attempt to employ more skilled and experience staff in identified areas (Hovels, 2003). Melbourne and Adelaide universities' shift has brought with it a demand together with pressure on staff. Furthermore, cited in (Pearson, 2010) at the University of Melbourne, research workers contribute directly to the research enterprise. Opportunities for researchers, or employees with enhanced research skills, often arise inside the university and the private sector to carry out work in administration, school teaching, nursing and business (Ehrenberg, Zuckerman, Groen & Brucker, 2010; Evans, Macauley, Pearson, & Tregenza, 2003b).

2.3. UWC's Postgraduate Division

UWC envisioned that the establishment of the Postgraduate Division would be an instrument to increase multi-disciplinary research, in order to generate a greater flow of quality postgraduate education, in line with national and international standards. The Divisions' goals are as follows:

- To develop graduates, by advancing and improving their academic ability and qualifications, to the standard where they are more competitive in the job market;
- To encourage, train and cultivate postgraduate students with the necessary knowledge to open career opportunities; thereby emancipating them economically;
- Render additional mentor support for those who took longer to understand the structure of a thesis and the writing process of chapters;

- To ensure that students complete education, training and skills development programmes;
- Support students to complete in the expected timeframe of the studies and to improve graduation and throughput rates;
- To engage with the academic community across all disciplines to support the skills development and career guidance activities offered by the postgraduate division.
- To ensure that postgraduate students are employable for the working environment of small, medium and large firms in the sector after graduation or to be creative and successful should they start their own businesses;

The Postgraduate Division adheres to the ethos of UWC Institutional Operation Plan (UWC, 2004; 2009a; 2014a). According to O’Connell (UWC, 2008), postgraduate education drives the information and knowledge system that links with economic development. The reforms implemented by a postgraduate division was intended to assist all postgraduate students (especially financial needy students) with services and resources to increase enrolment, retention, completion and graduation rates in the various departments at UWC. In addition, the Division focuses on building its research niche areas, to equip postgraduate students with skills and knowledge through various training programmes, as well as the winter and summer finishing school workshops, offered on a monthly basis. With its vigorous training programmes and workshops on proposal writing, literature reviews, funding proposals, research methodology and concepts, systematic reviews, database searches, statistics design and analysis; UWC’s structures are in place to aid postgraduate students (UWC, 2013). As a training initiative, the division appointed highly skilled mentors, facilitators with PhD qualifications in permanent capacity and various fields of studies to provide the necessary training. Additional staff are also appointed on the work-study programme, to guide and equip postgraduate students with the proficiency of methodology and concepts, to guide them in the writing of their research work. The Postgraduate Division’s objectives are to maintain a supportive and professional relationship with the students, by guiding them with sound

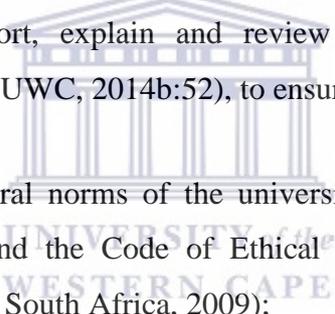
preparation of research, and assisting with methodology choices (UWC, 2014a). In addition, the Division's aim is to groom Masters' and PhD students to bring together diverse areas of expertise, and globally recognised researchers, under one roof. The Postgraduate Division wants to provide students with new knowledge and skills, to address key global issues and to deliver quality research output in national and international journals (UWC Annual Report, 2014a). Moreover, the Division's purpose is to build communities of scholars at PhD level that will expand and create collaborative partnerships to support and facilitate the effective development and the effective implementation of new technology ideas in scarce skill fields (O'Connell, 2013). Furthermore, the Postgraduate Division's aim with the scholarship support was to assist postgraduate students upon registration with a partial or full scholarship so that they can register without experiencing difficulty due to financial constraints (UWC Annual Report 2013). The postgraduate division also provides inadequately prepared students the opportunity to gain the necessary knowledge and skills to work independent and confidently on their research projects. The intervention of the postgraduate division was to prevent postgraduate students from becoming depressed or to develop low morale symptoms.

2.4. Strategic planning and policy framework

Strategic planning plays an important role in the development of universities in South Africa. It is the foundation in organizational strategy for development, decision-making and execution of tasks (O'Connell, 2013). UWC's strategic planning initiatives guide the institution's executive leadership, faculty and departmental leadership with institutional performance to ensure that leaders on a regular basis assess their own performance and staff performances (UWC IOP, 2010-2014:31). Furthermore, it guides leaders with the advancement of the institution and organizational development needs. Strategic planning has guided the leadership to regularly review postgraduate enrolment totals, department and administrative services, supervision and accommodation services, policy implementation processes and organizational development processes (UWC IOP, 2014-2019:13). Moreover, strategic planning also guided the leadership to review support structures such as mentor support and initiatives to enhance inadequately prepared students progress. Subsequently, strategic planning guided leaders to delegate work and ensure managers take responsibility for the success of institutional processes (DVC Academic Reflective Report, 2017 and Mullins, 1999:351). However, strategic planning

is a mechanism to enhance good governance systems and policy frameworks that allows flexibility, adaptability and contingency approaches, when rendering services (Swanepoel, Erasmus, Van Wyk & Schenk, and 2006:358). According to (HHénard, & Mitterle, 2010) strategic planning is also important to leadership, for example, the executive directors of universities like UWC to annually review policy documents, for the sake of good governance, quality assurance and auditing purposes. Frantz, (2018) and O’Connell, (2014) is of opinion it is equally important that during strategic planning processes with directors of faculties and departments, that the drafting structural plans such as: project plans, academic plans, infrastructure plans, mentoring guides, risk plans and divisional and departmental reports are included as part of their training and development procedures.

In addition, strategic planning had allowed UWC to adapt and incorporated the King III Code of Practices and Conduct, as well as the Code of Ethical Behaviour and Practice (King Committee on Corporate Governance for South Africa, 2009) governance approach, into its employment model. The King III Code is in line with the Batho Pele ethos, and clearly stipulates that UWC must report, explain and review (where necessary) institutional performance standards, annually (UWC, 2014b:52), to ensure that:

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- The values and behavioural norms of the university are in line with the Code of Practices and Conduct and the Code of Ethical Behaviour (King Committee on Corporate Governance for South Africa, 2009);
 - Transparency and accountability, for a more cost-effective environment of quality suitable and convenient that is the cornerstone of its infrastructure, resources, training and development, operational and service delivery mandate;
 - Gaps are identified, for improvement such as: funding support, enrolment and registration support, accommodation and supervision service sand groundbreaking ways of delivering services to the academic curricula, teaching and learning postgraduate programmes are identified for improvement;

- Collaborative partnerships with stakeholders, at national and international level, are nurtured and boosted continuously, and skilled administrative and academic staff are appointed with an appropriate qualification suitable to the job title and description.

UWC's institutional ethos of practice plays an integral role in the daily operation of departmental and administrative services, in the daily lives of the students, staff and the community at large. UWC's leadership challenges of modern day governance is characterised by their ethical values of responsibility, accountability, transparency and, fairness that are based on the spirit of Ubuntu (O'Connell, 2013). Responsible leaders direct institutions with strategic planning and implementation with intention to achieve sustainable economic, social and environmental performance of staff and students within the institution (King Committee Report on Governance, 2009). UWC's leaderships is actively involved with strategic planning to systematically integrate initiatives and activities, aligning action with vision and principles, and creating a caring, inspired and respectful culture on its campuses (O'Connell, 2013).

2.5. Enrolment and registration

It is evident that after two decades of democracy, South African universities still demographically, show a relatively slow postgraduate output of students of colour (CHE, 2012). In 1995, the Black, Coloured and Indian postgraduate enrolments, across universities in South Africa, totalled 70 964, approximately 13.7% of the student body (RSA, DHET, 2012a). By 2010, the number of Black, Coloured and Indian postgraduate enrolments at South African universities had escalated to 138 608, approximately 15.5% of the student body. Statistics revealed that 71.6% were Black students, with 56% being women. Between 1995 and 2010, there was a 1.8% growth in the postgraduate student population (RSA, DHET, 2013a). Over the past twenty-four years the total student enrolment headcount of full-time, part-time and distance learning students at South African universities, holistically, has grown by 17.4%, from a baseline of 837 776 in the 2009 academic year, to 983 698 in the 2013 academic year (RSA, DHET, 2014: 26). The national aim of government is to increase the enrolment headcount at universities to 1 087 000 by 2019, which represents an annual average of 1.9%. In addition, the goal is that, by 2030, the enrolment headcount must be 1.6 million, as envisage by the National Development Plan [NDP] (Republic of South Africa [RSA], Government Communication &

Information Services [GCIS], 2012), and the White Paper for Post-School Education and Training [PSET] (RSA, DHET, 2013a). Nevertheless, the number of university graduates has also increased by 24.3% per annum, from 145 428 in 2009, to 180 823 in 2013. Masters' graduates have increased by 54.6%, from 4179 in 2009, to 6460 in 2013, while PhD graduates have increased by 48.6%, from 1380 in 2009, to 2051 in 2013. The balance of 172 312 were undergraduates. Government's aim is to increase the graduate number to approximately 217 500 by 2019, which is an average of 3.9% per annum (RSA, DHET, 2014: 26), and PhD graduates, nationally, to 6 000 per annum, as envisaged by HESA (2014a: 16), and the National Planning Commission (NPC, 2012). In addition, there has been an increase in the registration of international students at South African universities, from 975 in 2009 to 4 698 in 2013, which is an increase of, approximately, 382% during this period. The completion rate of all international students was 47%, compared to the 45% of the South African students (National Research Foundation [NRF], 2013).

Enrolment and graduation rates at universities across the board are competitive, and the reality is that postgraduate studies, due to its in-depth nature, and its challenges, sometimes takes longer to complete (Jansen, 2010; National Planning Commission [NPC], 2011b). The number of students who drop out of the system, before the completion of their degree, remains high (Council on Higher Education [CHE], 2011). Dropout, retention, attrition, low completion and graduation rates, in most cases, are directly attributed to the funding conundrum, which remains a sticking point that affects the proper functioning of institutions, as it, invariably, leads to cost cutting measures (Bunting, 2006). The Department of Higher Education is trying to combat this conundrum through regular monitoring and evaluation of university enrolment plans. This is to assess the growth of postgraduate enrolment rates at universities, as it annually had an impact on the subsidies that are allocated to the respective institutions by the Minister of Higher Education (RSA, DHET, 2011b).

Since 2005, UWC had shown some improvement in the intake of postgraduate students. The statistics reflected in Table 2.1 below, illustrates the systematic growth of the Masters' and PhD students at UWC, since 2005 to 2013.

Table 2.1: Postgraduate enrolment rates at UWC

Year	2005	2007	2009	2010	2011	2012	2013
Masters'	1 205	1 105	1 419	1 489	1 485	1 514	1610
Doctorates	321	368	423	504	556	600	675

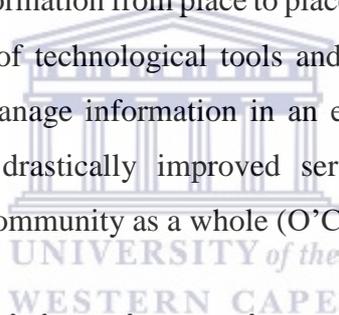
(University of the Western Cape Policy document, 2013:11)

During 2013, UWC only had 20% of its enrolled students at postgraduate level. There was a short period of decline in postgraduate enrolments, between 2006 and 2007, that was mainly due to a review of its re-admission requirements, to improve time-to-degree successes (UWC, 2013). Subsequently, mechanisms were put in place to address the relatively high dropout rates among postgraduate students (UWC, 2009b).

UWC became more innovative in its approach in achieving its goal by implementing an Information Communication Technology (ICT) system, referred to as the Student Enrolment Management System (SEMS). (2012b). The SEMS model was implemented by Miller, (2007) to effect changes in governance procedures. Miller's (2007) leadership vision was to improve the institutional administrative systems to enhance the functions of administrative services so that administrators worked in an enhanced professional manner and in an appropriate framework of accountability. The system was refined to facilitate the opportunity for South African, as well as international students, to register online without any obstacles, to prevent cumbersome paperwork, documentation being mislaid, endless long queues, or even the possibility of a stampede in the quest to be admitted. The system was created in such a way that if the information provided by the students is erroneous, or incomplete, the mistake could be rectified, online, by the student, or a university employee (UWC, 2008). However, no system is infallible and computer systems have the potential to crash; therefore, UWC retained a minuscule paper trail archived in each faculty, as a contingency plan. The rationale behind this system was to improve data integrity and accountability, to enhance effective management, as well as track and evaluate students' academic progress throughout annually.

The Marks Administration System (MAS) with its tracking portal, is critical to identify and resolve institutional weaknesses, related to retention and student performance rates (UWC,

2008). The obvious improvement in support structures alleviates the burden on time, and allows administrative staff to focus on other duties, instead of the long queues of students, requiring time consuming assistance (UWC, 2009a). The Student Administration System (SASI) and MAS are inter-linked with the Student Enrolment Management System (SEMS). The system is a link that exercises administrative control for different portals, to monitor and broaden oversight; for processing student applications; scanning of forms; access to applications and electronic fee payments; student online registration; marks and accounts; attendance and tutorials; practical and clinical sessions; academic evaluation of theses; and the retrieval of students' records, from recruitment to graduation and beyond (UWC, 2008:3). Furthermore, with SEMS students can also make course enquiries, check on-line time-tables, check class attendance registers and information about hostel accommodation. According to Krishnaveni and Meenakumari (2010). Information and Communication Technology (ICT) is a tool that enhances administrative activities of higher education institution. The authors are of view that ICT emphasizes the role of communication in modern information technology, in the transmission or transfer of the information from place to place and over a distance. Eadie (1999) stated that ICT is a diverse set of technological tools and resources used to communicate, create, disseminate, store and manage information in an effective and efficient manner. In addition the ICT system had drastically improved services rendered by departmental administrators to the university community as a whole (O'Connell, 2012).



2.6. Departmental and administrative services

An effective departmental and administrative service requires staff with in-depth knowledge of policies and procedures, to facilitate well-informed decisions, as well as to provide valuable services to the students (Senior & Fleming, 2006:176; Johnson & Scholes, 2002). Similarly, Lynch (2006:406) asserts that the ability of the workforce to “construe, convey and apply information appropriately can impact substantially on the quality and the delivery of services to maintain a viable competitive advantage in attracting prospective students and business”. UWC has a multi-disciplinary organizational development function that is associated with administrators that are dealing with daily operation in strategic planning, recruitment, selection, training and development, discipline, conflict management and organizational culture and ethnicity.

However, it is of utmost importance that administrative departments at universities like UWC are adequately equipped with the necessary infrastructure conducive and suitable to the working environment, employees' needs and satisfaction. The availability of adequate facilities in the working environment will boost the production, efficiency and effectiveness of an administrator as it is expected that administrators must at all times operate with high level values and norms. It is equally important that departments are equipped with suitable computer labs, venues, study hubs and space where students spend their lunch breaks and have a quite relaxed space to study (O'Connell, 2014). According to (Long, 2012) it is essential that departmental administrative environments dealing with students affairs are equipped with quality suitable furniture and equipment suitable to their operational needs. It is equally important for leadership to annually review administrative and academic staff's working environments, staff development and institutional and development programmes to ascertain that the needs of the individuals form part of everything that an institution of higher learning represents and promotes. UWC's administration had to correspond with the formation of distinct organizational administrative roles and depict administrative functions which resonates according to the tone set by UWC's institutional cultural roles and performances. However, UWC's administrative portfolios consist of directors whose function is to oversee that managers perform their roles effectively.

Frantz, (2018) & O'Connell (2013) stressed that it is essential for leadership of higher education institutions to review its service delivery operation and Code of Practice framework annually to ensure policy documents are in order and in safe keeping, and that effective leadership and governance, and administrative work ethic and performances is in line with institutional policy frameworks (Frantz, 2018 and O'Connell, 2013). Similarly, (Schein, 1984) reiterated that it is essential that inner workings in terms of organizational values and relevant documentation are kept in written form while others are kept unwritten and are strictly adhered to. Subsequently, directors must ascertain that their managers as head of departments perform their roles in managing staff, and that projects are executed, activities are implemented and run successfully on a daily basis (Frantz, 2018 & O'Connell, 2014). In addition, managers must ascertain that coordinators who are line manager and have senior administrative roles, work as effective and efficiently as required of them according to institutional rules and regulations (Frantz, 2018 and O'Connell 2014). Subsequently, UWC is a large higher

education institution with a diverse administrative and academic staff compliment, which consists of various ethnic groups with different behaviours and performances (O’Connell, 2014). Sucher and Cheung (2015) states that large institutions such as the higher education sector consist of employees with multi-cultural competencies that includes different types of behaviour, confidents, performances, motivation and achievement. UWC’s Academic Reflective Report, (2017); Kerr and Slocum, (2005) and Chatman and Cha, (2003) concur that organizational culture involves a set of beliefs, values, assumption and experiences that are acquired through learning, socializing and sharing by diverse people in the institution. According to Shili (2008) organizational culture and ethnicity is a complex network of values and norms that guides individual’s behaviour. Nicolaidis (2010) stated that individuals from diverse cultural groups provide different competencies that are important elements within public institutions and departments.

According to (Sucher and Cheung, 2015:94), culture competence refers to “the capacities that are required for achieving a mutual understanding, functional interaction and co-operation among people who have different cultural backgrounds”. The power of cultural theories is a tool of control and guidance mechanism that sometimes is difficult or impossible to maintain (Parker, 2000). In addition, (Hellriegel and Slocum, 2011:17) claim that culture is “the dominant pattern of living, thinking, feeling, and believing and are developed and conveyed by people, consciously or unconsciously, or to subsequent generations”. The authors is of opinion that cross cultural competence has a central role to play within public and private higher education institutions. It is important for leadership, managers and staff to recognize and appreciate the characteristics of unique cultures that has a positive influence on behaviour, attitudes, values and principles (Hellriegel and Slocum, 2011). It is equally imperative that all staff understand each other cultural beliefs, values, attitudes, and respecting each other’s languages, within the working environment (O’ Connell, 2013).

Cultural dogmas or doctrines are an important ingredient of an individual’s personality; however, the effective organisational performance of an institution should not be hampered by narrow-minded restrictions (Shili, 2008 and Mullins 1999:30). It is equally imperative that employees adhere to organisational cultural values as it portrays self-image, inner workings of quality assurance and behaviour of cultural changes of an institution, and adapt to any changes

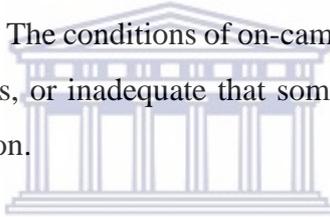
made by it (O’Connell, 2013 and Schein, 1990). Organisational culture is a valuable embedded form of social control that had a positive influence on employees’ decisions and behaviour (Plathotnik and Tonette, 2005). Strong and diverse institutional culture is a precious organisational phenomenon, thus it is important that higher education institutions constantly review their policies and conditions (Plathotnik and Tonette, 2005; Ojo, 2003; and Umiker, 1999). Moreover, strong culture within an organization tends to be long-lasting of which some can be traced back in well cemented footprints through development, achievement and growth (Sorensen, 2002). Furthermore, organisational culture is a powerful tool for controlling behaviour and its influence on how administrators and staff attach meaning to the working environment and how they interpret daily activities and events (Ojo, 2009). According to (Karakose, 2014) when employees accept cultural changes, and puts their best in an organization, the human resource practice should also ensure that the employees’ level of needs are reflected in the values the institution holds. Human resource practice and management includes administrative activities that are associated with different cultures in planning, recruitment, training and development, performance and success (Ojo, 2009 & Storey, 1992).

According to (Ojo, 2009 and (Robins; Tracy; Trzesniewski; Potter & Gosling, 2001) ‘confidence’ builds on good organizational development that are combined with performance and ‘achievement’ builds on satisfaction and effectiveness, to enhance productivity, ability and potential. UWC’s IOP, (2016-2019) describes the diverse interaction of organizational culture rendered by administrators at UWC with high confidence, achievement and success. These are manifested through administrative staff performances that showcase their capability and reliability in their daily working environments. For example, through administrative employees’ dedication and positive attitudes towards their work UWC, they had excelled and met the institutional administrative mission and vision objectives (Frantz, 2018). Therefore, it is important that administrative staff performances are recognized so that they improve and take new opportunities that will provide more growth. Some administrative employees had performed beyond expectation that is clearly visible in services rendered in departments and with the students. Staff performance plays an important role in an organizational context of which it is equally important for leadership to review staff performance and achievement of qualification and training annually with the goal providing an award or promotion in the near future (Frantz, 2018). UWC’s administrative services portfolio across faculties is in line with

the expectation of the NDP, (2012:37) and the NCP, (2014:17) outlined for administrative services in the higher education sector.

2.7 Accommodation

The number of undergraduate enrolments at HBUs in South Africa has escalated from 64 396 in 2008, to 97 294 in 2013. The shortage of residence accommodation at universities can be directly attributed to the increase in undergraduate enrolments each year, and the persistent *pile up* in the system (Council on Higher Education [CHE], 2014). While a relatively large number of students choose to live at home for the duration of their studies, others come from afar, and therefore, require campus accommodation. Neither the universities, nor the government, can keep up with the demand because of the lack of funding, investment and infrastructure. An investigation by the Department of Higher Education determined that universities, generally, have poor, or inadequate, infrastructure, and the need to construct suitable accommodation has become an urgent priority (Republic of South Africa [RSA], Department of Higher Education and Training [DHET], 2013b:50). The conditions of on-campus residences at most HBUs were so deplorable, in certain instances, or inadequate that some students were compelled to find private off-campus accommodation.



The cost of such accommodation, generally, is slightly more than on-campus accommodation and the location and facilities are not always easily accessible and available to students. This adds to the financial burden of having to secure funds for travelling and daily subsistence (UWC, 2009b). In other instances, because of the limited space, desperate students are compelled to share a room with several other students (DHET, 2013b:51). Therefore, with limited on-campus accommodation available, postgraduate students are constantly encouraged to apply upon admission for accommodation, as well (Cloete, 2002; UWC, 2009a). Unfortunately, the shortage of accommodation will continue, as universities such as UWC, do not own land to build more residences, and remain primarily dependent on the state for funding, even when suitable land becomes available (UWC, 2012a). UWC is situated in an impoverished area with a severe shortage of suitable accommodation for the general population, not to mention students, who seek lodgings. Ideally, in the short-to-medium term, UWC must be able to accommodate 80% of total student enrolment, in on-campus

accommodation, and 100% in the long term. In 2013 from the 8736 students that had applied for residence accommodation only 249 postgraduate students applied for residence accommodation at UWC. Due to the shortage of residence accommodation UWC could only accommodate 59 new applicants and 142 readmission applicants with residence accommodation on campus. The 29 unsuccessful students that was not accepted in residence accommodation lived in private accommodation around campus at an affordable monthly rate (UWC Residence Annual Report, 2013:16).

UWC's in-take ethos are based on non-discrimination, fairness and equality, irrespective of race and creed, is commendable; however, it cannot accommodate all its students with accommodation. In 2011, O'Connell issued a statement, after a site inspection to the following:

“We [UWC] have thrown open the doors of learning for nineteen thousand students but we can only assist three-thousand-two-hundred students with residence accommodation. As a result, local landlords demand high rentals but this accommodation is often appalling and NSFAS funding in this respect is totally inadequate. For student safety we can't have any campus programmes after four in the afternoon because of the dangers they face whilst travelling, many of whom are from the poorest of the poor communities. The past continues to linger with us” (O'Connell, site visit interview by an official of Department of Higher Education and Training, 17 March 2011). “Over time, UWC has formed partnerships with private landlords and businesses to assist students with suitable quality accommodation in nearby areas” (University of the Western Cape [UWC], 2011).

Ideally accommodation should be affordable, suitable, safe and within walking distance of the university, to avoid the costs of travelling. Security measures, such as electronic access cards, boomed gates, secure infrastructure equipment, and more visible security patrols have been increased” (UWC, 2012a:81). O'Connell (2012) was of view that UWC is in discussion with external institutions that are in the process to purchase land in nearby surrounding areas that would be beneficial to the postgraduate population at UWC. O'Connell reiterated, UWC in the near future would purchase some land around campus to establish more residences that would be a benefit of

postgraduate students. Most UWC students in the region of surrounding areas lives at home and commute with public transport on a daily basis (O’Connell, 2012).

2.8. Financial support

Funding or the lack thereof remains a problem at universities, especially HBUs (CHE, 2004). In 2001, a comprehensive investigation was conducted by a National Working Group, on the instruction of the Minister of Higher Education, to investigate and report on postgraduate programmes offered at higher education institutions across provinces, to scrutinise the growth of the institutions, the students’ success rate, the ratios of staff to students, and study costs at universities in South Africa in order to construct a sustainable funding model (RSA, DOE, 2001). Although the funding framework was introduced in 2003, it only came into effect between 2004/05, but due to a slow migration in implementation, it only became fully functional in the financial year 2007/08 (National Research Foundation [NRF], 2012). Since 2008, the new funding framework became more evident, as the government had started to systematically support universities with different types of financial projects, such as research grants and scholarship funding (NRF, 2012).

2.8.1. The National Research Foundation (NRF)

National Research Foundation [NRF] offers financial support to full-time Masters, PhD and Postdoctoral students, to improve research output in scarce skills fields. Financial support is allocated as scholarships and research grants to students in the fields of science, engineering, technology [SET], social sciences and humanities [SSH] (NRF, 2017). The NRF allocates, approximately, 100 scholarships/fellowships per year to UWC (NRF, 2014). The 100 scholarships are allocated in the various types of funding categories that the NRF offered to universities in general. NRF funds are allocated to eligible students who qualify for it according to their criteria. Due to the fact that the NRF is sponsoring universities at a national and international level with various postgraduate research and other projects, the funding allocated to universities for postgraduate students is not sufficient (NRF, 2014). Some students received a full-scholarship whereas other students receive a block grant. Block grants are important for the on-going institutional operating costs that are earmarked to steer the higher education

system and by increasing access to studies, enhancing teaching methods, increasing research outputs and for infrastructure development. One of the NRF's core criteria that is obligatory is that students are afforded the opportunity to work in an organisation as an intern after completion of studies to gain hands on work experience (NRF, 2014).

2.8.2. External stakeholders

UWC had realised that it was important to attract more investment from external stakeholders, at national and international level. UWC has signed various Memoranda of Agreements [MOA] with partners at national and international level to boost scholarship support for students who meet the scholarship criteria. External donor criteria and the allocation of funding differs between the various donors. Since 2016, UWC's postgraduate division's fundraising initiatives improved as some Seta organisations had started to fund some postgraduate study fields (Health and Welfare Seta's Memorandum of Agreement, [MOA] 2016). The Seta organisations such as Bankseta, Fasset seta, and all other Seta funding are allocated over a period of one year, which is from March the current year to March the following year. The new financial year started the following month of April (Bankseta and Fassett Seta MOA, 2018).

The Seta's open window starts 01 May to 31 May, whereas other Seta's open window is 01 August to 31 August. Others open in December the current year and closed in February the following year (Bankseta MOA, 2018).

However, one of the Setas allocated bursaries to students in 2018 but to date not all the funding are allocated to the institution because the funds are getting paid according to the performance of the student. For example I the student complete the proposal the first tranche payment of 50% are paid. The second tranche payment was supposed to be made when the students was busy writing up the chapters in the same year but although the students performed adequately no payments were received (HWSeta MOA, 2018). The final (third tranche payment) was supposed to be made upon submission for examination. For example the 4% PhD students and 1% Masters students that submitted in November 2018 for examination received the second and third tranche payment in September 2019. Another 4% that submitted for examination in November 2019 received payment in February 2020 with a one month waiting period on the

breakdown for the funding. From the 4% payment in 2019 1% was paid short and to date the payment was not yet made (HWSeta, 2019). However the progress reports was submitted in time by the supervisors and the students.

This process causes huge frustration amongst students because although they have a scholarship they still need to apply elsewhere for additional funding to cover their study costs for the year or the ensuing year. For example the Seta funding might be R80000 but the amount is split over a period of three to four years or even more depending when the student submit for final examination (HWSETA MOA, 2018). Some of the selected Honours students was supposed to receive the funding in the same year of 2018. But as the year progresses the Seta made changes to the MOA and some of the Honours students went onto the Masters programmes who not yet received the second and third payment. The MOA was for 2018-2019 with outstanding payments and no closeout report (HWSeta, 2018). The university official communicates to this specific Seta on a weekly basis but the officials made empty promises that does not adhere to the rule of the MOA or their institutional work performances.

Although many private and public institutions at international and national level has started to sponsor HBU especially UWC more postgraduate funding support is needed to bridge the funding gap in the system (Sokupa, 2018).



2.8.3. International scholarships

Multi-disciplinary collaborative partnerships provide students the opportunity to apply for various international scholarships in different countries. UWC has an award system in place that allows researchers to study in other countries, through research mobility programmes, such as Erasmus Mundus and Erasmus Mundus Plus; Emasa; EU/Saton; Enspire: Aesop; Eusaid; Intra ECP; Royisi Sisikawa; Full Bright; Daad; Desmond Tutu Netherlands; TWAS/DFG German scholarship; Missouri programme; Academic Doctorate Advancement Project Towards Transformation (ADAPTT), United States Development Programme (USDP), and the Presidential USA scholarship. The mobility programmes afford students the opportunity to study abroad at Masters' and PhD levels, while earning a monthly income. The scholarship opportunities provide researchers with research knowledge of, and insight into, new

information, ideas and strategies (UWC, 2013). These institutions, make a critical contribution in the conversation about the continent's future research (Kritzinger & Loock, 2012; Collis *et al.*, 2013; Martinez, Ordu, Della Sala & McFarlane, 2013).

2.9. Research, training and development

According to the Council of Higher Education (CHE, 2013) and the National Development Plan (NDP, 2012), universities are becoming increasingly competitive in an international education market; therefore, it is essential to review doctoral programmes continuously, to be on par with international standards (Lincoln and Denzin, 2008; HESA, 2015). There are enormous pressures on the postgraduate students to deliver quality research which can only be achieved, if there are reliable resources and adequate supervision available (UWC, 2009b:47; NDP, 2013:11; Commission of Inquiry Feasible Education Report, 2017). Modern-day career expansions make it imperative that job-seekers are multi-disciplined and research orientated, to meet the expertise required (Coetzee, Bergh & Schreuder, 2010). The successful postgraduate student is expected to make an original and valuable contribution, by adding new knowledge, and by expanding on established knowledge, with the publication of new results (Wisker, 2005; Van Wyk, 2008; Mouton, 2013). Therefore institutions can make a critical contribution in the conversation about the continent's future (Kritzinger, 2013). The quality and complexity of research remains a challenge, irrespective of the field of study (Collinson, 1998). The student must also be motivated, disciplined and dedicated to produce high quality research, by solving the research problems, in a methodical manner (Lee, 2010; Mouton, 2011). Postgraduate students are under enormous pressure to deliver quality work, to strive for excellence and to compete at a national and international level (Lovitts, 2006). As a result they are exposed to publish articles in accredited journals (Mouton, Van Lill, Botha, Boshoff *et al.*, 2015). This improves the student's academic profile and that of the academic institution.

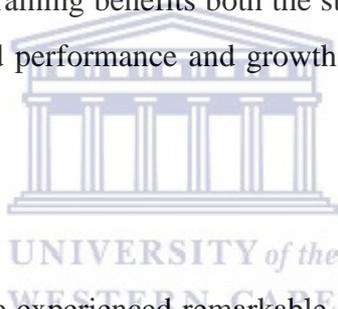
Postgraduate research evolved around two key principal actors, these are the student and the supervisor. Lessing; Schulze, 2003 & Katz; Coleman, 2001) observe that successful completion of the thesis by a student is due to a combination of factors such as the intelligence, the training received and perseverance of the student, as well as, proper guidance by the research supervisor or advisor. (Smith, Brownell, Simpson, & Deshler 1993:53) opine that “a

successful dissertation experience occurs only through significant efforts and good working relationship by both the supervisor and the student." For example, Abiddin, Ismail & Hassan (2009) noted that some students might experience challenges during their research process. Some of the identified challenges include not being familiar with the research process, difficulties in topic selection and lack of knowledge about the research methodology, structure and design of the thesis. The National Development Planning Committee (2014) is of opinion that universities in South Africa must address the inadequate preparedness of postgraduate students by implementing training and development programmes in support of their studies.

UWC has initiated significant multi-disciplinary collaborative research partnership projects and programmes, as part of the research innovative initiative, to enhance the knowledge and skills of postgraduate students, staff and academics alike (UWC, 2009b). Over the years, the well cemented relationships with institutions in Africa, Europe and North America have resulted in joint research partnerships and capacity building programmes (Hoskins & Goldberg, 2005). International scholarships do not only afford students many different research techniques and styles, but also provide postgraduate students the opportunity to work on multi-disciplinary projects (UWC, 2010). In addition, it allows students to broaden their scope and exploration of novel research ideas, methodologies and concepts (UWC, 2009b:34).

Students are also afforded the opportunity to publish in accredited journals and books at international level (UWC, 2009b: 47). These partnerships have "created opportunities for the university to excel in areas that will place it at the cutting edge of the production and transfer of new knowledge in key fields in the global market" (UWC, 2010:31). UWC has strong multi-disciplinary collaborative ethos in several research clusters abroad that act as forums for the generation, and development across traditional boundaries (UWC, 2009). O'Connell (UWC, 2009:45-47) further stated that "accredited publications assist not only in measuring a university's research contribution, but also the level of productivity of its research community". UWC publication outputs were estimated to increase from about 367 in 2012, to 422 by 2019, because of contributions to accredited publications by postgraduate students and academic staff (NRF, 2015). Feedback from the NRF indicates that, at the end of 2012, UWC had 89 NRF-rated researchers, compared to the 2009 count of 66. Subsequently, UWC's research outputs reveal consistent growth on a yearly basis (UWC, 2012a).

Since 1994, there has been a noticeable increase in administrative staff at UWC, that are also studying towards a postgraduate qualification. Their personal aim is career growth, as they ultimately hope to be promoted to better-remunerated positions, which would be the catalyst in improving their living conditions. This specifically would be a benefit to the ratio-inequity of Black, Coloured and Indian women, as they are still extremely side-lined (UWC, 2009a). According to McNamara (2005) another factor that is important within an administrative environment is that employees should improve their skills regularly through work skills development opportunities to enhance their performance in the work environment for future growth and promotion. Thus it is important for the institutions like UWC's human resources department to keep abreast with new skills development programmes, to equip administrative support staff with adequate knowledge and skills in their working environment. UWC's work skills plan, in line with the National Development Plan (2012), which afforded administrative and academic staff the opportunity to enhance their skills regularly. The training is enhanced staff performance so that they render an effective and efficient service to the community in general and to its students. The training benefits both the staff and the institution as it reflect on the institutions credibility and performance and growth (UWC Skills Development Plan, 2015:45).



2.10. Supervision

Universities in South Africa have experienced remarkable growth in the research innovation niche areas, which led that supervision of postgraduate students came under scrutiny over the past few years (Buttery, Richter & Filho 2005:8; Van Rensburg, 2007:8). Highly skilled supervisors are needed to not only train students, but to mentor younger less experienced academics (Manathunga, 2012 & Bunting, Sheppard, Cloete & Belding, 2010). Raffing, Jensen & Tønnesen (2017:23-24) assert that the “quality of supervision is a major predictor for successful postgraduate research”. The unique knowledge of a supervisor in a specific field helps to improve the student's understanding of a specific topic and ensures progress in the research project (Gabrielle, 2001).

Accessibility and reliability of supervision is crucial in postgraduate studies. In situations where supervisors are more involved and regularly follow up on their students' progress, better

completion rates and high-quality research are achieved (Bain, Fedynich & Knight, 2010; Paglis, Green & Bauer, 2006). It is important for the supervisor and student to have a good working relationship and regularly communicate whilst the student is working on the research project (Brundrett, Burton, & Smith, 2005; Friedrich-Nel & Masalla, 2011:172; Mosley, Pietri, & Mosley, 2008).

However, students who experience less day-to-day contact with their supervisors also reported lower attainment of research skills or lower levels of satisfaction . Adequate knowledge and skills are essential to sustained professional and scholarly development of both student and supervisor, and ultimately, the academic institution to reach its strategic objectives (UWC, 2015). It happens that often supervisors have enormous workloads, or they are busy with their own doctoral studies and are over-burdened; therefore, the students are deprived of the much-needed time and support, resulting in the students' slow progress with their studies (Todd, Smith & Bannister, 2006). Some supervisors are also head of departments with a large staff compliment that they have to guide and lead, with demanding meetings, conferences and travelling obligations (O'Connell, 2014). According to (Pearson & Brew, 2002) the growth in postgraduate studies has a down-side because of the shortage of suitably qualified and trained supervisors, in some study fields. The authors are of the opinion that supervisors must continuously refresh and update their knowledge, interact with their peers, and share their experiences to instil good practices.

In addition, it is widely acknowledged that the lack of communication between students and supervisors as well as inaccessible, unavailable or unapproachable supervisors, are stumbling blocks that lead to poor-quality research output (Guri-Rozenblit, 2009; Brundrett, Burton, & Smith, 2005). According to Harris, (2011) and Piccinin, (2000) the relationship between the student and supervisor involves selecting a research topic, planning the research, acquiring the necessary resources, managing the project, actively conducting the research, carrying out the literature review, analysis and interpretation of the data, writing the thesis, defending it and possibly publication. Consequently, the supervisory process requires constant adjustment, great sensitivity and interpersonal skill on the part of both the supervisor and student (Piccinin, 2000). Good supervisor and student communication and understanding is essential to aid the learning process (Friedrich-Nel & Masalla, 2011:172; Wisker, 2001:36).

However, guidance is not only limited to the PhD research process, it also extended to the whole postgraduate research environment (Baptista, 2011). Thus, it is important that the supervisor should make a significant academic contribution at the frontiers of a discipline, or field, to such an extent that the quality of work is satisfactory for peer review and publication (Council for Higher Education, 2014). When students are supervised by a supervisor, it has to be in the supervisor's area of familiarity or expertise, which is supported by publications and recognition by peers. Moreover, when PhD students need supervision in an area outside the supervisor's expertise, the supervisor should make the extra effort to keep abreast with developments and trends in that field, in order to support the student, adequately (Mouton, Boshoff, James & Treptow, 2012: 114).

Essentially, it is pivotal that a supervisor has adequate knowledge of a research subject, as insufficient knowledge could disadvantage the student, the supervisor and the university (Mouton, 2010: 17). An experienced supervisor would be able to distinguish if students understood what was required of them (Lessing, 2011). Most supervisors who are experienced in their field of study render multiple services such as mentoring and research guidance to their students (Albertyn, Kapp & Bitzer, 2008; Bitzer, 2011). Supervisors, who lack skills and competencies, should not be allowed to supervise students, until they had been adequately trained (Wisker, 2005: 166). Universities should appoint academics with suitable qualifications that are multi-skilled to advance Masters' and PhD in research methodology, concept and theory education (Manik, 2014 & Golde, 2005). In addition, it is vital for them to adequately train their successors, with the skills that match the academic profession, labour market and economy of the country. The Academy of Science in South Africa (ASSAf, 2010:65) states that the availability of adequate trained doctoral supervisors is crucial within higher education institutions in the South African phenomenon. It is expected that an individual, who supervises a student, must have completed their PhD qualification to make a significant academic contribution towards the research project of the student (Delaney, 2007 & Malfroy 2005).

De La Rey (1998: 232) asserts that the numbers are not as important as the nature and quality of the PhD education. Consideration should be given to whether traditional models are adequate or whether other models are needed to produce more PhD graduates. In order to graduate more PhD students, more PhD supervisors are needed; but in order to have more

supervisors, more PhDs are needed (MacGregor, 2013). MacGregor posed the following questions at a Seminar on the PhD's in South Africa, 16 May 2014, "If this is a vicious cycle, what is the virtuous cycle?" "What percentage of academics with a PhD has never published a peer reviewed article, or supervised a student since completing their PhD?" (NRF Centre of Excellence Policy 2014). De La Rey (1998: 232) stated that academics with PhDs are needed to feed both the academic profession and knowledge production.

In addition it has become important that academics should adequately train their successors with the skills that match academic needs for the labour market (Bunting, Sheppard, Cloete & Belding, 2010). The role of a supervisors is broad because it is not only to see that Masters' and PhD students succeed academically, but they are responsible for the overall wellbeing of the student (MacGregor, 2013). Supervision is a long term commitment while the student is busy with the research project which involves dedication from both the supervisor and student. Supervisors have to fulfil multiple portfolios such as supervisors, mentors, research coaches and at some point act as a councillor (Mouton, 2011). It is important that supervisors are trustworthy with a reputation in following university ethical protocol by protecting the students' thesis content until completion and publication thereof (Friedrich-Nel & Masalla (2011:172). Supervision is a contractual relationship between the supervisor and the student that creates explicit expectations and accountabilities between them, as well as the institution (Clark, Van Der Meer & Van Koten, 2009). Kimani (2014:11) states that, "the relationship between the two is perceived to be symbiotic in nature where both the supervisor and the student should follow the norms of the institution as per their code of conduct".

2.11. Mentor support

It is not always easy for supervisors to supervise and mentor students because they already have huge workloads and due to the fact that some of them are heads of departments, they have to manage staff, teach, provide training and travel extensively (Harle, 2013:4-9). Postgraduate students at South African universities often struggle to find good mentors to assist them during the study period (Eby *et al.*, 2010). Literature reveals that research programmes do not always provide suitable mentors for a specific field, and that students often work independently, which could result in the study process becoming difficult and intolerable for the student (Cronan-

Hillix, Davidson, Cronan-Hillix & Gensheimer, 1986; Clark, Harden & Johnson, 2000; Lewis & Lewis, 2008). Some universities have implemented a mentor support system, that afford PhD students the opportunity to work on a work-study programme. mentoring Masters' students; but often these mentors are not properly skilled, or trained in the student's field of study, yet they are assigned to assist the student (Lewis & Lewis, 2008). Often mentors are exposed to how students are supervised, as a result they would gain experience of what is expected from an academic/supervisor during the process (Eby, Butts, Durley & Ragin, 2010). Research capacity development, through mentorship and guidance by professionals, is critical in "building communities of scholars" (Harle, 2013:4-9). At the beginning of Masters' studies, a student is dependent on their supervisors to mentor and guide them through the research process, until they are confident enough to work independently (Eby, Butts, Durley & Ragin, 2010). Thus, it is important for students to connect well with their mentors, in a professional, appropriate manner, to foster a good working relationship between them (Eby, Butts, Durley & Ragin, 2010; Walfish & Hess, 2001).

Occasionally, some students who work without mentors feel abandoned, most of them find it difficult to progress on their own (Paglis, Green, & Bauer, 2006). According to (Thompson *et al.*, 2005) students should maintain good working relationships with their peers, faculties and departments in order for them to be up to date with activities that happened on campus that is beneficial to the development of the student. The concept of student and mentor connection or connectedness needs to be addressed, as an overall goal for the institution and the student (Hoskins & Goldberg, 2005). Postgraduate students can be affected by a feeling of isolation or abandonment which equates to disconnection between student and mentor (Springer, 2006). It is essential for a student to stay in touch with their mentor through regular communication and appointments as agreed upon by the mentor and student. The student will feel more comfortable to ask questions and make good progress (Beqiri *et al.*, 2010). Effective mentor support advances the discipline and often makes a significant contribution, long before the students complete their graduate qualifications (Tenenbaum, Crosby & Gliner, 2001). Good mentors are most likely to be productive, effective and efficient in their work because they are in the final stages of their degree or have already completed their Masters or doctoral studies (Stamm & Buddeberg-Fischer, 2011).

Mentors often must encourage their mentees to build networks with other students or stakeholders, and should have support structures in place to assist the student. For a student to show progress with their work they must show commitment to time schedules with their mentors and not jeopardize the time allocated to work on the research project as it may have a negative effect on productivity (Walfish & Hess, 2001). Walfish and Hess further assert that mentoring relationships evolve over a period that often begins because of a need. To establish a mentoring relationship, postgraduate students should be aware of the mentor's professional experiences which may relate to or intersect with the interest of the student (Paglis *et al.*, 2006). Mentors are keen to work with motivated students who are dedicated because their determination is to move on to the next level of the research project (Galbraith, 2003). Students should demonstrate why a mentor should invest time in them by portraying qualities of professionalism, perseverance, the ability to learn research and language skills, creativity, critical and analytical thinking, motivation and commitment (Crisp & Cruz, 2009; Walfish *et al.*, 2001). For postgraduate students to excel academically they must show their ability to work independently with minimal supervision (Letseka & Maile, 2009; Sinclair, 2003). Mentoring relationships evolves over a period of time that often begins because of a particular need. In order to establish a mentoring relationship, postgraduate students should be mindful of the mentor's professional experiences that might relate or intersect with the interest of the student (Bauer, 2006). Effective mentor support advances the discipline, it often begins to make significant contributions long before students complete their graduate qualification. Postgraduate students with good mentors are most likely to be productive, effective and efficient. Mentoring support helps to ensure improvement in the students' progress with the research project (Bauer, 2006). When postgraduates request an excessive amount of assistance they may run the risk of creating the impression that their mentors are doing their work (Sinclair, 2003). Students should show their appreciation of their mentors by thanking them for their time, because often mentors allow them to exceed the allocated time limit (Marshall & Gordon, 2010). Furthermore, when the terms of a mentoring relationship are established the ground rules for the working relationship is clear and this should alleviate any difficulties between the student, mentor or supervisor. If there is a good working relationship between the parties, there should not be a reason why an issue cannot be resolved (Marshall & Gordon, 2010). Communication is the foundation of the relationship because unforeseen or critical

situations might arise that could hinder the students' progress of completing the research project in the expected time frame (Sinclair, 2003).

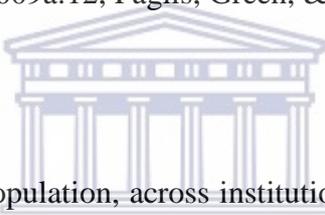
2.12. Inadequately prepared students

Higher education institutions are often challenged with inadequately prepared students in their systems, at both undergraduate and postgraduate levels (Republic of South Africa [RSA], Department of Higher Education and Training [DHET], 2012b). Students, who are not academically inclined to progress to postgraduate level, could surely be recognised at undergraduate level; therefore, more focus and attention should be given to monitor their progress, to determine whether they possess the acumen to cope with intensive research (Matshabaphala, 2008). However, it has been reported that universities continue to recruit inadequately prepared postgraduate students every year (RSA, DHET, 2010). Most students, who had completed their Honours degree, and were progressing to Masters level, find it difficult to conduct research, or start the writing of a proposal, because they did not have the mentorship of adequately trained supervisors, who had the patience and skill required to encourage, or academically prime them, during their undergraduate studies (UWC, 2009a, p. 22). It became apparent that the challenges being faced by inadequate prepared students in literacy, writing skills and preparation in research methodology is a challenging and complex task to the postgraduate supervisor in the higher education sector (Wadee, Keane, Dietz, & Hay, 2010:16 & Vilkinas 2002:129). However, it requires a re-conditioning of their mind-set and intensive guidance, to re-acquaint themselves with basic research skills, such as how to search electronic databases and doing literature reviews (Babbie & Mouton, 2012). Some of these students would dropout, stop out or end up *burnt out*, because of their inability to cope with the pressures of in-depth research. In addition, it requires a re-conditioning of their mind-set and intensive guidance, to re-acquaint themselves with basic research skills, such as how to search electronic databases and doing literature reviews (Babbie & Mouton, 2012). Despondent postgraduate students, who possess inadequate knowledge and skills have a tendency of assimilating negative perceptions about their competencies, which results in the lack of self-confidence and self-efficacy (Lee, 2005; Sayed, Kruss & Badat, 1998). Therefore, it is essential that, as part of the curriculum, students must attend the different writing skills workshops and

seminars, to improve their skills and to gain the required knowledge (Mouton & Hunter, 2001:109).

The Council for Higher Education (CHE, 2014) embarked on an extensive campaign to encourage institutions to implement various postgraduate training programmes and initiatives, with the view of improving students' physical and mental well-being, as well as confidence, skills and academic acumen (Republic of South Africa [RSA], Department of Education [DOE], 1997b; Malfroy, 2005; Nelson, 2006). In addition, the suggested training programmes would equip inadequately prepared students to work in groups with other students, to ensure a wider impact of the research skills and knowledge (Lee, 2005). Only professional mentors should be appointed to assist them through the critical stage of their study period (Malfroy, 2005; Nelson, 2006). The training programmes and mentor support would assist them to gain confidence, work independently, improve their intellectual ability, learn techniques to do research, build a valuable network, think critically, be effective and efficient, manage time and operate as professionals (UWC, 2009a:12, Paglis, Green, & Bauer, 2006; Galbraith, 2003).

2.13. Depressive feelings



A great majority of the student population, across institutions in South Africa, feel academic pressure that leads to feelings of stress, despondency, brain-, and anxiety for the future (Dixon & Kurpius, 2008). Literature reveals that research programmes do not always provide suitable support structures for a specific field, and students often work independently, or in isolation, which could result in the study process becoming difficult and intolerable for them (Clark, Harden & Johnson, 2000; Lewis & Lewis, 2008). Academic pressure could cause feelings of negativity towards education, as some students may have been under-prepared, or ill-advised, when they were deciding on their field of study or subjects that they enrolled for. The levels of stressful experiences varied significantly among students at both postgraduate and undergraduate levels, as many are overwhelmed by the demands of studies, work and family responsibilities (Clark, Harden & Johnson, 2000; Lewis & Lewis, 2008). This may result in the abuse of stimulants, obsession with grades, constantly working, quitting hobbies, and could even lead to suicidal tendencies (Dixon & Kurpius, 2008). Statistics reveal that 25% of the students, across various institutions of higher learning in South Africa, were observed to

display symptoms of depression (Dixon & Kurpius, 2008). However, the exact number of postgraduate students affected with this illness, still needs to be determined and documented (Dixon & Kurpius, 2008; Beck & Young, 1978). Various scholars have observed that universities are providing wellness and psychological support, as part of the coping mechanisms for students, who might be experiencing feelings of depression (Clark, Harden & Johnson, 2000; Lewis & Lewis, 2008). These authors are of the view that supervisors and mentors, constantly, ought to encourage and motivate students to manage pressure and stress. It is important that postgraduate students regularly interact in activities with social network support groups that are available on campus, to assist and guide them with self-esteem, or low morale, when the need arises, in terms of financial or family problems (Lewis & Lewis, 2008). It is equally important that higher education institutions consider enforcing a depressive feeling code of conduct as an institutional legislative mechanism to protect a student's confidentiality and anonymity. Thus when students become depressed they could feel comfortable to seek assistance from the university because they would feel protected (Cohen, 2003).

2.14. Time-to-degree and completion

Time-to-degree became under scrutiny at higher education institutions because it is evident that more Masters' and PhD students take longer than the expected time frame to complete their studies (Abiddin, Ismail & Ismail, 2011). Cloete, Mouton, and Sheppard (2015) observed that more than 60% of PhD students in South Africa studied part-time, with family and work responsibilities, which often resulted in slow completion rates. Their findings raise critical issues about the effectiveness of the current system; therefore, they advocate for a review of the existing PhD education models (Cloete Mouton, & Sheppard, 2015). As discussed in Chapters 1 and 2, the different problems that postgraduate students experience prevent them from completing their work in time. It has become apparent that, on average, some students take 6-8 years to complete a PhD degree, because of inadequate resources, lack of proper supervision, no support network, and bureaucracy in the approval process (Manyika & Szanton, 2001). In recent years, the time-to-degree factor has become a worrying factor at universities all over the world, as it hampers the progress of the skills profession (Raisman, 2013). Postgraduate research challenges, such as time-to-degree, are not unique to universities in South Africa, as other developed countries, namely, Germany, Australia, Canada, the United

States, and New Zealand have experienced the same dilemma. Thus, it is not surprising that, in the United States, “at least 40% of the students who begin a PhD program fail to complete in time” (Golde, 2005:669).

In Australia, postgraduate graduation success rates have improved, but research has revealed that some students are still taking longer to complete their degrees, even with all the modern technology and resources at their disposal. Intervention measures have been implemented to address this persistent problem with their training programme initiatives (Scholtz, 2007). O’Connell lamented that students should already be trained with research skills at honours level, to equip them to cope and excel at postgraduate level (UWC, 2014a). Bothma, Holmner, Penzhorn and Bester (2013) concur that, if students conducted research at the undergraduate level, they would gain valuable learning experience, and have a better understanding, as well as appreciation in their field of study, by the time they reached postgraduate level. Consequently, their knowledge would be developed and strengthened, and they would be able to apply it to their research (UWC, 2013). The undergraduate training would be enhanced to ensure students perform adequately at the postgraduate level, in order to complete within the prescribed time of the degree (Kisaka, 2014). In time completion is not only important for throughput and graduation rates, but also for the amount of funding that the state spends on postgraduate students, in terms of scholarship support. This problem seems to be prevalent worldwide and addressing it is imperative since research funding is usually linked to successful timeous postgraduate work (UWC, 2013).

There is still a great deal of concern about students’ inability to complete their degree within the prescribed period of time (Sayed, Kruss & Badat, 2006). Recent evidence revealed that, on average, 70% of postgraduate dropouts come from predominantly Black (African), Coloured and Indian families, who fall in the low income bracket, namely, parents/guardians with a paltry household income, ranging between R400-R1600 per month. If these students were encouraged to complete their degrees they could have become more economically emancipation to contribute to the economy of the country (Thaver, 2009; Mouton, Van Lill, Botha, Boshoff *et al.*, 2015). That is why supervisory training must aspire to cultivate knowledge and practical application of such, to enhance skills (Schulze, 2012). Another factor is that, in most South African households, the student does not hail from a family which conforms to the traditional

nuclear family structure (Martinez *et. al.*, 2013). Most students of colour are from child-headed households, single-parent households, or households where a grandparent is the guardian/provider. Students from such households cannot afford to study without a scholarship, or a study loan (Letseka, 2007).

It is vital for universities, including UWC, to retain these students, and support them to complete their degrees in time, because students who drop out negatively affect subsidies, enrolment, completion and graduation rates (UWC, 2009b). Retention initiatives, designed to manage student enrolment, were estimated to be 4 to 5 times more cost-effective, than recruitment efforts. For example, 4 to 5 enrolled students could be retained at university, for the same cost of recruiting one new student to a university (Boyle, Kwon, Ross & Simpson, 2010). The HESA Annual Report (2014a:26) indicated that the number of Masters' graduates increased by 54.6%, from 4179 in 2009, to 6460 by 2013. Similarly, there was a noticeable increase in the number of PhD graduates, from 1380 to 2051 in the same years.

2.15. Why students dropout

Existing scholarship statistics reveal that most postgraduate students often dropout, or stop out, of the university when they experience difficulties with financial support, inadequate resources, lack of research skills development, inadequate supervision or mentorship guidance, which could lead to despondency, and depression (Mouton, Louw & Strydom, 2013). The most common problem that currently still influences postgraduate student dropout or stop out, is the failure to secure, not only scholarships to cover their study costs, but also other ancillary costs, such as the cost for accommodation, travelling, study material, equipment and basic living expenses (Seagram, Gould & Pyke, 1998). High dropout, poor graduation, and retention rates, inevitably lead to wasted time, money and resources, which are crippling higher educational institutions like UWC. Often students stop out because, initially, they were ill-advised when deciding on a course of study, and subsequently, would have to change course, from one faculty to another, or, temporarily, withdraw from enrolment, due to other circumstances (O'Connell, 2011).

Some students may even decide to transfer to another institution, where the study costs are more affordable (Robinson & Bornholt, 2007). Available data reveal that approximately 20%, or 1.3 billion Rand in government subsidies, are lost, annually, on students who do not complete their intended qualifications, which could have been allocated to redress other inequities plaguing the higher education sector (NPC, 2012). Tuition and accommodation fees at all universities, generally, increase annually, which is another major reason why disadvantaged, postgraduate students dropout, as they might be unable to settle outstanding study debt, and be incapable of securing funds for the new study year (HESA, 2014a and O'Connell, 2010).

Subsequently, the poor living conditions, complex cultural, spiritual and demographical backgrounds of students contribute to low morale and the lack of confidence, which restraints performance and progress (Hiltz & Goldman, 2005; Astleitner & Steinberg, 2005). An additional factor that could contribute to the increased dropout rate at postgraduate level, is the transition from undergraduate to postgraduate studies, which, unavoidably, is accompanied by many difficulties in coping with the growth of knowledge and development (Matula, 2009). The lack, or shortage, of a study network to cope with the academic demands, and poor communication between students and supervisors, could lead to declining confidence, low morale, stress and despondency (Kritzinger & Loock, 2012). In most instances, the students need a good support system, as well as continuous motivation, as they, generally, work in isolation, and do not receive the necessary mentorship, guidance or assistance (Abiddin, Hassan & Ahmad, 2009). The lack of confidence could cause students to underestimate their ability to reach the standard of scholarly rigour, necessary for them to complete their degree within the expected time frame (Mouton, 2010). The inability to cope with the pressure of a huge workload, the lack of support, inadequate skills and knowledge, result in burn-out, which influences them to dropout (Astleitner *et al.*, 2005; Hockey, 1996).

Another negative factor is student depression, which could have biological and psychological implications that could lead to poor academic performance, illness and in extreme circumstances, suicidal tendencies (Astleitner *et al.*, 2005). Dire family circumstances, together with work pressure, as well as study fatigue, could have tragic consequences. In addition, some students struggle to adjust to studying techniques, and often fail to grasp information speedily,

and sufficiently, during discussions. This causes them to fall behind with their work, and result in dropout (Isaacson & Fujita, 2006). To reduce the dropout rate, and boost the retention rate, students owe it to themselves to allocate their time, appropriately, to accommodate the various areas of responsibilities in their lives, to keep pace with new developments in their fields of study, to timeously acknowledge their limitations, and to assess whether they can think analytically and creatively (Isaacson & Fujita, 2006).

The challenge for working students is that they must be disciplined enough to manage their time by working out an appropriate schedule for work, family responsibilities and study commitments (Carr, 2000). When students are not disciplined enough or lack the needed time-management skills to juggle work and study commitments, they become demotivated, which, in turn, leads to a lack of confidence and self-esteem, and hampers expected progress (Braunstein, 2002; Carr, 2000). In addition, many students are often too ambitious and take on more responsibility than they can manage (Terry, Owens & Macy, 2001; Isaacson & Fujita, 2006).

2.16. Conclusion

In this chapter, the researcher provides literature related to the challenges that postgraduate students experience at universities, specifically at UWC. From the foregoing discussions, continued developments are needed to support a successful postgraduate education system, which will transform universities into a place of research, as well as a *seedbed* of training and learning for future generations of researchers. Various authors' views and perceptions were discussed and assessed, regarding the challenges of postgraduate students. The next chapter will provide a detailed explanation of the methods used in the research of this current study.

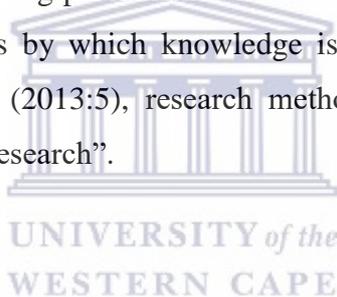
CHAPTER THREE

METHODOLOGY

3.1. Introduction

In this chapter, the researcher provides a detailed discussion of the literature that relates to the research problem and the data gathering process. In addition, an insight into the research methodology is provided, as well as why it is suitable for this current study.

Research methodology is “the general approach the researcher selects to conduct the research project and to some extent, this approach dictates the particular tools to employ” (Leedy & Ormrod, 2005:12). Rajasekar, Philominathan and Chinnathambi (2013:5) assert that research methodology “is a systematic way to solve a problem. It is a science of studying how research is to be carried out. Essentially the procedure by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. It is also defined as the study of methods by which knowledge is gained. According to Rajasekar Philominathan & Chinnathambi (2013:5), research methods are “the various procedures, schemes and algorithms used in research”.



3.2. Research aim

The aim of this current study was to explore postgraduate services for both Masters’ and PhD students from different study disciplines, in various faculties at UWC at a specific point in time (2009 to 2013). In this case, the researcher conducted a mixed methods research (MMR) study by taking the views and beliefs of the postgraduate students into consideration in order to answer the research questions (see Section 1.7):

- To understand obstacles in postgraduate enrolment and registration processes;
- To understand the challenges regarding departmental, administrative, supervision, and accommodation services;

- To evaluate support structures to improve the general well-being of students, in terms of academically preparedness, feelings of inadequacy which could in turn lead to symptoms of depression; and
- To explore possibilities for more collaborative partnerships with external stakeholders, to improve funding mechanisms in order to render better scholarship support to postgraduate students.

3.3. Mixed methods research design

The mixed methods research (MMR) approach for this study is an inquiry that incorporates both *quantitative* and *qualitative* approaches in a single study. This mixed methods approach requires knowledge of various mixed methodological designs that assists in organising procedures for a study within its context, through a variety of data sources. This ensures that these issues are explored through a variety of lenses, rather than one lens (Lincoln & Guba, 2000). The main reason for using a MMR approach is that, both qualitative and quantitative together, offer a holistic understanding of the research problem, more than either approach could, in isolation (Maxcy, 2003). The MMR approach, was selected for this study, because it is situated in the middle of a continuum, with quantitative and qualitative approaches representing different ends to this continuum (Creswell & Plano Clark, 2012; Newman & Benz, 1998; Marshall & Rossman, 2011).

In this study the researcher, collects and analyses, not only numerical data, which is customary for quantitative research, but also narrative data that are customary for qualitative research, integrating the two sets of data by answering the research questions (Tashakkorri & Teddlie, 20011; Johnson, Onwuegbuzie & Turner, 2007). Additionally, according to Guba & Lincoln (2005), although the core characteristics of mixed methods are important in conducting research, philosophical assumptions of MMR comprise a basic set of beliefs, or assumptions, which guide the inquiries. According to Creswell and Plano Clark (2013:39) these assumptions are described as a worldview, implying that the researcher generates a worldview, comprising their beliefs and assumptions, which informs the study to be conducted. According to Kuhn,

(1962) paradigms are synonymous to worldviews, which are sets of generalisations, beliefs and the values brought by the researcher to the study.

Creswell (2014) explains that since the collection of data is an iterative process when collected from the field, information are analysed, and the researcher goes back to the field to gain more insights. These forward and backward movements for Patton (1980:306) are inductive analysis as the patterns, themes, and categories of analysis. However, Tashakkori & Teddlie (2001) posit that mixed methods research does not seek only convergence in research results, but an important outcome of combining information from different sources are also the dissimilarities. This, in turn, may provide greater insights into complex aspects of the same phenomenon or the design of a study.

In conclusion, the use of both qualitative and quantitative methods simultaneously is complementary. Luyt (2012) reveals that the combination of these methods increases confidence in the research findings when the datasets are consistent. According to Bryman (2008:621) hypothesis that mixed research methods is “beneficial in creating data that are suitable for academic researchers and policy-makers” whereas (Guest, 2013:144) argues that “a study, gains validity from the strength of the research design, the use of convincing argument and the transparency of the research process”. Translating these ideas into a template for this study, the researcher argues that neither quantitative nor qualitative methodology on its own is superior but that they both play a role in the creation of knowledge depending on the form of knowledge that is required. Building on these justifications for adopting MMR design for the purpose of this study, there are three approaches to adopting a paradigm in mixed methods research, namely, a-paradigmatic stance (not considered relevant), multiple paradigm stance (alternate paradigms deemed compatible within same study), and single paradigm stance (qualitative and quantitative combination are appropriate under one paradigm) (Onwuegbuzie & Leech, 2004).

3.4. The paradigm stance

There are four dominant paradigms, namely, post-positivism, constructivism, transformative and pragmatism (Creswell & Plano Clark, 2007). In addition, there are three approaches to

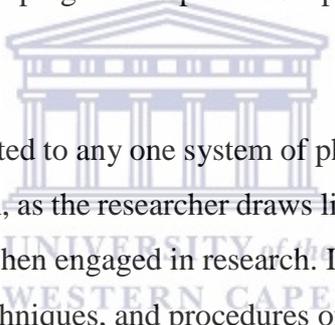
adopting a paradigm in mixed methods research, namely, a-paradigmatic stance (not considered relevant), multiple paradigm stance (alternate paradigms deemed compatible within same study), and single paradigm stance (qualitative and quantitative combination are appropriate under one paradigm) (Onwuegbuzie & Leech, 2004). For this current study, a single paradigm stance was considered appropriate, because “a-paradigmatic perspective is not considered congruent as no research can be paradigm free, whilst the use of a multiple paradigms creates tensions with the compatibility of integration” (Hall, 2013:76). The single paradigm stance, adopted in this current study, is *pragmatism*, which is focused on “solving practical problems in the ‘real world’ (Feilzer, 2010:8), rather than on assumptions about the nature of knowledge” (Hall, 2013:77). The paradigm stance of pragmatism clarifies the way students proceed to solve practical problems that impede their daily social economic circumstances, on campus in general, as well as the world. According to Feilzer (2010:14), “pragmatists do not care which methods they use as long as the methods chosen have the potential of answering what it is one wants to know”.

In this current study, the researcher explores the challenges that postgraduate students experience at UWC. This paradigm seems to break with the controls of dominant paradigms, while, simultaneously, being a pacifier between paradigms (Reason, 2003). Therefore, the division between quantitative and qualitative will be put aside, to end “the paradigm war by suggesting that the most important question is whether the research has helped to find out what [the researcher] want[s] to know” (Hanson, 2008:109). According to Gray (2009:9), pragmatism took a very bold step to solve practical problems in the real world. Gray (2009:9) continues to describe the real world as “the specific and subjective contexts in which people spend their day to day living, which provides real world research problems for social scientists”.

According to Ormerod (2006:892) the main idea of pragmatism is that the individuals’ “actions are guided by their beliefs which emphasize the practical, common sense, scientific approach embedded in pragmatism”. Ormerod (2006:892) states, “world pragmatism hold positive connotations”, implying that pragmatism is more practical in nature. Consequently, researchers have become aware of, and is receptive to, the ideas of others through pragmatism, and the research paradigms that address the philosophical dimensions of Masters’ and PhD students’

social needs, institutional and external donor funding and policy frameworks (Feilzer, 2010; Johnson & Onwuegbuzie, 2004; Maxcy, 2003; Morgan, 2007). The use of pragmatism in social theoretical research is not, without its critics. Hall (2013) concurs that, while this criticism was directed at James' Pragmatic Theory of Truth (1907), the difficulty is determining social theoretical research and mixed methods design that *works*, prior to using it. According to Teddlie and Tashakkori (2009), it is worth noting that, although pragmatism is mixed methods researchers' most popular single paradigm, several versions of it exist. Schutz (1967:11) ads, "...the pragmatic standpoint on ordinary knowledge is that it is shaped by human action. What people know about the world is shaped by "what they do", "can do" and "want to do" in the world. And this includes to a large degree what they know about other people's doings".

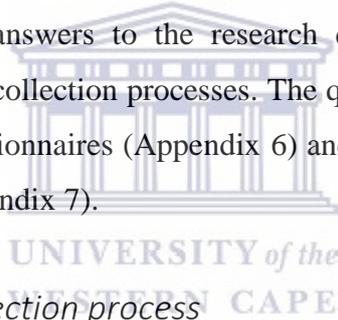
Johnson, Onwuegbuzie and Turner (2007); Tashakkori and Teddlie (2007), as well as Morgan (2007) argue that pragmatism represents the single most appropriate approach to mixed methods studies. Based on the views of Cherryholmes (1992), Morgan (2007), as well as their own, Creswell (2003) indicate that pragmatism provides a philosophical basis for research, as follows:

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- Pragmatism is not committed to any one system of philosophy and reality. This applies to mixed methods research, as the researcher draws liberally from both quantitative and qualitative assumptions, when engaged in research. In this case the researchers are free to choose the methods, techniques, and procedures of research that best meet the needs and purpose of the study.
 - Pragmatists do not see the world as an absolute unity. In a similar way, mixed methods researchers look to many approaches for collecting and analysing data, rather than subscribing to only one, for example, quantitative or qualitative. Therefore, the mixed methods research, in this study use both quantitative and qualitative data, as it provides clear understanding of the research problem.
 - The pragmatic researchers explore *what* and *how* to research, based on the intended consequences. Thus the mixed methods research established a purpose for the study choice, a rationale for the reasons why quantitative and qualitative data needs to be

combined, in the first place. They agree that research always occurs in social, historical, political, and other contexts (Cherryholmes, 1992). Moreover, for the mixed methods researcher, pragmatism opens the door to multiple methods, different worldviews and different assumptions, as well as different forms of data collection and analysis. It further provides solutions to the research questions, objectives, and assumptions (Rorty, 1990).

3.5. Research design

The research design in this current study describes the plan of action of how the researcher intends to conduct the research process by gathering quantitative and qualitative research in order to solve the research questions, problem and objectives of the study. It describes the primary and secondary objectives by linking data and methods to outcomes, while governing the choice of using an explanatory survey and exploratory designs. It stipulates the techniques and procedures (questionnaires, interviews) used by the researcher in the study, to explore the research problems and obtain answers to the research questions. This study used both quantitative and qualitative data collection processes. The quantitative data were collected by means of self-administered questionnaires (Appendix 6) and the qualitative data by means of semi-structured interviews (Appendix 7).



3.5.1. Quantitative data collection process

During the quantitative data collection process, a self-administered questionnaire was employed. A questionnaire can be defined as “an tool of data collection consisting of a consistent number of questions relating to the research topic to be answered by the respondents” (Bless & Higson-Smith, 2000:156). In this study, the questionnaire was suitable in identifying a variety of information gathered by questioning participants in various disciplines at UWC using a combination of close-ended and open-ended questions (Collis *et al.*, 2003: 173). According to Neuman (2003:268), a good questionnaire forms an “integrated whole where the researcher weaves questions together, so that they flow smoothly”. The basic objective of a questionnaire is to “obtain facts and opinions about a phenomenon from people, who are informed on the particular issue” (Delpont, 2005:166; Cooper *et al.*, 2006). The

questions were phrased in a way that required one response for each question from the respondents. In order to obtain information that could be used in a descriptive design.

3.5.2. Qualitative data collection process

During the qualitative data collection process, a semi-structured interview was employed. The reason for choosing the semi-structured interview technique was to encourage the participants to discuss freely their own understanding and experience of postgraduate challenges. Qualitative research involves the study of postgraduate students' experiences, values and beliefs, from their own perception. Creswell, (2012) & Rubin & Babbie (1997:272) stated that the qualitative research approach provides an in-depth understanding, with the goal of generating theoretical quality explanations. In this study, an in-depth understanding of the qualitative research approach was selected to explore, understand and describe the perspectives of Masters' and PhD students' hindrances with regards to their studies at UWC (Creswell, 2009). Participants were asked similar structured questions to get a variety of quality answers, to avoid ambiguous and simultaneously the researcher will obtain information about the objective and problem of the study (Newman & Benz, 1992 & Morse, 1991:176;). At the same time the researcher will get knowledge of participant's views, beliefs and behaviour, to compare responses generated from the interviews (Guthrie, 2010:120). The researcher was flexible and participants could comfortably elaborate on their points of interest without being influence by the researcher (Denscombe, 2007:176). An interview schedule was used as a guide, to conduct the interviews.

A mixed methodological research approach was selected for this current study, there different descriptive approaches and various mixed methods research designs, namely, Explanatory, Exploratory, Triangulation and Embedded (De Vos, Strydom, Fouché & Delpont, 2011).

3.5.3. Explanatory mixed methods design (sequential)

According to Creswell and Zhang (2009), in an explanatory mixed methods design, the quantitative data are gathered and analysed first, with the qualitative data collection and analysis serving as a follow-up phase. Additionally, the qualitative data are used to enhance, or explain the quantitative findings, with less emphasis placed on the qualitative strand. As per the exploratory design, the integration of the findings occurs at the interpretation and discussion

phase of the research process. Creswell (2014), as well as Hanson, Creswell, Plano and Clark, (2012:229), state that the explanatory design, is most useful to assess trends, as well as “relationships or study findings when they are unexpected”. According to Creswell (2003), the aim of the explanatory design is to collect and analyse quantitative data to provide a general understanding of the research problem. Moreover, with the exploratory design, the process is sequential and requires a great deal of time and effort.

3.5.4. Exploratory mixed methods design (sequential)

This research design commences with the researcher studying (or exploring, as the name suggests) a phenomenon by utilizing qualitative data (De Vos *et al.*, 2011). After the analysis of this data, the researcher follows up this process by quantitatively seeking to measure, or test the generalizability of the findings emerging from the qualitative data. More emphasis, therefore, is placed on the qualitative element of the data collection and analysis. The qualitative element is defined by Teddlie and Tashakkorri (2009) as a component of a study that encompasses the basic process of research; posing a question, collecting data, analysing data, and interpreting results, based on that data. The integration of the findings occurs at the interpretation and discussion phase. The combination of these two methods in a study is known as a mixed methods approach (Creswell, 2009; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2010; Teddlie & Tashakkori, 2009), and is conducted sequentially (the qualitative phase conducted first, followed by the quantitative phase). However, the disadvantage of this design is that it necessitates a substantial amount of time and effort. Creswell (2009:4) defines qualitative research as an investigation procedure of understanding which are based on an individual methodology beliefs of investigation to determine social or human problems under scrutiny. It can be difficult for a researcher exploring mixed methodological research to remain objective, because by clarifying, reporting and analysing the data, the researcher/s might include some of their own ideas and philosophies to the research (Tashakkori & Teddlie, 2003:16; Phillips & Burbules, 2000:7; Schwandt, 2000:8; Kumar, 2005:245; Creswell, 2003:54). Mixed methods research can be conducted in several ways, which results in the use of various mixed method designs. These designs refer to the different processes of data collection, data analysis, and the clarification and reporting of data in a research study (Tashakkori & Teddlie, 2003:16; Phillips & Burbules, 2000:7; Schwandt, 2000:8; Kumar, 2005:245; Creswell, 2003:54).

3.5.5. Triangulation mixed methods design (concurrent, but separate)

Of the four mixed methods designs, triangulation is the most prominent and prevalent because “it constitutes the first phase of the analysis. It is utilized to estimate the error inherent in our quantitative measurements. Although triangulation contributes directly to the analysis of the phenomenon being measured, it also serves as a building block for the incorporation of qualitative data” (Ivankova, Creswell, & Stick, 2007:3-20). The researcher collects and analyses data, using both quantitative and qualitative methods, simultaneously (concurrently), during one phase. The two strands are equally weighted for the most effective understanding of the phenomenon under study. Although the data collection and analysis are concurrent, they are conducted separately and independently, which suggests the involvement of a research team of experts, as the researcher would not be able to conduct both processes him/herself. The aim is to “compare and contrast the different findings to see the extent to which they do or do not agree with each other” (De Vos, Strydom, Fouché, & Delpoit, 2011:442). In this design, for example, the researcher would conduct a survey (quantitative) and semi-structured interviews (qualitative), with the same sample, regarding a phenomenon under study, simultaneously. Triangulation mixed methods design, therefore, has the advantage that it requires less time to conduct the research. The disadvantage, though is, when the findings do not agree, the resolution could be challenging, and may require having to collect and analyse additional data.

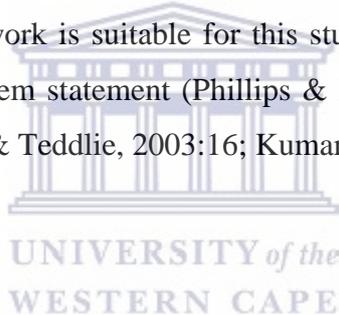
3.5.6. Embedded mixed methods design (concurrent)

In this design, the study is based mainly on one type of data; however, both quantitative and qualitative data sets are collected and analysed. The one set of data plays a supportive role. The primary data set is experimental, while the secondary data set complement the results of the experiment (De Vos *et al.*, 2011), and helps to describe the dominant design. The advantage is that both data sets can be collected and analysed, simultaneously (Ivankova *et al.*, 2007:266, cited in De Vos *et al.*, 2011); however, the disadvantage is that the researcher must explain the reason for the second data set. The researcher selected sequential explanatory mixed methods design for this current study because the “data collection approach either validates the other or compliments it adding greater depth and understanding to the research” (Tashakkori & Teddlie, 1998:168). The methodology of the current study follows a multi-phase process that includes

explanatory, descriptive and predictive approaches (Rossman & Creswell, 2013). It explains the findings of one method with another, during survey and semi-structured interview processes, to provide a comprehensive analysis (Moustakas, 1994). This research methodology aims to provide a solution to the problem, as well as achieve good results (Gorman & Clayton, 2005:22). A research project, therefore, should to be conducted according to the design of the research methodology (Saunders, Lewis, and Thornhill, 2012 and Babbie, 2001:74). The research design and methodology are pivotal to the study, as they guide the researcher through the evidence gathering process, and enables the researcher to anticipate that the research problem/s and question/s match appropriately (Lincoln & Guba, 2000; Singleton & Straits, 2010:108).

3.6. Research strategy framework

The researcher outlines the research strategy framework that includes the setting, population, sampling techniques and sampling procedure, data collection instruments, data collection and data analysis. The above framework is suitable for this study, as it provides answers to the research questions and the problem statement (Phillips & Burbules, 2000; Schwandt, 2000; Creswell, 2003:54; Tashakkorri & Teddlie, 2003:16; Kumar, 2005:245).



3.6.1. Setting

This current study was conducted at UWC, Bellville, Cape Town, South Africa. The university is described in Chapter 1 as an institution that was established in 1960, to educate the Coloured population in the Western Cape. According to Wood and Low (1998), “Bellville is a city in the greater Cape Town metropolitan area and falls within the area of the City of Cape Town municipality. Originally called the 12 Mile Post (Afrikaans: 12-Myl-Pos), as it is located 12 miles (20 km) from the Cape Town city centre, it was originally founded as a railway station on the line from Cape Town to Stellenbosch and the Strand. In 1861, it was renamed Bellville, after the surveyor general, Charles Bell. (Wood & Low, 1998).

3.6.2. Population

In this study, the population was the registered Masters' and doctoral students from various faculties at UWC, who studied between 2009 and 2013, but were registered in 2013. At the time of the questionnaire planning in 2013, a total of 2307 Masters' and students were registered at UWC.

3.6.3. Sampling

Neuman (2006:224), defines a population as a concept of a group or people from which the sample is chosen. In the field of human sciences, a population refers to essential research areas that the researcher are interested in that are relevant to the study (Monette, Sullivan & De Jong, 2008:136). According to Gall, Gall and Borg (2007:166), Monette, Sullivan and De Jong (2011:13), as well as Neuman (2011:241), sampling is the selection of a small segment, or subset, of a specific population, to represent the whole population. Scott and Morrison (2006: 219) concur that sampling is “the selection of a subset of persons or things, from a larger population, known as a sampling frame”, and Brink (2001:133) asserts that a “sample is a group of elements, or units that is selected from a certain population”. A sample is probed to reveal information that could be generalised for the entire population (Babbie, 2001:74). However, according to Lantham (2007:2), “the standard definition always includes the ability of the research to select a portion of the population that is truly representative of said population”.

3.6.4. Sampling approach

3.6.4.1. Random sampling

Random sampling is often called “straight random sampling” (Lantham 2007: 4). According to Lantham (2007: 4), random sampling requires that each member of the population have an equal chance of being selected (as is the main goal of probability sampling). Random sampling is the selection of primary and secondary data that involve direct and indirect knowledge and skills to describe the essence of the study (Royce 2010:156). In addition, MacNealy (1999: 155) asserts that a random sample is selected by assigning a number to each member in the

population list and then “uses a random number table to draw out the members of the sample”. By using random sampling, the researcher is “mixing up the population before grabbing n units” (Lohr, 1999: 3-5). Henry (1990: 27) is of the opinion that another way of viewing random sampling precludes that “all members of the study population are either physically present or listed, and the members are selected at random until a previously specified number of members or units has been selected”. Lantham (2007: 4) states that researchers “who choose simple random sampling must be cognizant of the numbers that they choose”.

Teddle and Yu (2007: 79) suggest that “simple random sample selection may be accomplished in several ways including drawing names or numbers out of a box or using a computer program to generate a sample using random numbers that start with a ‘seeded’ number based on the program’s start time”. This selection process corresponds to random sampling (Saunders, Lewis & Thornhill, 2012). Lantham (2007: 4) states that “random sampling is usually preferred over simple random sampling, as it is more convenient for the researcher”. According to Frey *et al.* (2000:128), Henry (1990:28) & Kish (1965:21), this type of probability sampling is also called “ordinal sampling and pseudo-simple random samples”, which includes a “selection of sampling units in sequences separated on lists by the interval of selection”. The researcher uses a wide range of methods to locate all possible cases of highly specific and difficult-to-reach population”. According to Bernard (2002), Lewis and Sheppard (2006), choosing systematic random sampling is fundamental to the quality of data gathered, and the reliability and competence of the participant is ensured. It was, therefore, very important to establish a sample that represents the population and was useful to the overall purpose of the study, in general.

3.6.4.2. Quantitative sampling procedure

The researcher worked closely with the senior faculty administrators to obtain the information of students after she had the consent of the students, the registrar and the administrators. For the sake of transparency, the faculty officers provided the researcher with a list of all registered Masters’ and PhD students in their respective faculties, in 2013. The lists provided, consisted of information such as i) students numbers, ii) name and surname, iii) programme registered for, and iv) email address and contact details of all students. From the lists, 700 students were randomly selected to participate in the study and were contacted via e-mail and telephone. For

some personal meetings were arranged at a venue at UWC in February 2013 to explain the research objectives. At the time of the study, in 2013, a total of 2307 Masters' and doctoral students were registered at UWC and a sample of 700 students was randomly selected (30% of the population). Of the 700 selected students, a total of 606 (26.3% of the population)(498 Masters' and 108 PhD) registered students completed the survey. For this group of 606 participating students, at a 95% confidence level, the margin of error would only be 3.42%, which is below the general acceptable level of 5%.

Over a period of one week from 02 February to 05 February 2013 the researcher, distributed an information participation sheet explaining the project to the seven-hundred (700) students some via e-mail, or in the cases where e-mailing was not an option, the researcher hired an assistant to hand-deliver the information sheets, thereby ensuring that all the respondents were fully informed.

The researcher, subsequently, distributed an information sheet (Appendix 3 & 4) to the 700 students, some via e-mail, or in the cases where e-mailing was not an option, the researcher hired an assistant to hand-deliver the information sheets, thereby ensuring that all the respondents were fully informed. Once all had been informed, and had questioned the researcher on issues that they had not understood, the researcher distributed a consent letter (Appendix 5) to the 700 respondents, for their written consent – once again, some via e-mail and others sealed and hand-delivered by the hired assistant. The respondents were sceptical about the issue of confidentiality, as they were concerned about being victimised by those in authority, for their disclosure of any sensitive information. The researcher assured the respondents that their identities, and the information shared, would be kept confidential.

Six-hundred-and-six (606) consent forms were returned to the researcher. Several meetings were arranged by the researcher to hand out the questionnaire survey, as it was nigh impossible to accommodate the 606 respondents together in one single venue. A venue was arranged to distribute the questionnaires to the students. The venue could accommodate 150 students at a time. The researcher formally introduced herself to the students and explained the questionnaire content to the students before they completed the survey. Some of the students, within a day or two, completed the survey and had submitted it to the researcher sometimes at the same

venue or at the library postgraduate lab. The collection of the questionnaire process continued until all the 606 questionnaires were successfully completed and returned (100%). The researcher personally received the completed questionnaires from each respondent, to ensure the privacy and confidentiality of the information.

3.6.4.4. Non-probability sampling

Saunders, Lewis and Thornhill (2003:35) stated that non-probability sampling is “a sampling technique in which the chance or probability of each case being selected is not known”. This current study employed non-probability sampling. The reason for the selection of this sampling method is that the researcher was not aware of the probability of each case being selected. In addition, the specific type of non-probability sampling used, was heterogeneity sampling, which is a type of purposive sampling. According to Neuman (2011:267), purposive or judgemental sampling is based on “the judgement of an expert in selecting cases, or it selects cases with a specific purpose in mind”.

According to Neuman (2011:267), purposive or judgemental sampling methods require “the researcher to use his/her own judgement to identify those participants/respondents, who would be useful for the study. This judgement should be informed by the researcher’s knowledge of the study population, its elements and the nature of the research aims”. The researcher, therefore, believes that some subjects are more acceptable for the research than others; those identified, are purposively chosen as participants/respondents. Purposive sampling is referred to by Neuman (2005:517), as “a type of non-random sampling, in which the researcher uses a wide range of methods to locate all possible cases of highly specific and difficult-to-reach population”. According to Bernard (2002), as well as Lewis and Sheppard (2006), selecting purposive sampling is fundamental to the quality of the data gathered, as the reliability and competence of the participant is ensured. Using this sampling method, thus, enabled the researcher to use personal judgment to select cases with a specific purpose in mind (Saunders, Lewis, & Thornhill, 2012). In this current study, the purpose was to collect data from diverse, postgraduate students at UWC. Purposive (or judgemental) sampling methods require the researcher to use his/her own judgement to identify those respondents/participants, who would be useful for the study. This judgement should be informed by the researcher’s knowledge of

the study population, its elements and the nature of the research aims. The researcher, therefore, believes that some subjects are more suitable for the research than others are. Those identified, therefore, are purposively chosen as respondents/participants.

3.6.4.5. Qualitative sampling procedure

A total of 45 students were interviewed (19 Masters' and 26 PhD) as part of the qualitative phase of the research. After each meeting of the quantitative survey, the researcher approached certain of the respondents to recruit them for the qualitative phase of the research study. Forty-five (45) voluntarily responded positively, on condition that they could remain anonymous; to which the researcher replied in the affirmative. The researcher once again informed them of the purpose of the study and provided each of the forty-five participants with a consent form (Appendix 5) for them to confirm their participation in the second phase of the study. The researcher set up appointments, individually, for each participant's interview.

3.6.5. *Data collection instruments*

3.6.5.1. Quantitative phase

A descriptive close-ended questionnaire was used for the quantitative phase of this current study, as it was suitable to identify and describe the content in a higher education context (Saunders, Lewis & Thornwill, 2012).

The questionnaires were marked "Q1-Q700" on the right top corner "with a tick column". The consent letter were marked "CL 1-700" This was for the sake of transparency and accountability of how the documents were distributed and received.

The researcher then personally disseminated the self-administered questionnaire (Appendix 6) to the students using the control list to regulate the process. A questionnaire can be defined as "an tool of data collection consisting of a uniform series of questions relating to the research topic to be answered in completing the questionnaire by the participants" (Bless & Higson-Smith, 2000:156). According to Neuman (2003:268), a good questionnaire forms an

“integrated whole where the researcher weaves questions together, so that they flow smoothly”. The basic objective of a questionnaire is to “obtain facts and opinions about a phenomenon through research and from people that are knowledgeable on the particular issue” (Delpont, 2005:166). The questionnaire consisted of two sections, and contained forty-one items.

Through the survey, the researcher successfully gathered the relevant information (Cooper, Robinson & Patall, 2006). The questionnaire was uncomplicated, explanatory and useful, as the best research approach, to test the description and merits of the phenomenon under scrutiny (Bailey, 1994:94). In addition, being objective, is essential to competent inquiry (Phillips & Burbules, 2000). Therefore, as the respondents were a diverse population, from various cultural backgrounds, the researcher was careful of biases, and sought to ensure the truthfulness, reliability and validity of the information gathered (Crotty, 1998:9).

3.6.5.2. Quantitative phase analysis

For this current study, quantitative data were analysed and interpreted first, followed by the qualitative data analysis and interpretation. The different strategies of analysis were combined and integrated during this stage. According to Creswell (2003), data analysis is a descriptive process that involves making sense of the text, preparing the data for analysis, understanding the data, interpreting the larger meaning of the data, and representing the data in descriptive forms. The data from the survey were statistically analysed, using IBM (SPSS) and (SAS). The quantitative data were analysed using the following: i) Descriptive statistics, which were depicted in tables and graphical displays. ii) Statistical analysis, which included Chi-square-, Mann-Whitney-, Kruskal-Wallis- and Cronbach Alpha tests. The researcher presents various explanatory tables, chi-square tests, hypothesis tests and graphs to understand and interpret the data, in the following sections. Due to the non-normality of the continuous measurements, non-parametric analysis was employed. For the comparisons of the two groups, the Mann-Whitney test was used, while for faculty comparisons (more than two groups) the Kruskal-Wallis test was used.

In order to collate questionnaire items that measured similar aspects, five scores were calculated (*financial needs perception score; administrative services perception score;*

departmental services perception score; supervision perception score; and the inadequacy perception score).

The Cronbach Alpha coefficient was used to test the internal consistency of the questions used to create a specific score, this provided a scale reliability of the created score. In order to compare and interpret the various scores, each score was expressed as a percentage. In the following tables the questions that were used to create each score is described.

Table 3.1: Questions used to calculate the *financial needs perception score*

Variable: Questions related to the financial needs perception score	Response & Mark allocation
Q1: I need to take out a loan to continue studying	Strongly Agree = 1 Agree = 2 Disagree = 3 Strongly Disagree = 4
Q2: It is easy to get a PG bursary/scholarship in my field of study	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q3: Financial aid is important to continue my studies	Strongly Agree = 1 Agree = 2 Disagree = 3 Strongly Disagree = 4
Q4: I need to work to pay my studies	Strongly Agree = 1 Agree = 2 Disagree = 3 Strongly Disagree = 4

The above-mentioned *financial needs perception score* was calculated by adding the individual answers of the financial needs questions in Table 3.1. The score ranged between 4 and 16; the higher the score, the lower the financial need.

The *administrative services perception score* was calculated by adding the individual answers of the administrative services questions in Table 3.2. This score can range between 7 and 28; the higher is the score the better the perception of the administration services.

Table 3.2: Questions used to calculate the *administrative services perception score*

Variable: Questions related to the administrative services score	Response & Mark allocation
Q5: I am satisfied with the services I receive from the bursary office	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q6: I am satisfied with the way student account queries are handled	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q13: I am satisfied with the services I receive from the Student Administration Office	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q14: I am satisfied with my living accommodation at UWC	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q16: I am satisfied with services provided by my faculty office	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q15: I am satisfied with the availability resources of resources at UWC	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q12: I am satisfied with services I receive from the PET project/ division for postgraduate studies	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1

Table 3.3: Questions used to calculate the *departmental services perception score*

Variable: Questions related to departmental perception score	Response & Mark allocation
Q7: Academic staff in my department is familiar with university procedures	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q8: Academic engagement in my department is important	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q9: Academic standards at UWC are similar to other research Universities in South Africa	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q10: I am frequently intellectually stimulated in my department	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q11: I am satisfied with the departmental academic services provided for post graduate students	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q17: I am satisfied with the availability of space (study rooms) provided to Masters' and Doctoral students in my department	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1

The *departmental services perception score* was calculated by adding the individual answers of departmental services questions in Table 3.3. This score can range between 6 and 24; the higher the score, the better the perception of the department.

Table 3.4: Questions used to calculate the *supervision perception score*

Variable: Questions related to supervision perception score	Response & Mark allocation
Q18: My supervisor and I have an agreement or contract in place to manage the different aspects of my thesis work, including our meetings	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q19 I feel my supervisor respects the MOU contract by keeping to all the agreements	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q20 I feel my supervisor gives valuable and intellectual stimulating input that assist with the input of my thesis	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q21 I feel my supervisor supporting me throughout the thesis process	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q22 I feel my department is supporting me throughout the thesis process	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q23 I feel my supervisor knows my research field	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q24 I feel my supervisor holds me accountable with respect to my thesis progress	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1
Q25 I feel my supervisor and I meet regularly and to my satisfaction	Strongly Agree = 4 Agree = 3 Disagree = 2 Strongly Disagree = 1

Variable: Questions related to supervision perception score	Response & Mark allocation
Q26 I feel my supervisor gives me feedback on my written work in an appropriate timeframe	Strongly Agree = 4
	Agree = 3
	Disagree = 2
	Strongly Disagree = 1

The *supervision perception score* was calculated by adding the individual answers of questions in Table 3.4. This score could range between 9 and 36; the higher the score, the better the perception of the supervisor. The scores were eventually changed to percentages, to compare and interpret the results.

Table 3.5: Questions used to calculate the *inadequacy perception score*

Variable: Questions related to inadequate perception score	Response & Mark allocation
Q27 I have considered withdrawing from my current studies	Strongly Agree = 4
	Agree = 3
	Disagree = 2
	Strongly Disagree = 1
Q28 I feel I am inadequately prepared to continue my current degree	Strongly Agree = 4
	Agree = 3
	Disagree = 2
	Strongly Disagree = 1
Q29 I feel I am not getting the professional guidance I need to complete my current degree	Strongly Agree = 4
	Agree = 3
	Disagree = 2
	Strongly Disagree = 1

The *inadequacy perception score* was calculated by adding the individual answers of inadequately prepared students' questions in Table 3.5. The score could range between 3 and 12; the higher the score, the more inadequately prepared the student feels.

3.6.5.3. Qualitative phase

For the purpose of this current study, in-depth, semi-structured interviews were chosen, as the interviews formed part of the qualitative phase. Bryman (2008) asserts that interviews in qualitative research are usually less structured, than they are in quantitative research. According to Esterberg (2002), the use of in-depth, semi-structured interviews, allows the researcher to put some confirmatory questions to the participants, about the predetermined themes. The forty-five students who agreed to participate to in the interview process, comprised nineteen (19) Masters and twenty-six (26) PhD students, from the various faculties at UWC. In addition to the interviews, participant observation was used as a data collection tool during the interview process (De Walt & De Walt, 2002).

The researcher contacted sixty-five (65) purposively selected Masters' and PhD students at the venue where students were met for the dissemination of the self-administered questionnaire (described in Section 3.6.5.1) or via e-mail and telephone to ask whether they would participate in the study.

Forty-five (45) of the sixty-five students responded positively to participate in this second phase of the research project. Once all had been informed, and had questioned the researcher on issues that they had not understood, the researcher distributed consent forms (Appendix 5) to the respondents, for their written consent all via e-mail as agreed upon with the students and the researcher. The researcher assured the respondents that their identities, and the information shared, would be kept confidential.

The interview schedule with open-ended questions was drawn up to be used as a guide in the interviews. The interview questions focussed on the challenges of post-graduate students at UWC (see Appendix 7). Before each interview commenced, the researcher requested the signed consent letter that the researcher sent to them in advance to complete.

The interview questions focussed on the challenges of post-graduate students at UWC. The reason for choosing the semi-structured interview technique was to encourage respondents to discuss freely their own understanding of the challenges they experience as Masters' and PhD

students at UWC. The questions were specifically drafted to achieve the aim and objective of this study. The interviews were individually audio-recorded upon consent from the participants.

Essentially, candid knowledge of the participants' characteristic views, beliefs and behaviours was acquired, which enabled the researcher to compare the responses, generated from the interviews (Barbour & Schostak, 2005). The researcher endeavoured to be as accommodating as possible, so that the participants could elaborate on their points of interest, freely, without being influenced by the researcher (Denscombe, 2007: 176). According to Kemmis and Wilkinson (1998:9), humans engage with their world, to express their views, in order to make sense of it, based on their historical, social and cultural perspectives. Morgan and Krueger (1998, pp. 3-17) assert, "The critical ingredients of qualitative analysis are that analysis must have logical meaning, consecutive, demonstrable and constant, it requires time, it is jeopardised by delay, it seeks to teach, it should interest alternative explanations, it is improved by response, and it is a process of assessment". The interviews were conducted over a four days. Although the interviews were audio recorded, the researcher made notes of all the answers to questions posed to participants. This served as a back-up to the mechanical recordings (Rubin & Rubin, 2005). These recordings allowed the researcher to replay the recordings repeatedly, to become thoroughly familiar with the content, in order to identify the dominant themes that would emerge from the data.

According to Silverman (2000, p. 104), in purposive sampling, a particular unit is chosen because it illustrates some feature, or process, that is of interest for a particular study. Bless *et al.* (2006, p. 106) asserts that the purposive sampling technique can be invaluable, especially when used by experts, who are familiar with the population under study, as was the case in this study. The face-to-face semi-structured interviews, with open-ended questions, were appropriate choice for the qualitative stage in this study (Denscombe, 2007:176), as it discusses the themes of interest (Kvale & Brinkmann, 2009). According to Teddlie and Tashakkori (2009:6) states that a qualitative approach may be defined as "the techniques associated with the gathering, analysis, interpretation and presentation of narrative information". Bryman (2008) asserts that interviews in qualitative research are usually less structured, than they are in quantitative research. According to De Vos (2002b, p. 339), "...qualitative data analysis is a process of bringing order, structure and meaning to the mass of collected data". According to

Esterberg (2002: 83), interviewing ranks “at the heart of social research”. According to these authors, the three most common interviews are, structured, semi-structured and unstructured interviews, among the several types of interviews in social science research.

Additionally, Liamputtong (2013) claims that interviewing is the most commonly known, and utilised data-collection-technique in qualitative research. An interview is defined as “a specific form of conversation where knowledge is produced through the interaction between an interviewer and an interviewee” (Kvale, 2007: xvii). Bryman (2008), Esterberg (2002), as well as Gill, Stewart, Treasure and Chadwick (2008) suggest that there are different forms of interviews, depending on the degree of structure, and the role of the interviewer in the process. The participants were asked similar structured questions, for a variety of quality answers, to avoid ambiguous statements, and obtain information concerning the objective/s and problem/s of the study (Morse, 1991:176).

3.6.5.4. Qualitative phase analysis

Unlike quantitative data, qualitative data analysis is often an on-going process that starts during the data collection phase. According to Morgan and Krueger (1998: 3-17), “the critical ingredients of qualitative analysis are that analysis must be systematic, sequential, verifiable and continuous, it requires time, it is jeopardised by delay, it seeks to enlighten, it should entertain alternative explanations, it is improved by feedback, and it is a process of comparison”. Qualitative data analysis is often less systematic, and more challenging, in terms of time and effort, as the rules for the analysis of qualitative data are more flexible, (Bryman, 2008; Suter, 2012). Thematic analysis was used to analyse the qualitative data of this current study. According to Visagie (2010:104-105), thematic analysis is “analysis of the data by emerging themes”. However, Braun and Clarke (2006:79) define thematic analysis as “a method for identifying, analysing and reporting patterns (themes) within data”. Bryman (2008:3-5) describes thematic analysis “as the process of extracting the key themes from the data”. In addition, Creswell (2014:238) states that “themes are major ideas in the database, formed by the process of grouping similar codes, which are the labels used to describe a segment of text or an image”. Bailey and Jackson (2003) assert that the themes and patterns

that emerged from the data analysis are grouped into categories and summarised, in order to bring meaning to the text.

According to (De Vos, Strydom, Fouché, & Delpont, 2011:103), the themes and sub-themes that emerge from the data are coded with descriptive codes that are “characteristic of the data incident they presented”. Although thematic analysis is a commonly used analytical method in qualitative research, there is no clear agreement on its definition and procedure (Braun & Clarke, 2006; Bryman, 2008). Braun and Clarke (2006:77-101) suggest that the following six steps are the most commonly used in analysing qualitative data: i) Familiarise yourself with your data; ii) Generate initial codes; iii) Search for themes; iv) Review themes; v) Define and name themes; and vi) Produce the report. For the purpose of the current study, the researcher used these steps as a guideline for the qualitative data analysis. In preparation for the qualitative data analysis, the collected data from the semi-structured interviews were transcribed and coded to extract the findings of the study. According to (Minichiello, 2011 & Aroni & Hays 2008) coding is an essential tool, at this stage of the research, and is the key means of shaping data into categories (themes). Gomm (2004:87) noted that in qualitative data analysis, the themes are sometimes “inspired” by the researcher’s own views about existing theoretical ideas, and sometimes the themes simply “float up” from the data. Gomm (2004) adds that, in both scenarios, the analysis procedures are similar, because once the data are categorised under the appropriate themes, the findings are described and reported, in preparation for the interpretation.

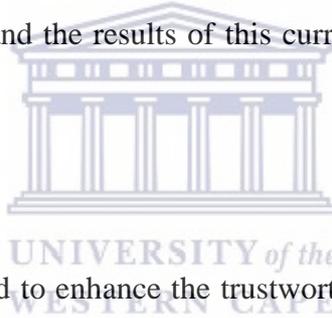
3.7. Ethical considerations

The researcher sought written consent from UWC’s Ethics committee (Appendix 1), in accordance with research principles and values, before this study was undertaken. The nature and extent of the study were explained, verbally, by the researcher to all the respondents/participants, as well as by means of information sheets (Appendix 3 & 4) before collecting data. All the respondents/participants offered voluntary consent by signing a consent form (Appendix 5). Confidentiality was strictly maintained throughout the study and the respondents/participants were informed of their right to withdraw at any stage of the process, without prejudice. Recordings and transcript documents of the participants were kept secure,

and will be destroyed on study completion. All information gathered remained anonymous and no names were mentioned in any reports, or discussion documents. The Registrar, who is the custodian of UWC's information, was notified of the study and its purposes. Consent to access institutional data was sought, while ethical and procedural requirements, as stipulated by UWC senate, were always adhered to.

3.8. Validity and reliability

The validity and reliability of this study are the most important criteria to ensure that the quantitative research instruments is adequately evaluated (Morse, 2002 & Polit, Beck & Hungler, 2001). According to Babbie and Mouton (2001:119-122), validity refers to the extent to which an empirical measure accurately reflects the real meaning of the concept being considered, and is also used to estimate the true reflection of the results. They also define reliability as the quality of the measurement method, suggesting that similar data would be recurrently collected, by means of questionnaires to the same subjects. Based on the true experiences of the participants, and the results of this current study, the research instrument was reliable, valid and suitable.



3.9. Trustworthiness

Various strategies were employed to enhance the trustworthiness of the qualitative approach used for this study. These strategies, as mentioned by Lincoln and Guba (1985), are, credibility, transferability, dependability, and conformability.

3.9.1. Credibility

Credibility indicates the truthfulness of the findings, compared with reality. Merriam (1998) suggests that the issue of *credibility* deals with the question of how congruent the findings are with reality. Checks were performed to ensure the credibility of the information received from the participants of this current study. The researcher granted the participants the opportunity to review the interviews that were conducted.

3.9.2. Transferability

Marshall and Rossman (1999:38) describe *transferability* as “the degree of which qualitative results can be generalised or transferred to other populations”. The aspect of transferability was maintained as the data, collected from various sources (active listening, field notes and audio recordings), were used to “substantiate, elaborate and illuminate the research in question” (De Vos, Strydom, Fouché, & Delpport, 2011:420).

3.9.3. Dependability

Makin (2015:108) observed that *dependability* and *conformability* are interrelated concepts. Dependability scrutinizes the process of inquiry, and conformability examines the validity of the findings. According to Gasson (2004:94), the dependability of the findings is ensured through clear and repeatable procedures, concerning the way the research is conducted. Gasson (2004) concur “making explicit the process, through which findings are derived, is a useful way of ensuring their dependability” (Gasson, 2004:94). In addition, to establish dependability, “consistency of the study processes” needs to be demonstrated (Makin, 2015:108). In this current study, the following dependability strategies were implemented to increase the consistency. The research methods applied were described in detail, and field notes, transcripts of interviews, and audio recordings were used, and made available to the study supervisors for clarification. Subsequently, ideas that emerged from the discussions were triangulated by the researcher and the participants (Creswell & Miller, 2000:124-131). According to Shenton (2004:73), an in-depth description of all the methods used to collect and analyse data, is provided to allow for the “integrity of research results to be scrutinised”. Wiersma (2000:251-252) assert that “triangulation is qualitative cross-validation. It assesses the sufficiency of data according to the convergence of multiple data sources or multiple data collection procedures.”

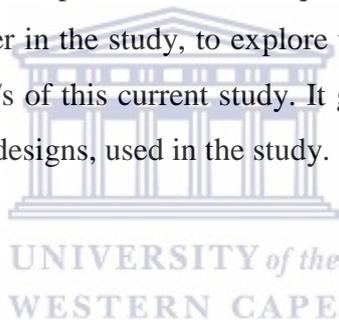
3.9.4. Conformability

In this section of the thesis, the concept of conformability is explored. Conformability describes the extent to which inferences can be confirmed and corroborated with others. The procedures of the data analysis were documented by the researcher and shared with the research

supervisors for constructive criticism, throughout the entire process, to ensure conformability (Teddlie & Tashakkori, 2009). The supervisors examined the research findings, the interpretations, the recommendations, and ensured that they were supported by the data. Conformability is a useful measure and widely used in triangulation, a major means of building credibility for qualitative research. In addition, conformability can be referred to as the degree to which others agree with the conclusions of this research project (Morse, Barrett, Mayan, Olson & Spiers, 2002).

3.10. Conclusion

This chapter provides an in-depth explanation on the methodological frameworks for this study. Mixed methodology design was selected to provide detailed representation of the research problem. The methodology was a descriptive explanation of primary and secondary data that combined methods to outcomes, while governing the choice and use of survey research and experimental research methods. It stipulates the techniques and procedures (questionnaires, interviews) used by the researcher in the study, to explore the research problem/s and obtain answers to the research question/s of this current study. It gave a detailed explanation of the various mixed methods research designs, used in the study.



CHAPTER FOUR

FINDINGS OF THE QUANTITATIVE DATA

4.1. Introduction

In this chapter, a detailed analysis is presented of the findings from the survey that was conducted with a randomly selected group of Masters' and PhD students in 2013. The aim of the survey was to identify how serious the challenges were that postgraduate students faced at UWC. It reports on the descriptive statistics, followed by comparative results between Masters' and doctoral students, as well as between faculties at UWC. Detailed analyses are reflected in the figures and tables that follow in this chapter.

4.2. Descriptive statistics of Masters' and PhD students

In this survey, a total of 606 Masters' and PhD students completed the self-administered questionnaire. Of the 606 students, 498 (82%) were enrolled for a Masters' degree and 108 (18%) for a PhD degree. From the Masters' participants 51% were female, whereas most PhD students were male (64%).

Figure 4.1, illustrates the distribution percentages of each faculty's participating Masters' and PhD respondents, enrolled in Natural Sciences (20%); Economic & Management Sciences (20%); Community Health Sciences (18%); Dentistry (12%); followed by Education, Law and Arts (10% respectively).

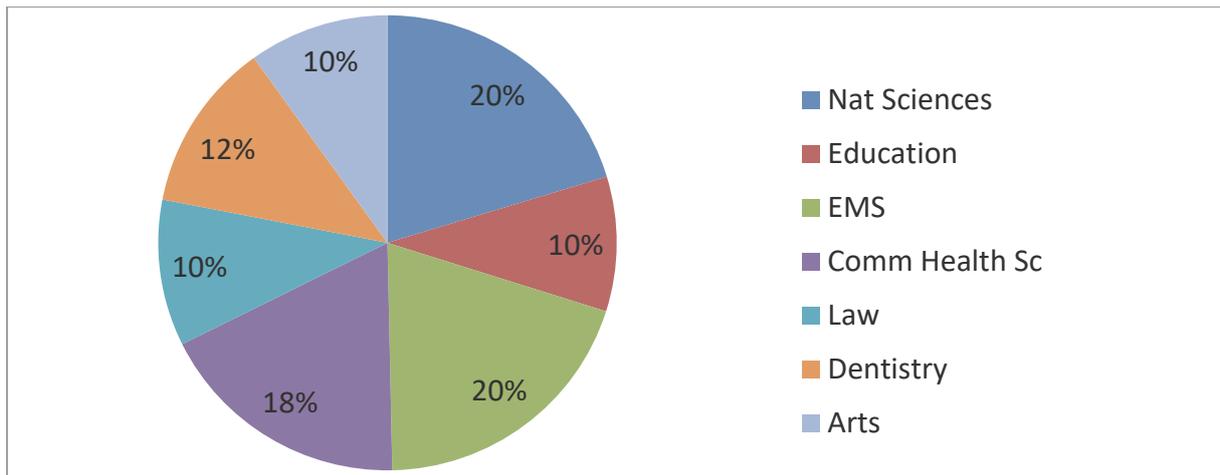


Figure 4.1: Respondents by faculty

Figure 4.2 stipulates that most PhD respondents were registered in the faculties of Natural Sciences (32%), followed by EMS (26%), CHS (19%), Education (17%), Dentistry (14%), Law (12%) and Arts faculty (10%). Similarly, most Master’s respondents were registered in Natural Sciences (18%), followed by CHS (14%), Arts, EMS and Education (8% respectively), with the lowest percentages in Dentistry (3%) and Law faculty (0%), as illustrated in Figure 4.2.

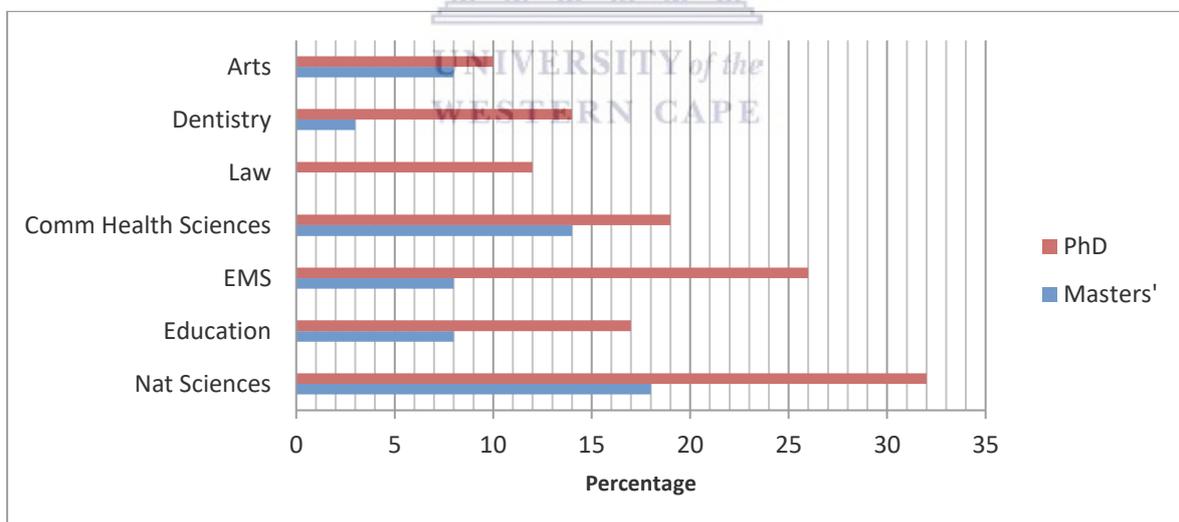


Figure 4.2: Respondent percentage by faculty

Figure 4.3 shows the percentage of respondents by degree structure. Many of the respondents (45%) were enrolled for a coursework Masters' degree, followed by a full thesis Masters' (37%), a PhD full thesis (16%), and a few indicated a coursework PhD degree (2%).

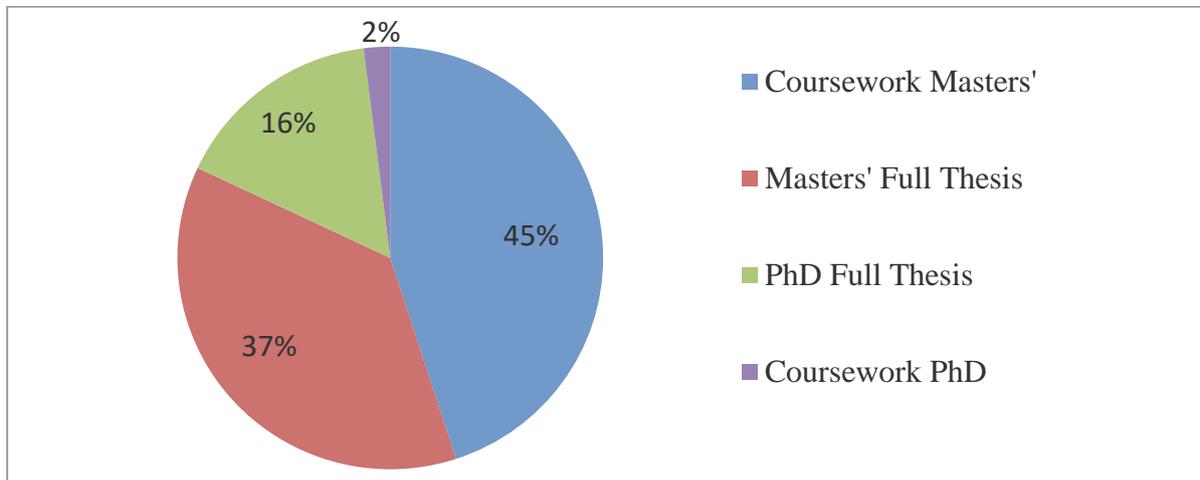


Figure 4.3: Respondent by degree structure

The descriptive percentage statistics in Figure 4.4 illustrates that most of Masters' and PhD respondents, across all faculties, were Black (50%), and followed by Coloured (13%), Indian (4%), White (3%), and other decent (30%).

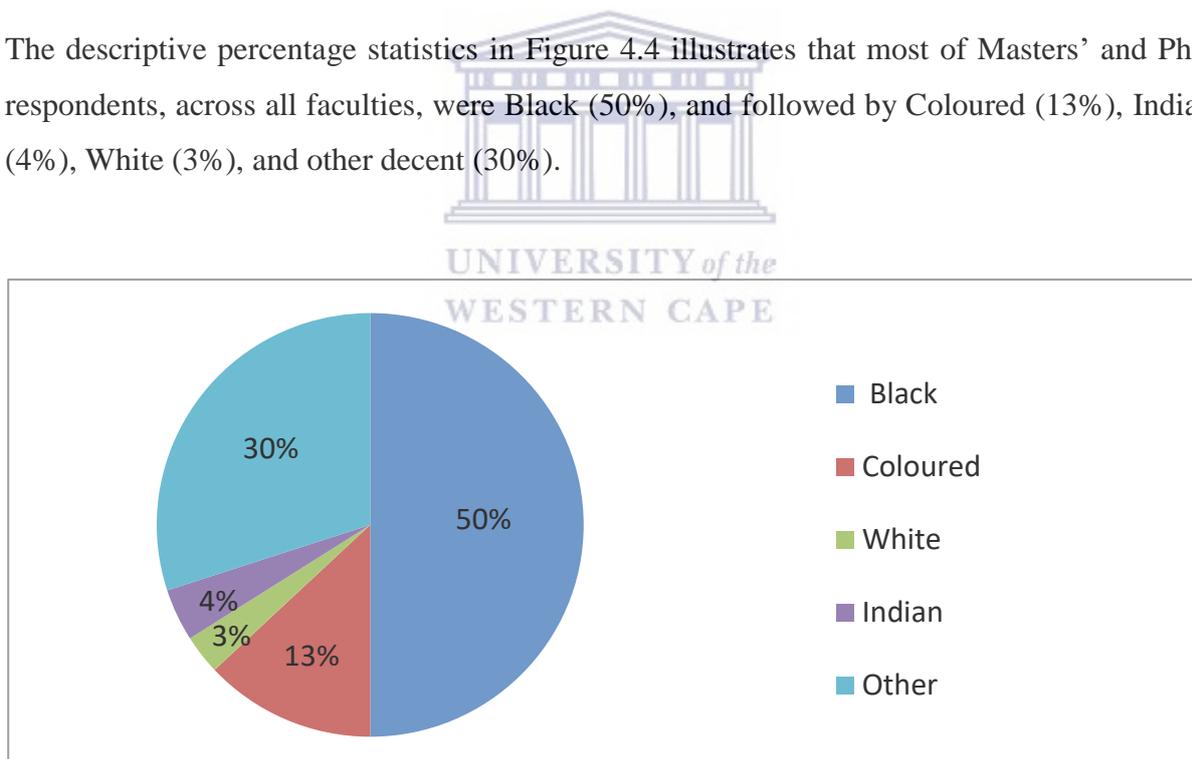


Figure 4.4: Racial distribution of all respondents

The comparisons by nationality reports the nationality of the participating Masters' students. The three dominant nationalities were, South African students (42%), followed by other African countries (37%), and students from outside Africa (21%), as illustrated in Figure 4.5.

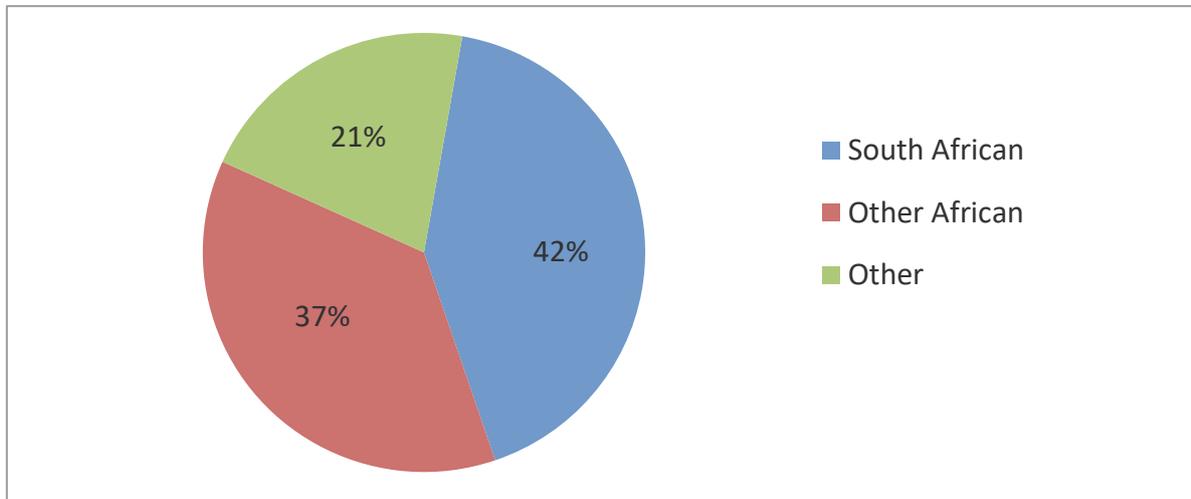


Figure 4.5: Nationality of Masters' Respondents

The three dominant nationalities of the participating PhD students were students from other African countries (79%), followed by students from countries outside Africa (13%), and finally, South African students (8%).

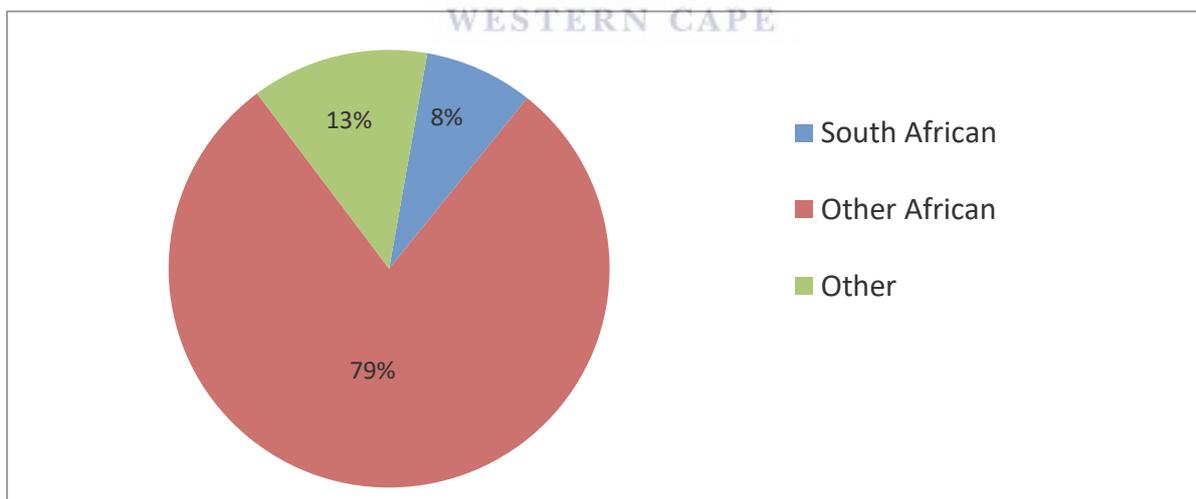
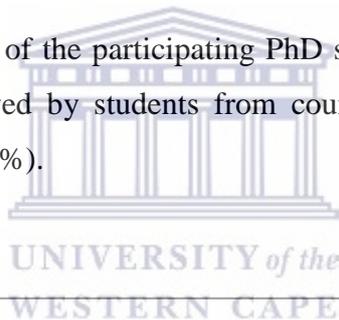


Figure 4.6: Nationality of PhD Respondents

4.3. Degree comparisons of all participating respondents

In this section, the Masters' and PhD degree comparisons of all participating students are summarised. In Table 4.1, the degree comparison by nationality is illustrated, followed by gender in Table 4.2, marital status in Table 4.3, language in Table 4.4, accommodation in Table 4.5, and feelings of depression in Table 4.6.

Table 4.1: Nationality of Masters' and PhD Respondents

Nationality (row %)	No.	Degree	SA	Other African	Other	Chi-square (prob)
Degree currently registered for	498	Masters'	42	37	21	66.51
	108	PhD	8	79	13	<0.0001

Table 4.1 indicates that 42% of the Masters' respondents, and 8% of the PhD respondents were South Africans, whereas 37% of the Masters' and 79% of the PhD respondents, were from other African countries (Chi-sq=66.51, $p < 0.0001$). Thus, significantly more of the PhD respondents were from outside South Africa's borders, whereas the majority of the Masters' participants were South African.

Table 4.2: Gender of Masters' and PhD Respondents

Gender (row %)	No.	Degree	Female	Male	Chi-square (prob)
Degree currently registered for	497	Masters'	50.5	49.5	7.52
	106	PhD	36	64	<0.0061

The distribution of gender of Masters' respondents in Table 4.2 displayed an even split between the genders (50.5% females and 49.5% males), while the PhD respondents were significantly dominated by males (64%) (Chi-sq=7.52, $p = 0.0061$).

Table 4.3: Marital status of Masters' and PhD Respondents

Marital status (row %)	No.	Degree	Single	Married	Divorced	Separated	Chi-square (prob)
Degree currently registered for	497	Masters'	63	35	0.6	0.8	31.63
	106	PhD	34	63	1.85	0.93	<0.0001

Table 4.3 shows most of the Masters' respondents (63%) were single, whereas significantly more (close to two-thirds (63%) of the PhD respondents were married (Chi-sq=31.63, $p<0.0001$).

Table 4.4: Language distribution of Masters' and PhD Respondents

Home language (row %)	No.	Degree	Xhosa	English	Afrikaans	Zulu	Other	Chi-square (prob)
Degree currently registered for	498	Masters'	15	19	17	4	45	40.95
	106	PhD	6	36	1	0	57	<0.0001

The distribution of language, as indicated in Table 4.4, differed significantly between the two groups of students. Many respondents in both groups were fluent in languages other than English, Afrikaans, Xhosa or Zulu. More Masters' respondents (15%) were fluent in Xhosa, compared to 6% of the PhD respondents. English speaking PhD respondents were 36%, compared to the 19% of the master's respondents. Additionally, 17% of Masters' respondents were fluent in Afrikaans, compared to 1% of the PhD respondents. Zulu speaking master's respondents comprised 4%, while most PhD respondents (57%) were fluent in other languages. The table further reveals that 45% of the master's respondents were also fluent in other languages (Chi-sq=40.95, $p<0.0001$). As Table 4.1 indicated, the majority of PhD students were not South Africans, the Other language category would mostly refer to non-South African home languages. In the case of the Masters' degree participants the Other language category could imply a combination of other South African languages as well as foreign languages.

Table 4.5: Accommodation of Masters' and PhD Respondents

Reside during studies (row %)	No.	Degree	Home with relatives	UWC residences	Rental with friends	Rental alone	Chi-square (prob)
Degree currently registered for	498	Masters'	20	56	8	16	14.23
	107	PhD	10	55	6	29	0.0026

In Table 4.5, it is illustrated that close to 55% of both degree groups stayed in UWC residences. More (20%) of the Masters' respondents stayed at home with their relatives, compared to the 10% of PhD respondents. More of the PhD respondents (29%) indicated that they rented single accommodation, compared to 16% of the Masters' respondents (Chi-sq=14.23, p=0.0026). As more PhD participants were not South African, it would make sense that most (90%) of them either stayed in a UWC residence or rented accommodation.

Table 4.6: Questions related to 'feelings of depression' shown of Masters' and PhD Respondents

Feelings of depression (row %)	No.	Degree	Yes	No	Chi-square (prob)
Degree currently registered for	496	Masters'	30	70	0.22
	108	PhD	28	72	0.6408

Close to 30% of the Masters' and PhD respondents, as illustrated in Table 4.6, indicated that they had felt depressed in the last 12 months, but no significant difference was observed between these two groups of students (Chi-sq=0.22, p= 0.6408).

Many of the South African Masters' and PhD respondents, as stipulated below in Figure 4.7, were registered as follows: Dentistry (47%), followed by Natural Sciences (46%), CHS (40%), Law (38%), with the lowest percentage in EMS (23%), and the Education faculty (21%).

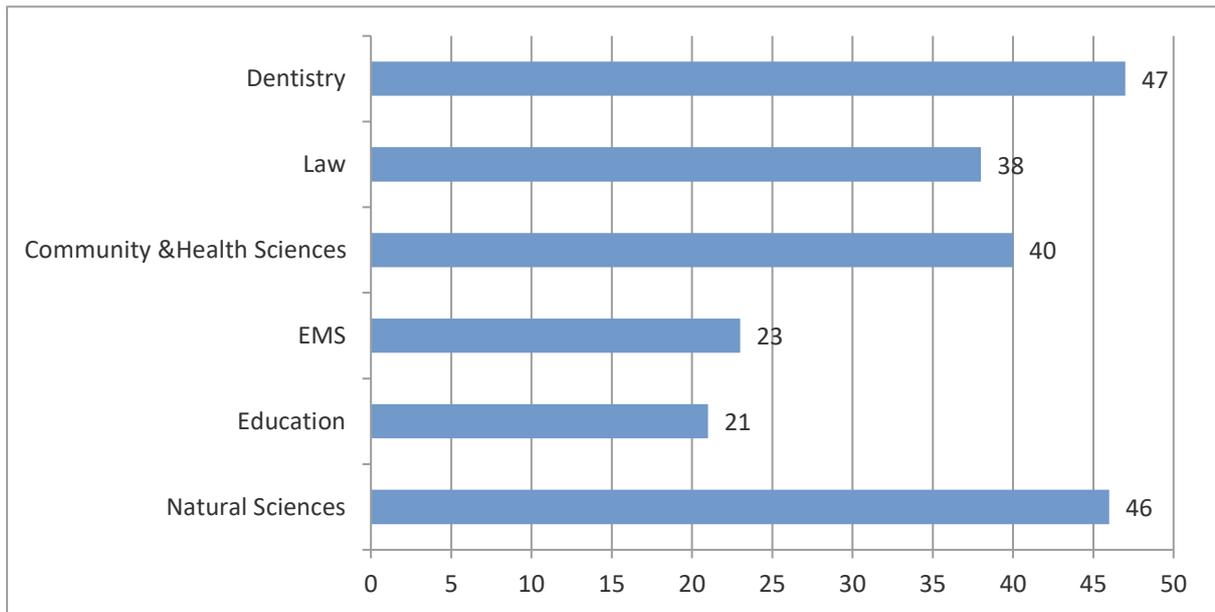
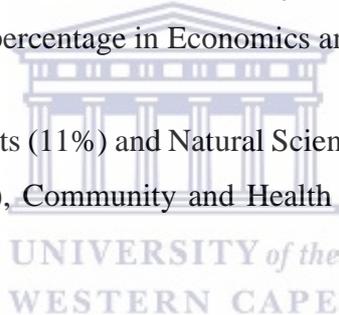


Figure 4.7: Percentage South African respondents by faculty

The percentage of respondents who made use of a study loan facility, by faculty, as indicated in Figure 4.8, shows the highest percentage in Economics and Management Sciences (EMS)

faculty (14%), followed by the Arts (11%) and Natural Sciences faculties (7%), with the lowest percentage in the Dentistry (4%), Community and Health Sciences (CHS) (4%), Education (3%), and Law faculties (0%).



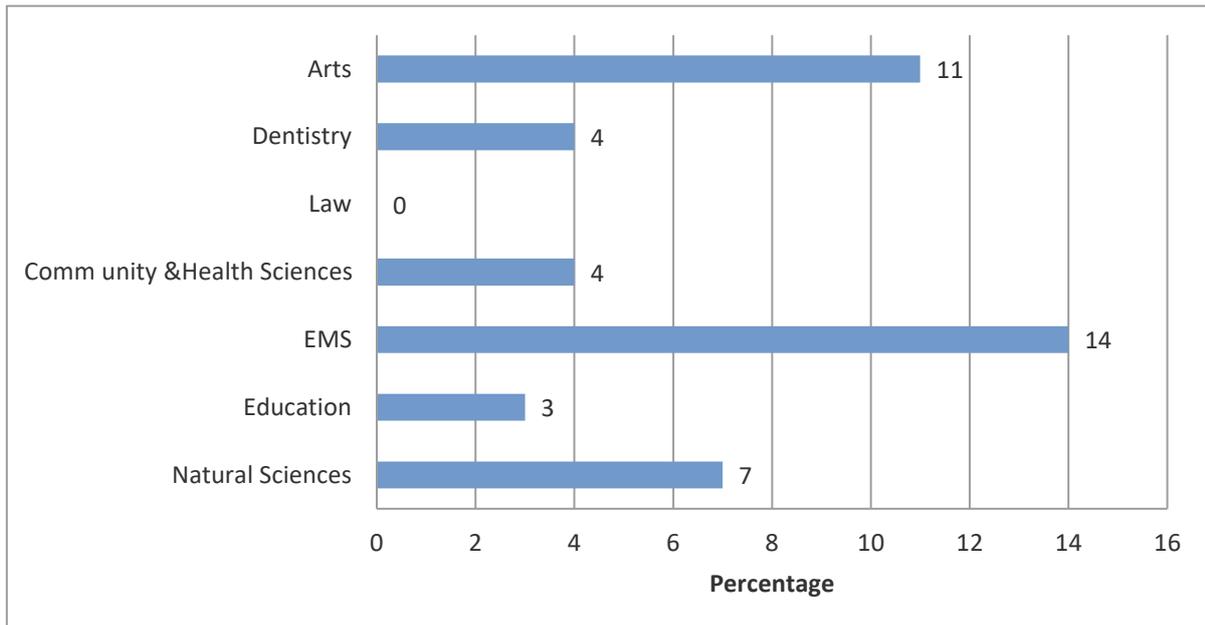


Figure 4.8: The percentage of respondents who made use of a study loan facility, by faculty

Figure 4.9, comprises the degree phase of Masters' and PhD respondents, at questionnaire completion time, with 9% of the Masters' respondents, and 13% of the PhD respondents in the proposal development phase, while 24% Masters' respondents and 20% PhD respondents were busy with literature reviews. Additionally, 20% of the Masters' respondents and 9% of the PhD respondents were in the data collection phase, while 12% Masters' respondents and 13% PhD respondents were in the analysis phase of their work. The respondents who were in the writing phase of their work was 15% Masters' respondents and 29% PhD, whereas 11% Masters' respondents and 13% doctoral respondents were in the process of submitting a draft. Only 7%

Masters' respondents and 3% PhD respondents were in the editing phase of their work, while no masters or PhD respondents had submitted their thesis for final examination, at the time of survey.

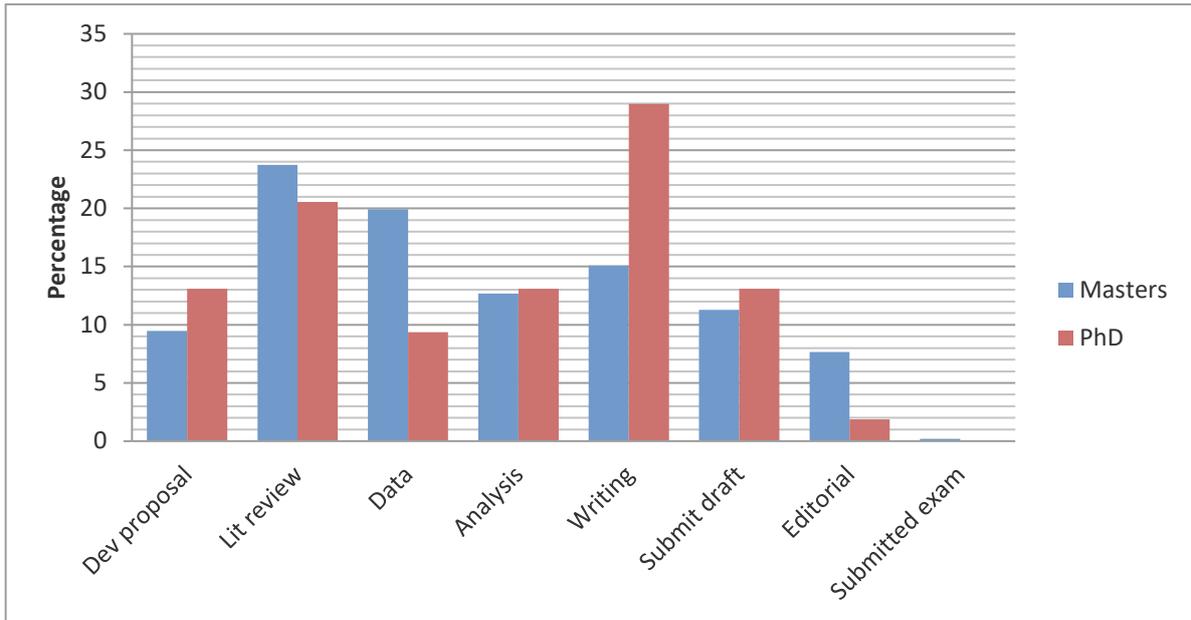


Figure 4.9: Degree phase of Masters' and PhD respondents at questionnaire completion time

4.3. Degree comparisons for individual variables

In Tables 4.7 to 4.11, the degree comparisons for individual variables were used to create the perception scores on questions related to: financial need, administrative services, departmental services, supervision services and inadequate preparedness. The variables that were used to create the *financial needs perception score* were calculated by summarising the individual answers of questions mentioned in Chapter 3, Table 3.1. This *financial needs perception score* could range between 4 and 16; the higher the score, the lower the financial need.

Table 4.7: Questions related to financial needs perception score of Masters' and PhD respondents (row %)

Questions related to financial matters	No.	Degree	Agree	Disagree	Chi-square (prob)
Q1: I need to take out a loan to continue studying.	498	Masters'	56%	44%	15.75
	108	PhD	35%	65%	<0.0001***
Q2: It is easy to get a PG bursary/ scholarship in my field of study.	498	Masters'	41%	59%	0.19
	108	PhD	39%	61%	0.6626
Q3: Financial aid is important to continue my studies.	498	Masters'	64%	36%	2.98
	108	PhD	73%	27%	0.0839
Q4: I need to work to pay for my studies.	498	Masters'	62%	38%	6.87
	108	PhD	75%	25%	0.0088**

*: <0.05; **: <0.01; ***: <0.0001 (Cronbach Alpha coefficient of Financial needs perception score= 0.220).

According to Table 4.7, significantly more of the Masters' respondents (56%) disclosed that they needed a loan to continue their studies, as opposed to only 35% of the PhD respondents. There were no significant differences between the responses of Masters' and PhD respondents, regarding obtaining a scholarship/bursary in their field of study, or that financial assistance was important to continue their studies. However, more PhD respondents (75%) indicated that they needed to work, to pay for their studies, compared to 62% of the Masters' respondents (Chi-sq=6.87, p=0.0088). The fact that more PhD students are married and might have family responsibilities would probably contribute to their need to work whilst studying. This is a general trend at national and international level (HESA, 2017). Although the Cronbach Alpha coefficient was only 0.22, the *financial needs perception score* was regarded as important to use as it provided some score on financial need. All the items (questions) making up this score, dealt with financial assistance towards studies, but the perceptions towards loans and bursaries did not exactly have the same response probably due to the longer term impact of paying back a loan.

The *administrative services perception score* was calculated by summarising the individual answers of questions for degree groups as mentioned in Chapter 3, Table 3.2. This score could range between 7 and 28 – the higher the score the better the perception of administrative services, which the students experienced.

Table 4.8: Questions related to *administrative services perception score* of Masters’ and PhD respondents (row %)

Questions related to administration services perceptions	No.	Degree	Agree	Disagree	Chi-square (prob)
Q5: I am satisfied with the services I receive from the bursary office.	498	Masters’	63%	37%	5.11
	108	PhD	51%	49%	0.0238*
Q6: I am satisfied with the way student account queries are handled.	498	Masters’	70%	30%	0.10
	108	PhD	69%	31%	0.7486
Q13: I am satisfied with the services I receive from the student administration Office.	498	Masters’	68%	32%	3.37
	108	PhD	77%	23%	0.0662
Q14: I am satisfied with my living accommodation at UWC.	498	Masters’	52%	48%	9.14
	108	PhD	68%	32%	0.0025**
Q16: I am satisfied with services provided by my faculty office.	498	Masters’	76%	24%	0.19
	108	PhD	74%	26%	0.6554
Q15: I am satisfied with the availability of resources at UWC.	498	Masters’	82%	18%	0.33
	108	PhD	84%	16%	0.5646
Q12: I am satisfied with services I receive from the division for postgraduate studies.	498	Masters’	78%	22%	5.42
	108	PhD	68%	32%	0.0199*

*: <0.05; **: <0.01; ***: <0.0001 (Cronbach Alpha coefficient for *administrative services perception score* =0.54).

According to Table 4.8, significantly more Masters’ students (63%) agreed that they were satisfied with the services received from the bursary office, while 51% of the PhD students agreed with this statement (Chi-sq=5.11, p=0.0238). In addition, significantly more of the PhD students (68%) felt that the accommodation was satisfactory, compared to 52% Masters’ students (Chi-sq=9.14, p=0.0025). Significantly, more of the Masters’ students (78%) were satisfied with the services received from the *Postgraduate office*, compared to 68% PhD

students (Chi-sq=5.42, p=0.0199). Masters' and PhD students did not differ much with respect to the following statements: *I am satisfied with the way student account queries are handled; I am satisfied with the services I receive from the Student Administration Office; I am satisfied with services provided by my Faculty Office; and I am satisfied with the availability of resources at UWC.* A satisfactory Cronbach Alpha coefficient (0.54) was achieved for the creation of the *administrative services perception score*.

The *departmental services perception score* was calculated by summarising the individual answers of questions for degree groups as, mentioned in Chapter 3, Table 3.3. This score could range between 6 and 24; the higher the score, the better the perception of departmental services, as experienced by the students.

Table 4.9: Questions related to *departmental services perception score* of Masters' and PhD respondents (row %)

Questions related to departmental perceptions	No.	Degree	Agree	Disagree	Chi-square (prob)
Q7: Academic staff in my department are familiar with university procedures.	498	Masters'	81.7%	18.3%	0.03
	108	PhD	82.4%	17.6%	0.8679
Q8: Academic engagement in my department is important.	498	Masters'	83%	17%	4.09
	108	PhD	91%	9%	0.0430*
Q9: Academic standards at UWC are like other research Universities in South Africa.	498	Masters'	73	27	2.06
	108	PhD	67	33	0.1508
Q10: I am frequently intellectually stimulated in my department.	498	Masters'	78	22	1.74
	108	PhD	72	28	0.1869
Q11: I am satisfied with the departmental academic services provided for postgraduate students.	498	Masters'	79	21	7.74
	108	PhD	67	33	0.0054**
Q17: I am satisfied with the availability of space (study rooms) provided to Masters' and Doctoral students in my department.	498	Masters'	82	18	8.88
	108	PhD	69	31	0.0029**

*: <0.05; **: <0.01; ***:<0.0001 (Cronbach Alpha coefficient for *departmental services perception score*=0.63).

More of the PhD respondents (91%), as indicated in Table 4.9, agreed that academic engagement is of great importance in their department, while only 83% of the Masters'

respondents agreed with this statement (Chi-sq=4.09, p=0.0430). Significantly, more of the Masters' respondents (79%) were satisfied with departmental academic services provided for postgraduate students, compared to 67% of the Masters' respondents (Chi-sq=7.74, p=0.0054). Additionally, more of the Masters' respondents (82%) were satisfied with the availability of space (study rooms) provided in their department, compared to 69% of the doctoral respondents (Chi-sq=8.88, p=0.0029). No differences were observed between the Masters' and doctoral respondents, regarding the following statements: *Academic staff in my department are familiar with university procedures; Academic standards at UWC are like other research Universities in South Africa; and, I am frequently intellectually stimulated in my department.* A good Cronbach Alpha coefficient (0.63) was achieved for the creation of the *departmental services perception score*.

The *Supervision perception score* was calculated by summing the individual answers of questions mentioned in Chapter 3, Table 3.4. The score could range between 9 and 36; the higher the score, the better the perception of the supervisor, as experienced by the students.



Table 4.10: Questions related to *supervision perception score* of Masters' and PhD respondents (row %)

Questions related to supervision perceptions	No.	Degree	Agree	Disagree	Chi-square (prob)
Q18: My supervisor and I have an agreement or contract in place to manage the different aspects of my thesis work, including our meetings.	498	Masters'	85%	15%	0.80
	108	PhD	81%	19%	0.3702
Q19: I feel my supervisor respects the MOU contract by keeping to all the agreements.	498	Masters'	87%	13%	6.28
	108	PhD	78%	22%	0.0122*
Q20: I feel my supervisor gives valuable and intellectual stimulating input that assist with the input of my thesis.	498	Masters'	92%	8%	0.65
	108	PhD	90%	10%	0.4203
Q21: I feel my supervisor supporting me throughout the thesis process.	498	Masters'	93%	7%	5.11
	108	PhD	86%	14%	0.0238*
Q22: I feel my department is supporting me throughout the thesis process.	498	Masters'	90%	10%	1.37
	108	PhD	86%	14%	0.2413
Q23: I feel my supervisor knows my research field.	498	Masters'	94%	6%	0.17
	108	PhD	95%	5%	0.6802
Q24: I feel my supervisor holds me accountable with respect to my thesis progress.	498	Masters'	96%	4%	1.69
	108	PhD	93%	7%	0.1941
Q25: I feel my supervisor and I meet regularly and to my satisfaction.	498	Masters'	89%	11%	9.18
	108	PhD	79%	21%	0.0024**
Q26: I feel my supervisor gives me feedback on my written work in an appropriate time-frame.	498	Masters'	90%	10%	11.23
	108	PhD	78%	22%	0.0008**

*: <0.05; **: <0.01; ***:<0.0001 (Cronbach Alpha coefficient for supervision perception score = 0.830).

Significantly more of the Masters' respondents (87%), in Table 4.10, felt that the supervisor respected the memorandum of understanding (MOU) contract, by keeping to all the agreements, while only 78% of the doctoral respondents agreed with this statement (Chi-sq=6.28, p=0.0122). Significantly, more of the Masters' respondents (93%) were satisfied with supervisor support they received throughout the thesis process, whereas only 86% of the PhD respondents agreed with this statement (Chi-sq=5.11, p=0.0238). Remarkably, more of the Masters' respondents (89%) were satisfied with meeting their supervisors on a regular basis, while 79% of the PhD respondents also agreed with this statement (Chi-sq=9.18, p=0.0024). Essentially, more masters students (90%) felt satisfied with supervisor feedback on their written work in an appropriate timeframe, and 78% of the PhD respondents agreed with this statement (Chi-sq=11.23, p=0.0008). Five of the items used to create this *Supervision*

perception score did not differ between the degree groups. A satisfactory Cronbach Alpha coefficient (0.83) was achieved for the creation of the *Supervision perception score*.

The *inadequacy perception score* was calculated by summarising the individual answers of questions mentioned in Chapter 3, Table 3.5. This score could range between 3 and 12; the higher the score, the more inadequate a student felt.

Table 4.11: Questions related to *inadequacy perception score* of Masters' and PhD respondents (row%)

Variable: Questions related to inadequate perceptions	No.	Degree	Agree	Disagree	Chi-square (prob)
Q27: I have considered withdrawing from my current studies	498	Masters'	66	34	45.36
	108	PhD	31	69	<0.0001***
Q28: I feel I am inadequately prepared to continue my current degree	498	Masters'	21	79	0.31
	108	PhD	19	81	0.5808
Q29: I feel I am not getting the professional guidance I need to complete my current degree	498	Masters'	25	75	3.50
	108	PhD	17	83	0.0613

*: <0.05; **: <0.01; ***:< 0.0001 (Cronbach Alpha coefficient for *inadequacy perception score* = 0.59.)

In Table 4.11, significantly more of the Masters' respondents (66%) considered withdrawing from their current studies, while only 31% of the PhD respondents agreed with this statement (Chi-sq=45.36, p<0.0001. No differences were observed in the following comparisons between Masters' and PhD students: *I feel I am inadequately prepared to continue my current degree*; and *I feel I am not getting the professional guidance I need to complete my current degree*. A reasonable Cronbach Alpha coefficient (0.59) was achieved for the *inadequacy perception score*.

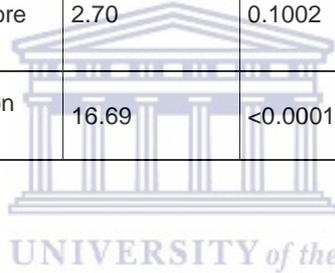
4.5. Mann-Whitney tests comparing the degree groups

The Mann-Whitney tests, comparing the Masters' and PhD respondents, are summarized in Table 4.14. The Box-and-Whisker plots revealed the comparisons between the degree groups, which are graphically presented for each of the score variables.

Table 4.12: Mann-Whitney comparisons of all Masters' and PhD students in study

Variable	Label	Mann-Whitney	Prob	Conclusion – comparing Masters' and PhD students
Q34	Age in years	14.31	<0.0001***	PhD students are older than Masters' students
Q45	Number of dependents you are responsible for	13.63	0.0002**	PhD students have more dependents
Time	Years registered		<0.0001***	Doctoral students have been registered longer
Fin_need	Financial needs perception score	0.37	0.5452	Financial needs perception scores are similar
Admin2	Administrative services perception score	0.06	0.8117	No difference between degree groups regarding the Administrative services perception score
Dept	Departmental services perception score	10.71	0.0011**	Masters' students reported higher Departmental services perception scores
Supervision	Supervision perception score	2.70	0.1002	No difference between the degree groups regarding the Supervision perception scores
Inadequate	Own inadequacy perception score	16.69	<0.0001***	Masters' students feel more inadequately prepared

*: <0.05; **: <0.01; ***:<0.0001



The medians in Table 4.14 reflect that PhD respondents were significantly older (median difference 12 years) than the Masters' respondents (Mann-Whitney=14.31, $p<0.0001$). The PhD respondents had significantly more dependents (median difference 0.5) to care for, compared to the Masters' respondents (Mann-Whitney=13.63, $p=0.0002$). The PhD respondents were registered significantly longer (median difference 1 year) compared to the Masters' group (Mann-Whitney=25.91, $p<0.0001$). PhD and Masters' respondents did not differ with respect to their *financial needs perception* score, departmental, administrative, supervision and *inadequacy perception scores*. Masters' respondents scored higher *Departmental services perception scores* than the PhD respondents (Mann-Whitney=10.71, $p=0.0011$), and the Masters' students felt more inadequately prepared for their studies than the PhD students did (Mann-Whitney=16.69, $p<0.0001$). The score of the Masters' respondents for inadequately prepared perception was slightly higher than the PhD respondents were.

4.4. Summary of the continuous measures

The continuous measures, of the perception score values, were transformed from a score value to a percentage, for ease of interpretation between the various scores. These scores, with other continuous variables, such as age, number of dependents and years registered, are illustrated in Tables 4.12 to 4.14. These summary tables are followed by comparisons between the degree groups for each of the continuous measures. Due to the variables not being normally distributed, the Mann-Whitney test was used to compare the two degree-groups for each of the continuous variables.

Table 4.13: Continuous measures of Masters' students

Variable	Label	No.	Mean	Median	Std Dev	Lower 95% CL for Mean	Upper 95% CL for Mean	Minimum	Maximum
Q34	Age in years	488	29.09	28.00	3.95	28.74	29.45	21.00	53.00
Q45	Number of dependents you are responsible for.	110	1.00	1.00	1.35	0.98	1.22	0.00	6.00
Time	Years registered.	498	1.03	1.00	0.95	0.95	1.12	0.00	3.00
Fin_need	Financial needs perception score.	498	56.48	56.25	12.23	55.40	57.55	25.00	100.00
Admin2	Administrative services perception score.	498	70.30	67.86	9.66	69.45	71.15	39.29	100.00
Dept	Departmental services perception score.	498	75.13	75.00	10.22	74.23	76.03	37.50	100.00
Supervision	Supervision perception score.	498	81.36	80.56	9.95	80.48	82.23	47.22	100.00
Inadequate	Own inadequacy perception score.	498	54.07	50.00	18.27	52.46	55.67	25.00	100.00

In Table 4.12, the average age of the Masters' respondents was 29 years, but the ages ranged from twenty-one to fifty-three years. The Masters' students had one dependent, on average, but this varied between zero and six dependents per student. On average, these students were registered for one year at the time of the survey, but some had been registered for up to three years. Regarding the five scores that were calculated, the highest average score (81%) was the *supervisory perception score*, followed by the *departmental services perception score* (75%),

and administrative services perception score (70%). The financial needs perception score and inadequacy perception scores were slightly lower, on average, at 56% and 54%, respectively.

Masters' respondents were positive about the supervisory aspect of their thesis. Both the departmental and university administrative processes surrounding the thesis aspects were positively experienced by these Masters' respondents. With a high financial needs perception score, students would be more in need of finances to fund their studies. The financial needs perception score of 56%, which indicates that some Masters' respondents were experiencing financial challenges. A high inadequacy perception score indicates that students felt inadequately prepared for their studies. In this current case, where the perceived inadequacy was 54%, it implied that many Masters' respondents felt inadequately prepared.

Table 4.15: Continuous measures of PhD students

Variable	Label	N	Mean	Median	Std Dev	Lower 95% CL for Mean	Upper 95% CL for Mean	Minimum	Maximum
Q34	Age in years.	99	39.35	40.00	7.84	37.79	40.92	26.00	60.00
Q45	Number of dependents you are responsible for.	108	1.96	1.50	2.16	1.55	2.38	0.00	10.00
Time	Years registered.	108	1.69	2.00	1.44	1.42	1.97	0.00	11.00
Fin_need	Financial needs perception score.	108	56.77	56.25	12.79	54.33	59.21	25.00	93.75
Admin2	Administrative services perception score.	108	69.31	69.64	11.90	67.04	71.58	28.57	100.00
Dept	Departmental services perception score.	108	71.10	70.83	10.96	69.01	73.19	33.33	95.83
Supervision	Supervision perception score.	108	79.14	77.78	12.91	76.68	81.6048	36.11	100.00
Inadequate	Own inadequacy perception score.	108	45.76	41.67	15.81	42.74	48.77	25.00	83.33

According to Table 4.13, the mean age of the respondents was 39 years old, but the ages ranged from twenty-six to sixty years. The PhD respondents had two dependents, on average, which

varied between zero and ten dependents per student. On average, the PhD respondents were registered for 1.7 years, at the time of the survey. Regarding the five scores that were calculated, the highest average score (79) was the *supervisory perception score*, followed by the *departmental services perception score* (71) and *administrative services perception score* (69). The *financial needs perception score* and *inadequacy perception score* were slightly lower, on average at 57 and 46, respectively.

Most PhD respondents were positive about the supervisory aspect of their thesis. Both the departmental and university administrative processes surrounding the thesis were positively experienced by most PhD respondents. The higher the *financial needs perception score* is, the less likely respondents would need finances to fund their studies. A *financial needs perception score* of 57 indicates that some PhD respondents were experiencing financial constraints during their studies. However, the higher the *inadequacy perception score*, the more inadequate the respondents felt towards their studies. In this current case, where the perceived inadequacy score was 46, the implication was that some PhD respondents felt adequately prepared for their studies.



4.6. Faculty comparisons

The tables below illustrate various comparisons between faculties at UWC. It should be noted that the study focused on students who registered for the first time between 2009 and 2013, but it can be seen that a few students who were registered in 2013 had been registered since 2005 (see Table 4.15). The participant's first time registration years for the different faculties are shown in Table 4.15. The distribution by faculty are shown in the following tables: Table 4.16, the type of registration; Table 4.17, the gender distribution; Table 4.18, the employment status; Table 4.19, depressive symptoms; Table 4.20, the current stage of research; Table 4.21, the financial status; Table 4.22, the home language; Table 4.23, the racial distribution; and Table 4.24, where the student resides while studying.

Table 4.15: Faculty comparisons showing the first year of registration (row %)

Q43 Faculty	Year of registration2005 (%)	Year of registration2008 (%)	Year of registration2009 (%)	Year of registration2010 (%)	Year of registration2011 (%)	Year of registration2012 (%)	Year of registration2013 (%)
Natural Sciences	1	2	1	7	20	33	36
Education	0	0	0	14	27	31	28
EMS	0	0	0	13	19	37	31
Community & Health Sciences	0	0	0	7	14	33	46
Law	0	0	0	11	43	22	24
Dentistry	0	0	0	10	37	30	23
Arts	0	0	0	8	22	42	28

Table 4.16: Faculty comparisons by type of registration (row %)

Faculty	Q40: What type of student registration	
	Full-time (%)	Part-time (%)
Natural Sciences	91	9
Education	83	17
EMS	85	15
Community & Health Sciences	89	11
Law	88	12
Dentistry	88	12
Arts	82	18

Most of the respondents, as presented in Table 4.16, were full-time students at the time of this study. Slight differences were observed; a higher proportion of the Natural Sciences respondents were full-time students compared to the Arts respondents (Chi-sq=41.6787, $p < 0.0229$).

Table 4.17: Faculty gender comparisons (row %)

Faculty	Female (%)	Male (%)
Natural Sciences	52	48
Education	60	40
EMS	37	63
Community & Health Sciences	55	45
Law	37	63
Dentistry	58	42
Arts	35	65

The comparison of gender profiles of the respondents in each faculty shows the domination of females in the following faculties: Natural Sciences, Education, Community and Health Sciences, as well as Dentistry (Chi-sq=7.52, p=0.0061).

Table 4.18: Faculty comparisons by employment status (row %)

Faculty employment status of M & D students	Employment status				
	Unemployed (%)	Part-time UWC (%)	Part-time Elsewhere (%)	Full-time UWC (%)	Full-time Elsewhere (%)
Natural Sciences	41	26	11	10	12
Education	26	40	9	5	20
EMS	28	28	13	6	25
CHS	21	26	15	11	27
Law	20	25	16	11	28
Dentistry	16	12	26	26	20
Arts	20	20	12	18	30

Table 4.18 shows the employment status of the respondents, by faculty, and specifies that, in the Community and Health Sciences, Law and Arts faculties, most respondents were working on a full-time basis, off campus. In the Natural Sciences and the EMS faculties, the respondents were mostly unemployed. Many of the respondents from the Education faculty were working part-time at UWC. Most of the Dentistry faculty participants were working, either full-time at

UWC, or on a part-time basis, off campus. The employment status of the participants differed significantly across the faculties (Chi-sq=67.0293, $p < 0.0005$).

Table 4.19: Faculty comparisons of depressive symptoms (row %)

Faculty	During the past 12 months, did you ever feel so sad or hopeless almost every day or two weeks or more in a row (yes) (%)
Natural Sciences	34
Education	33
EMS	33
Community & Health Sciences	25
Law	57
Dentistry	12
Arts	13

The percentage of respondents, who suffered depressive symptoms during the previous twelve months, are displayed for each faculty in Table 4.19. The highest percentage of depressive symptoms were observed in the faculty of Law (57%), followed by Natural Sciences (34%), Education and EMS (33% each), and CHS (25%). The lowest percentage was observed in Arts (13%) and Dentistry (12%). No differences were observed between the faculties (Chi-sq=0.22, $p = 0.6408$).



Table 4.20: Faculty comparisons of current stage of research (row %)

Faculty	Q44 Current stage of research components						
	Dev proposal (%)	Literature Review (%)	Data (%)	Analysis (%)	Writing (%)	Submit Draft (%)	Editorial (%)
Natural Sciences	12	32	16	13	20	4	0
Education	7	30	18	5	23	14	0
EMS	14	26	13	13	17	14	1
CHS		32	24	12	14	6	0
Law	2	3	21	14	14	24	0
Dentistry	5	14	14	19	15	21	0
Arts	20	10	25	10	23	7	0

The current stage of the respondents' research progress are presented in Table 4.20. However, this table does not present the length of registration; therefore, the status (or real progress) is difficult to interpret from this table. For the faculties of Natural Sciences, Education, EMS, as well as the Community and Health Sciences, most of the respondents were busy with the literature review phase. Most of the Law and Dentistry respondents indicated that they had submitted a draft thesis, while most Arts students were in the data collection phase.

Table 4.21: Faculty comparisons of respondent's scholarships status (row %)

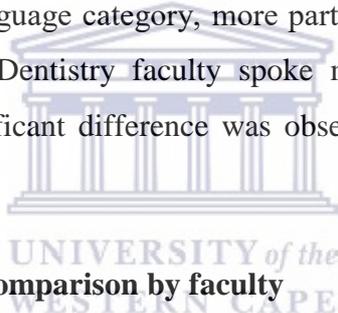
Faculty	Students with scholarships (%)	Students without scholarships (%)
Natural Sciences	41	59
Education	12	88
EMS	33	67
Community & Health Sciences	22	78
Law	22	78
Dentistry	22	78
Arts	53	47

As noted in Table 4.21, most respondents in all faculties, except Arts, were studying without a scholarship. The participants who indicated having a scholarship, were from the Arts (53%), Natural Sciences (41%), EMS (33%), CHS, Law and Dentistry (22% respectively) with the lowest percentage in Education faculty (12%) (Chi-sq=6.87, $p < 0.0088$). A significant difference in studying with a scholarship was observed between the faculties.

Table 4.22: Faculty comparisons of home language (row %)

Faculty	Home language				
	English	Afrikaans	Xhosa	Zulu	Other
Natural Sciences	33	12	12	3	40
Education	31	7	10	2	50
EMS	24	12	8	2	54
Community & Health Sciences	22	15	20	3	40
Law	11	14	16	5	54
Dentistry	10	29	15	3	44
Arts	13	10	10	8	58

Many of the respondents in all the faculties spoke languages, other than English, Afrikaans, Xhosa or Zulu (see Table 4.22). When the 'Other' language category is excluded, most participants in the Natural Sciences, Education, EMS, CHS and Arts faculties spoke English at home. Excluding the 'Other' language category, more participants in the Law faculty spoke Xhosa and participants in the Dentistry faculty spoke mainly Afrikaans at home ($\chi^2=54.4553$, $p<0.0004$). A significant difference was observed, when comparing the home language across faculties.

**Table 4.23: Population group comparison by faculty**

Faculty	Q37 - Racial groups				
	Black (%)	Coloured (%)	White (%)	Indian (%)	Other (%)
Natural Sciences	52	24	2	1	22
Education	53	9	5	0	28
EMS	69	15	2	0	14
Community & Health Sciences	62	15	3	2	19
Law	17	10	7	0	65
Dentistry	18	23	5	0	53
Arts	50	12	3	2	33

Table 4.23 indicates that most of the respondents in the Natural Sciences, Education, EMS, CHS and Arts claimed to be of a Black racial group. Most participants from the Law and

Dentistry faculties indicated that they were from other racial groups. The racial profile of the respondents differed significantly across the faculties (Chi-sq=122.0962, p<0.0001).

Table 4.24: Faculty comparison of respondent’s residence when at university (row %)

Faculty	Q38 - Where do you live when you at university			
	Home with relatives (%)	UWC Residence (%)	Rental with friends (%)	Rental alone (%)
Natural Sciences	27	51	9	13
Education	17	67	0	16
EMS	14	58	9	19
CHS	24	47	11	18
Law	13	73	3	11
Dentistry	16	60	1	19
Arts	12	43	1	18

Statistics in Table 4.24 revealed most of the respondents in all faculties reside in UWC residences, followed by respondents who resides at home (Natural Sciences, Education, CHS and Law) or renting alone (EMS, Dentistry and Arts). A significant difference was observed for students who lived with relatives, on campus, rent with friends, and lived in private accommodation across the faculties (Chi-sq=41.6752, p<0.0012).

4.7. Descriptive statistics for continuous variables by faculty

The descriptive statistics for continuous variables per faculty are presented in Tables 4.25 to 4.31. These summary tables will be followed by comparisons between the faculty groups for each of the continuous measures. Because the variables were not normally distributed, the Kruskal-Wallis test and Dunn’s post hoc test were used to compare the faculty groups for each of the continuous variables.

Table 4.25: Faculty=Natural Sciences

Variable	Label	N	Mean	Median	Std. Dev.	Lower 95% CL for Mean	Upper 95% CL for Mean	Min.	Max.
Q34	Age in years	119	29.99	29.00	6.03	28.90	31.09	22.00	53.00
Q45	Number of dependents you are responsible for	123	1.17	0.00	1.67	0.87	1.47	0.00	10.00
Time	Years registered	123	1.16	1.00	1.41	0.91	1.41	0.00	11.00
Fin_need	Financial needs perception score	123	59.04	62.50	13.11	56.71	61.38	25.00	93.75
Admin2	Administrative services perception score	123	71.11	71.43	9.86	69.35	72.87	39.29	96.43
Dept	Department services perception score	123	75.58	75.00	10.69	73.67	77.48	37.50	95.83
Supervision	Supervision perception score	123	82.20	83.33	11.56	80.14	84.27	36.11	100.00
Inadequate	Own inadequacy perception score	123	55.01	50.00	22.12	51.07	58.96	25.00	100.00

In the faculty of Natural Sciences, the average age of the respondents was 30 years, with a minimum of 22 years and a maximum of 53 years. In this faculty, the respondents were registered for over a year and on average, supported one dependent, at the time of the survey. The *financial needs perception score* of the Natural Science students was on average, 59%. The perception score on administrative services was, on average, 71%. The *departmental services perception score* was, on average, 76%. The *supervision perception score* was, on average, 82%. The *inadequacy perception score* was, on average, 55% (see Table 4.25).

Table 4.26: Faculty=Education

Variable	Label	N	Mean	Median	Std. Dev.	Lower 95% CL for Mean	Upper 95% CL for Mean	Min.	Max.
Q34	Age in years	51	33.18	31.00	6.33	31.40	34.96	25.00	48.00
Q45	Number of dependents you are responsible for	58	1.88	2.00	1.83	1.40	2.36	0.00	6.00
Time	Years registered	58	1.28	1.00	1.02	1.01	1.54	0.00	3.00
Fin_need	Financial needs perception score	58	57.22	56.25	9.85	54.63	59.81	25.00	75.00
Admin2	Admin and PG services perception score	58	70.01	67.86	10.87	67.15	72.87	46.43	100.00
Dept	Department perception score	58	73.06	70.83	10.90	70.19	75.93	45.83	100.00
Supervision	Supervision perception score	58	81.08	80.56	11.72	78.00	84.16	52.78	100.00
Inadequate	Own inadequacy perception score	58	54.02	50.00	16.90	49.58	58.47	25.00	91.67

Table 4.26 specifies in the Education faculty, the average age group of respondents was 33 years, with a minimum age of twenty-five years and a maximum of forty-eight years old. In this faculty, the respondents were registered for over a year, and on average, supported two dependents, at the time of the survey. The *financial needs perception score* was, on average, 57%. The *administrative services perception score* was, on average, 70.1%. The *department services perception score* was, on average, 73%. The *supervision perception score* was, on average, 81%. The *inadequacy perception score* was, on average, 54%.

Table 4.27: Faculty=Economic & Management Sciences

Variable	Label	N	Mean	Median	Std. Dev.	Lower 95% CL for Mean	Upper 95% CL for Mean	Min.	Max.
Q34	Age in years	116	33.18	30.50	7.85	31.74	34.62	21.00	60.00
Q45	Number of dependents you are responsible for	117	1.16	0.00	1.51	0.89	1.44	0.00	5.00
Time	Years registered	120	1.15	1.00	1.01	0.97	1.33	0.00	3.00
Fin_need	Financial needs perception score	120	59.32	56.25	12.79	57.01	61.63	25.00	100.00
Admin2	Admin and PG services perception score	120	68.66	67.86	11.90	66.51	70.81	28.57	100.00
Dept	Department perception score	120	71.67	70.83	11.10	69.66	73.67	33.33	100.00
Supervision	Supervision perception score	120	78.15	75.00	10.63	76.23	80.07	47.22	100.00
Inadequate	Own inadequacy perception score	120	51.94	50.00	17.87	48.71	55.18	25.00	91.67

In the Economics and Management Sciences faculty, the average age group, as stipulated in Table 4.27, of Masters' and PhD respondents was 33 years old, with a minimum age of twenty-one years and a maximum of sixty-years old. In this faculty, the respondents were registered for over a year, and on average, supported one dependent, at the time of the survey. *The financial needs perception score was, on average, 59.3%. The perception score on academic services was, on average, 68.7%. The department perception score was, on average, 71.7%. The supervision perception score was, on average, 78%. The inadequacy perception score was on average 51.9%.*

Table 4.28: Faculty=Community & Health Sciences

Variable	Label	N	Mean	Median	Std Dev	Lower 95% CL for Mean	Upper 95% CL for Mean	Min.	Max.
Q34	Age in years	106	31.24	29.00	6.05	30.07	32.40	24.00	50.00
Q45	Number of dependents you are responsible for	109	0.86	0.00	1.32	0.61	1.11	0.00	6.00
Time	Years registered	109	0.83	1.00	0.93	0.65	1.00	0.00	3.00
Fin_need	Financial needs perception score	109	53.73	56.25	12.73	51.31	56.14	25.00	93.75
Admin2	Admin and PG services perception score	109	70.97	67.86	9.56	69.15	72.79	46.43	100.00
Dept	Department perception score	109	75.65	75.00	10.03	73.74	77.55	58.33	100.00
Supervision	Supervision perception score	109	81.17	80.56	11.16	79.05	83.29	47.22	100.00
Inadequate	Own inadequacy perception score	109	45.34	41.67	14.45	42.59	48.08	25.00	91.67

Table 4.28 report the average age of Masters' and PhD respondents in the Community and Health Sciences faculty, as stipulated in Table 4.29, was 31 years old, with a minimum of twenty-four years and maximum fifty-years old. In this faculty, the respondents were registered for over a year, and on average, supported one dependent, at the time of the survey. *The financial needs perception score was, on average, 54.3%. The perception score on academic services was, on average, 71%. The department perception score was, on average, 76%. The supervision perception score was, on average, 81%. The inadequacy perception score was, on average, 45%.*

Table 4.29: Faculty=Law

Variable	Label	N	Mean	Median	Std. Dev.	Lower 95% CL for Mean	Upper 95% CL for Mean	Min.	Max.
Q34	Age in years	63	27.73	27.00	2.16	27.19	28.27	24.00	35.00
Q45	Number of dependents you are responsible for	63	1.40	1.00	1.43	1.04	1.76	0.00	5.00
Time	Years registered	63	1.41	2.00	0.98	1.17	1.66	0.00	3.00
Fin_need	Financial needs perception score	63	47.22	43.75	9.90	44.73	49.72	25.00	75.00
Admin2	Admin and PG services perception score	63	71.71	71.43	7.46	69.83	73.59	57.14	85.71
Dept	Department perception score	63	78.31	79.17	7.82	76.34	80.28	58.33	91.67
Supervision	Supervision perception score	63	81.83	80.56	6.96	80.08	83.59	61.11	100.00
Inadequate	Own inadequacy perception score	63	54.76	50.00	10.87	52.03	57.50	41.67	91.67

Table 4.29 illustrates that the average age of Masters' and PhD respondents in the Law faculty was 28 years old, with a minimum of twenty-four years, and a maximum thirty-five years old. In this faculty, the respondents were registered for over a year, and on average, supported one dependent, at the time of the survey. *The financial needs perception score was, on average, 47%. The perception score on academic services was, on average, 72%. The department perception score was, on average, 78%. The supervision perception score was, on average, 82%. The inadequacy perception score was, on average, 55%.*

Table 4.30: Faculty=Dentistry

Variable	Label	N	Mean	Median	Std Dev	Lower 95% CL for Mean	Upper 95% CL for Mean	Min.	Max.
Q34	Age in years	72	27.94	27.00	2.52	27.35	28.54	23.00	38.00
Q45	Number of dependents you are responsible for	73	1.26	1.00	1.35	0.94	1.58	0.00	6.00
Time	Years registered	73	1.33	1.00	0.94	1.11	1.55	0.00	3.00
Fin_need	Financial needs perception score	73	59.08	56.25	10.68	56.58	61.57	37.50	81.25
Admin2	Admin and PG services perception score	73	69.86	67.86	8.91	67.78	71.94	46.43	92.86
Dept	Department perception score	73	75.63	75.00	8.64	73.61	77.64	58.33	95.83
Supervision	Supervision perception score	73	81.43	83.33	10.24	79.04	83.82	58.33	100.00
Inadequate	Own inadequacy perception score	73	50.68	50.00	12.25	47.83	53.54	25.00	100.00

The average age of the Masters' and PhD respondents in the Dentistry faculty, as specified in Table 4.30, was 28 years old, with a minimum of twenty-three years and a maximum of thirty-eight years old. In this faculty, the respondents were registered for over a year, and on average, supported one dependent, at the time of the survey. The *financial needs perception score* was, on average, 59.8%. The *administrative services perception score* was, on average, 70%. The *department services perception score* was, on average, 76%. The *supervision perception score* was, on average, 81%. The *inadequacy perception score* was, on average, 51%.

Table 4.31: Faculty=Arts

Variable	Label	N	Mean	Median	Std. Dev.	Lower 95% CL for Mean	Upper 95% CL for Mean	Min.	Max.
Q34	Age in years	60	31.90	30.00	5.83	30.39	33.41	25.00	53.00
Q45	Number of dependents you are responsible for	60	1.55	1.00	1.74	1.10	2.00	0.00	10.00
Time	Years registered	60	1.10	1.00	0.92	0.86	1.34	0.00	3.00
Fin_need	Financial needs perception score	60	56.88	56.25	9.74	54.36	59.39	31.25	81.25
Admin2	Admin and PG services perception score	60	68.21	67.86	10.31	65.55	70.88	46.43	92.86
Dept	Department perception score	60	71.04	70.83	11.42	68.09	73.99	41.67	100.00
Supervision	Supervision perception score	60	82.08	80.56	8.85	79.80	84.37	63.89	100.00
Inadequate	Own inadequacy perception score	60	60.69	66.67	23.62	54.59	66.80	25.00	100.00

In Table 4.31, the average age of Masters' and PhD respondents in the Arts faculty was 32 years old, with a minimum of twenty-five years, and a maximum of fifty-three years old. In this faculty, the respondents were registered for over a year, and on average, supported one dependent, at the time of the survey. The *financial needs perception score* was, on average, 57%. The *administrative services perception score* was, on average, 68%. The *department services perception score* was, on average, 71%. The *supervision perception score* was, on average, 82%. The *inadequacy perception score* was, on average, 61%.

4.8. Kruskal-Wallis and Dunn's post hoc tests comparisons in each faculty

The Kruskal-Wallis and Dunn's post hoc tests report the comparisons between the various faculties. The Kruskal-Wallis tests are summarized in Table 4.32, the Dunn's post hoc tests in Tables 4.33 to 4.41, and in Figures 4.11-4.15, the Box-and-Whisker plots for each continuous variable.

Table 4.32: The Kruskal-Wallis test comparing the differences in faculties

Variable	Label	Kruskal-Wallis	Prob	Conclusion – comparing faculties
Q34	Age in years	72.59	<0.0001	Age difference in faculties
Q45	Number of dependents you are responsible for	21.99	0.0012	Faculties differ with respect to number of dependents
Time	Years registered	22.54	0.0010	Faculties differ with respect to registration years
Fin need	Financial needs perception score	66.84	<0.0001	Financial need score is different between the faculties
Admin2	Admin and PG services perception score	8.48	0.2071	No difference in the Administrative services perception score
Dept	Department perception score	33.58	<0.0001	Department services perception differs between faculties
Supervision	Supervision perception score	13.70	0.0332	Supervision perception score differs between faculties
Inadequate	Own inadequacy perception score	31.60	<0.0001	Inadequacy perception score differs between faculties

Results from the Kruskal-Wallis test in Table 4.32 revealed that the median age significantly differed in each faculty. Faculties differed, with respect to the median number of dependents. In each faculty, the respondents were responsible for one dependent, except in the Education faculty, where the respondents were responsible for two dependents. Each faculty differed with respect to the median number of registration years. The respondents in each faculty were registered for a bit more than one year; however, there was no guarantee that they would complete their degrees successfully in the specified period. The median indicates there is no difference in the *financial needs perception score* in each faculty, with the highest percentage in Natural Sciences, EMS and Dentistry (59%), Arts and Education (57%), CHS (54%) and Law (47%). There was no difference in each faculty with respect to the *median administrative services perception score*, with the highest percentage in Law (72%), followed by Natural Sciences and CHS (71%), Dentistry (68%), and finally EMS and Arts (68%). The median *department services perception score* differs in each faculty, with the highest percentage in Law (78%), followed by Natural Sciences, CHS and Dentistry (76%), Education (73%) and Arts (71%).

The median *supervision perception score* revealed that the difference in most faculties was significant, with the highest percentage in Natural Sciences, Law and Arts (82%), followed by CHS and Dentistry (81%) and EMS (78%). The median *inadequacy perception score* in some faculties is the same with the highest percentage in Arts (61%), followed by Law and Natural Sciences (55%), Education (54%), EMS (52%), Dentistry (51%) and CHS (45%).

Table 4.33: Dunn’s post hoc Test – Age

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	3.5497	3.6658	1.5512	2.7364	2.5456	2.9313
Educ	3.5497	0.0000	0.6892	2.2704	5.4175	5.3227	0.6824
EMS	3.6658	0.6892	0.0000	2.0178	5.7804	5.7213	0.0892
CHS	1.5512	2.2704	2.0178	0.0000	3.9824	3.8453	1.5904
Law	2.7364	5.4175	5.7804	3.9824	0.0000	0.2683	4.9365
Dentistry	2.5456	5.3227	5.7213	3.8453	0.2683	0.0000	4.8294
Arts	2.9313	0.6824	0.0892	1.5904	4.9365	4.8294	0.0000

The codes used for the comparisons identify each faculty for example 1='Nat Sciences' 2='Education' 3='EMS' 4='Comm Health Sc' 5='Law' 6='Dentistry' 7='Arts'.

Regular Test: Medians significantly different if z-value > 1.9600. Bonferroni Test: Medians significantly different if z-value > 3.0381. Age: youngest to oldest: 5, 6, 1, 4, 7, 3, 2.

The ages of Law and Dentistry students were similar, but lower than the ages of students in the other faculties. Education, EMS and Arts had significantly older students, compared to the rest of the faculties. The ages of Natural Sciences, CHS and Arts did not differ from each other, but were significantly different from the other faculties.

Table 4.34: Dunn's post hoc Test – Number of dependents responsible for

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	2.2962	0.2647	1.4904	1.8743	2.3199	2.0647
Educ	2.2962	0.0000	2.4854	3.4757	0.2426	0.0237	0.2826
EMS	0.2647	2.4854	0.0000	1.2077	2.0577	2.5123	2.2636
CHS	1.4904	3.4757	1.2077	0.0000	2.9908	3.5234	3.2961
Law	1.8743	0.2426	2.0577	2.9908	0.0000	0.2237	0.0185
Dentistry	2.3199	0.0237	2.5123	3.5234	0.2237	0.0000	0.2630
Arts	2.0647	0.2826	2.2636	3.2961	0.0185	0.2630	0.0000

Regular Test: Medians significantly different if z -value > 1.9600 ; Bonferroni Test: Medians significantly different if z -value > 3.0381 .

The number of *Dependents score* was the highest for the CHS, Dentistry and Arts faculties, but significantly lower in the EMS, Law, Education and Natural Sciences.

Table 4.35: Dunn's post hoc Test – Years registered

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	1.3729	0.6683	1.8747	2.4324	2.0123	0.3730
Educ	1.3729	0.0000	0.8312	2.8627	0.8692	0.4470	0.8685
EMS	0.6683	0.8312	0.0000	2.5118	1.8710	1.4252	0.1709
CHS	1.8747	2.8627	2.5118	0.0000	3.9393	3.5964	1.8995
Law	2.4324	0.8692	1.8710	3.9393	0.0000	0.4626	1.7635
Dentistry	2.0123	0.4470	1.4252	3.5964	0.4626	0.0000	1.3690
Arts	0.3730	0.8685	0.1709	1.8995	1.7635	1.3690	0.0000

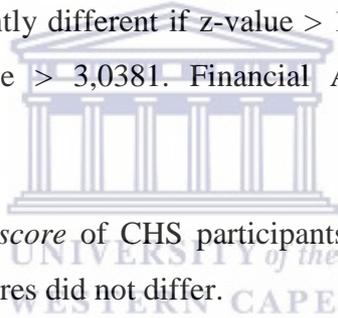
Regular Test: Medians significantly different if z -value > 1.9600 ; Bonferroni Test: Medians significantly different if z -value > 3.0381 ; Short to longer registration periods: 4, 1, 7, 3, 2, 6, 5.

The CHS, Natural Sciences and Arts respondents had registered more recently than the other faculties.

Table 4.36: Dunn’s post hoc Test – *Financial needs perception score*

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	1.6217	0.0807	2.0946	1.5205	0.2247	1.4563
Educ	1.6217	0.0000	1.6304	0.1592	0.2004	1.4908	0.2039
EMS	0.0807	1.6304	0.0000	2.1519	1.5316	0.2902	1.4608
CHS	2.0946	0.1592	2.1519	0.0000	0.4007	1.7823	0.3971
Law	1.5205	0.2004	1.5316	0.4007	0.0000	1.3840	0.0094
Dentistry	0.2247	1.4908	0.2902	1.7823	1.3840	0.0000	1.3461
Arts	1.4563	0.2039	1.4608	0.3971	0.0094	1.3461	0.0000

Regular Test: Medians significantly different if z-value > 1,9600; Bonferroni Test: Medians significantly different if z-value > 3,0381. Financial Aid score from small to large: 4,2,5,7,1,3,6.



The *financial needs perception score* of CHS participants was lower than that of Natural Sciences and EMS. The other scores did not differ.

Table 4.37: Dunn’s post hoc Test – *Administration services perception score*

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	0.8571	1.6690	0.6504	0.0000	0.0000	2.0691
Educ	0.8571	0.0000	2.1861	0.2675	0.8192	0.8192	2,4968
EMS	1.6690	2.1861	0.0000	2.1920	1.5271	1.5271	1.0457
CHS	0.6504	0.2675	2.1920	0.0000	0.6138	0.6138	2.4577
Law	0.0000	0,8192	1,5271	0,6138	0.0000	0.0000	1,9879
Dentistry	0.0000	0,8192	1,5271	0,6138	0.0000	0.0000	1,9879

Arts	2,0691	2,4968	1,0457	2,4577	1,9879	1,9879	0.0000
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Regular Test: Medians significantly different if z-value > 1.9600; Bonferroni Test: Medians significantly different if z-value > 3.0381. *Administrative services perception score* from small to large: 7, 3, 1, 5, 6, 4, 2.

The *administrative services perception scores* for students registered in Arts and EMS faculties were similar, but lower than in the other faculties. The highest *administrative services perception score* was measured in the Education faculty, but this score only differed from Arts and EMS.

Table 4.38: Dunn’s post hoc Test – *Department services perception score*

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	0.3661	0.0831	2.0844	0.3024	0.3024	1.0740
Educ	0.3661	0.0000	0.3102	1.2895	0.2895	0.0176	0.5929
EMS	0.0831	0.3102	0.0000	2.0923	0.2512	0.2512	1.0368
CHS	2.0844	1.2895	2.0923	0.0000	1.1516	1.1516	0.6257
Law	0.3024	0.0176	0.2512	1.1516	0.0000	0.0000	0.5537
Dentistry	0.3024	0.0176	0.2512	1.1516	0.0000	0.0000	0.5537
Arts	1.0740	0.5929	1.0368	0.6257	0.5537	0.5537	0.0000

Regular Test: Medians significantly different if z-value > 1.9600; Bonferroni Test: Medians significantly different if z-value > 3.0381. *Department services score* from small to large: 1,3,2,5,6,7,4

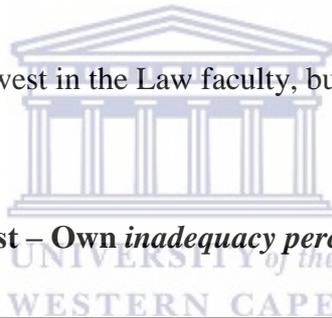
The *departmental services perception score* for students in Natural Sciences and EMS differed from the CHS faculty’s score. All other faculty scores were similar.

Table 4.39: Dunn's post hoc Test – Supervision services score

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	0.3795	0.3809	0.7589	0.8728	0.5225	0.3859
Educ	0.3795	0.0000	0.7949	0.3795	1.1763	0.8491	0.7016
EMS	0.3809	0.7949	0.0000	1.2089	0.6264	0.2365	0.1012
CHS	0.7589	0.3795	1.2089	0.0000	1.9799	1.1757	1.0173
Law	0.8728	1.1763	0.6264	1.9799	0.0000	0.3498	0.4427
Dentistry	0.5225	0.8491	0.2365	1.1757	0.3498	0.0000	0.1070
Arts	0.3859	0.7016	0.1012	1.0173	0.4427	0.1070	0.0000

Regular Test: Medians significantly different if z-value > 1.9600; Bonferroni Test: Medians significantly different if z-value > 3.0381. Supervision score from small to large: 5, 6, 7, 3, 1, 2, 4.

The supervision score was the lowest in the Law faculty, but differed only from the highest score of the CHS faculty.

**Table 4.40: Dunn's post hoc Test – Own inadequacy perception score**

Codes	1	2	3	4	5	6	7
Nat Sc	0.0000	2.2962	0.2647	1.4904	1.8743	2.3199	2.0647
Educ	2.2962	0.0000	2.4854	3.4757	0.2426	0.0237	0.2826
EMS	0.2647	2.4854	0.0000	1.2077	2.0577	2.5123	2.2636
CHS	1.4904	3.4757	1.2077	0.0000	2.9908	3.5234	3.2961
Law	1.8743	0.2426	2.0577	2.9908	0.0000	0.2237	0.0185
Dentistry	2.3199	0.0237	2.5123	3.5234	0.2237	0.0000	0.2630
Arts	2.0647	0.2826	2.2636	3.2961	0.0185	0.2630	0.0000

Regular Test: Medians significantly different if z-value > 1.9600; Bonferroni Test: Medians significantly different if z-value > 3.0381. Own *inadequacy perception scores* from small to large: 4, 3, 1, 5, 6, 2, 7.

The inadequately prepared score was the lowest for the CHS faculty, but it did not differ from EMS or the Natural Sciences faculties. The highest *inadequacy perception score* was measured

in the Arts faculty, which was no different from the Education, Dentistry and Law faculties' scores.

4.9. Box-and-Whisker plots of the perception scores

The Box-and-Whisker plots specify the continuous measures and the perception scores of Masters' and PhD respondents, in each faculty. Figure 4.10 shows the age groups of participants in each faculty. Figure 4.11 shows the number of dependents the respondents are responsible for, in each faculty. Figure 4.12 shows the time that respondents take to complete their degrees in each faculty. Figure 4.13 shows the different financial needs of students in each faculty. Figure 4.14 shows that administrative services differ in each faculty. Figure 4.15 shows that departmental services differ in each faculty. Figure 4.16 shows that supervision services differ in each faculty. Figure 4.17 shows that the own *inadequacy perception score* differs in each faculty.

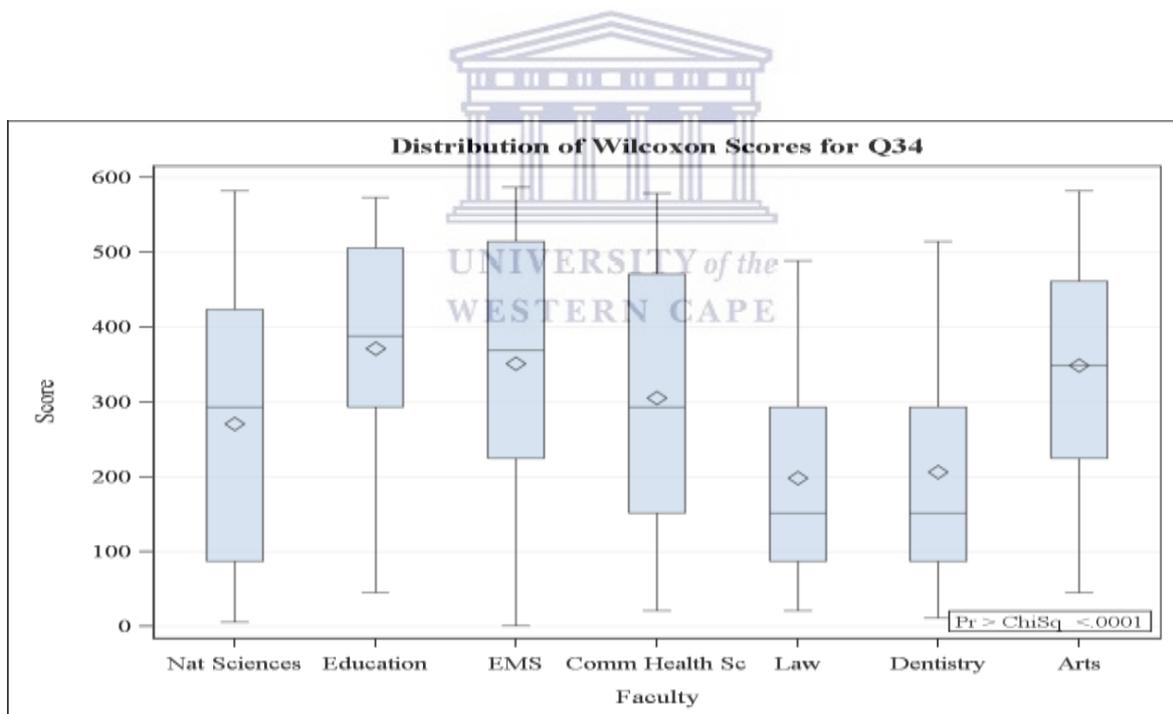


Figure 4.10: Age groups of participants in each faculty

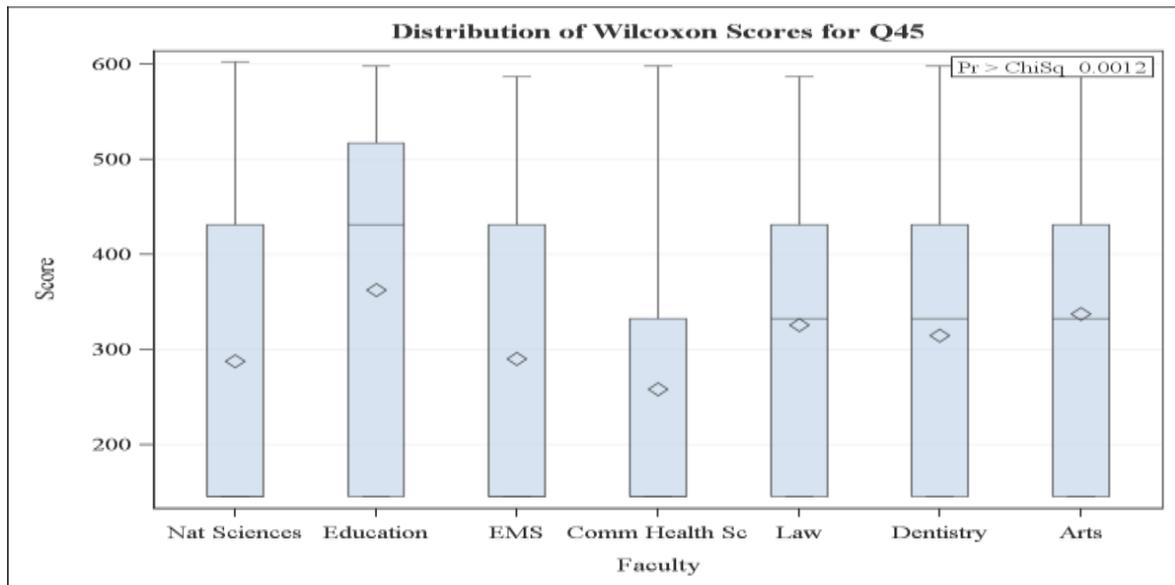


Figure 4.11: Faculties differ with respect to number of dependents that Masters' and PhD respondents are responsible for

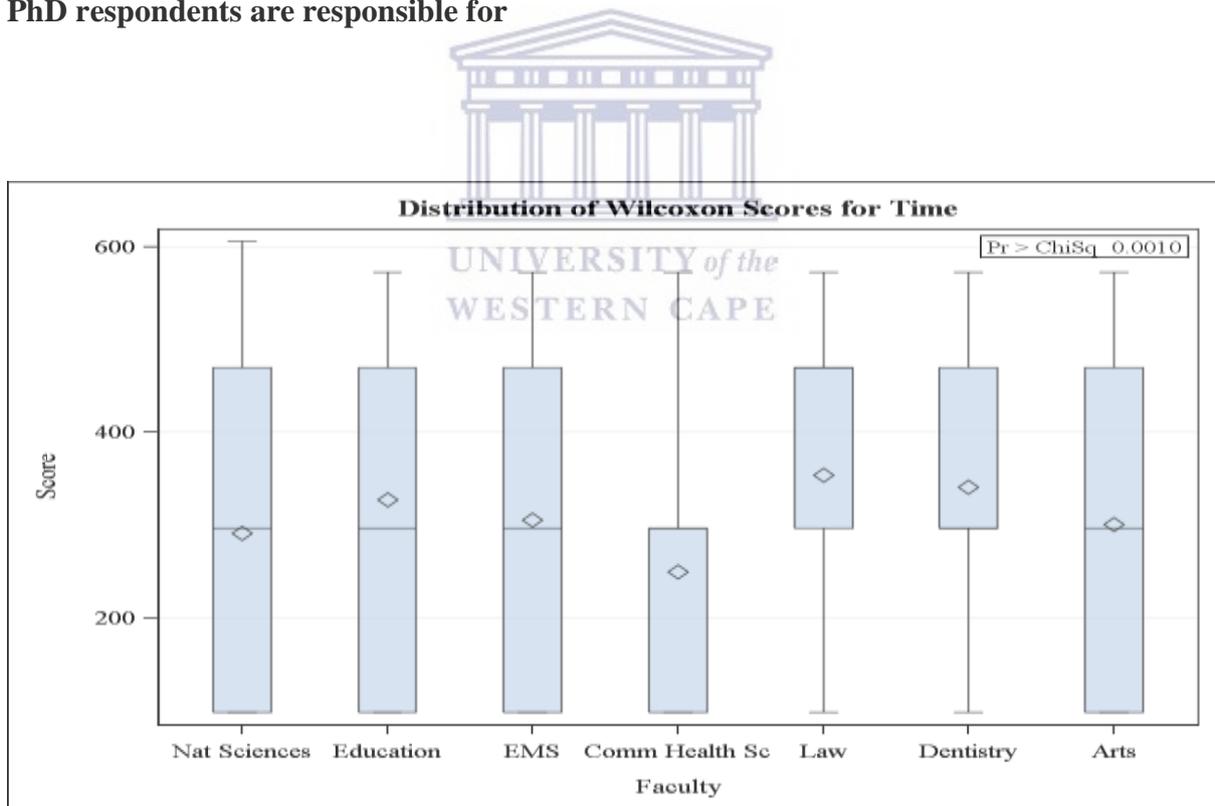


Figure 4.12: The period that Masters' and PhD respondents spend to complete their degree in each faculty

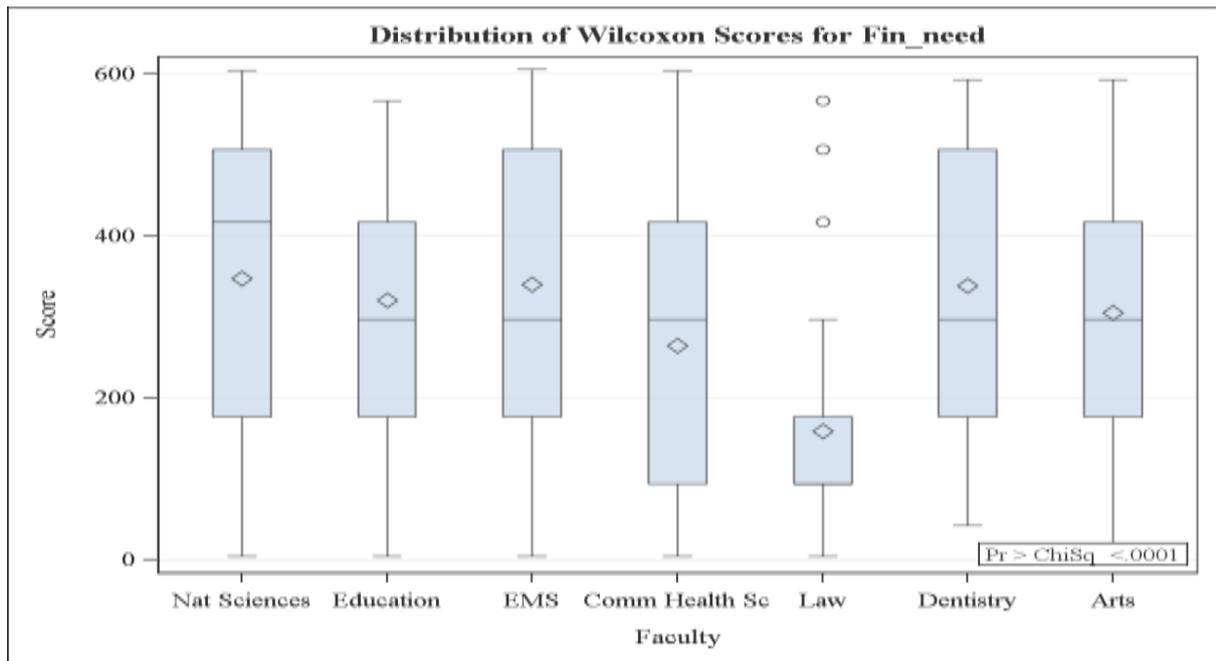


Figure 4.13: The *financial needs perception score* of Masters' and PhD respondents in each faculty differ

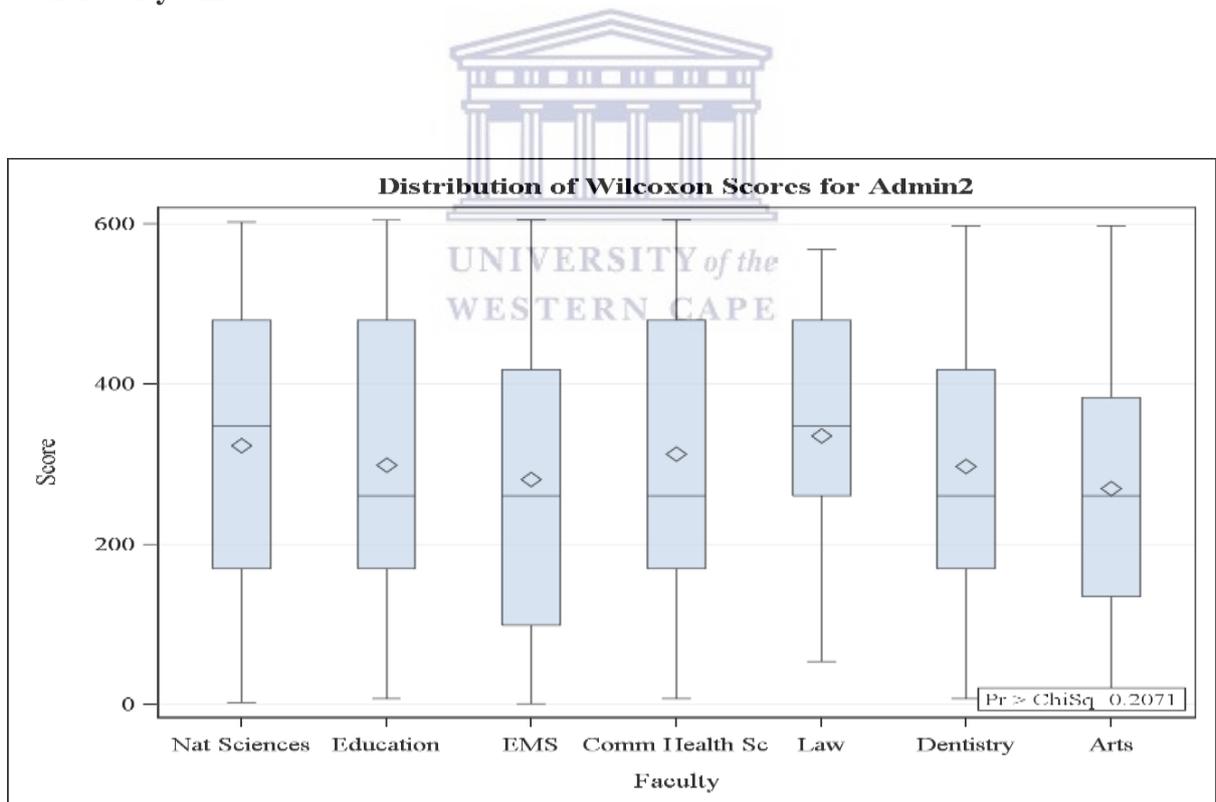


Figure 4.14: The *administrative services perception score* differ in each faculty

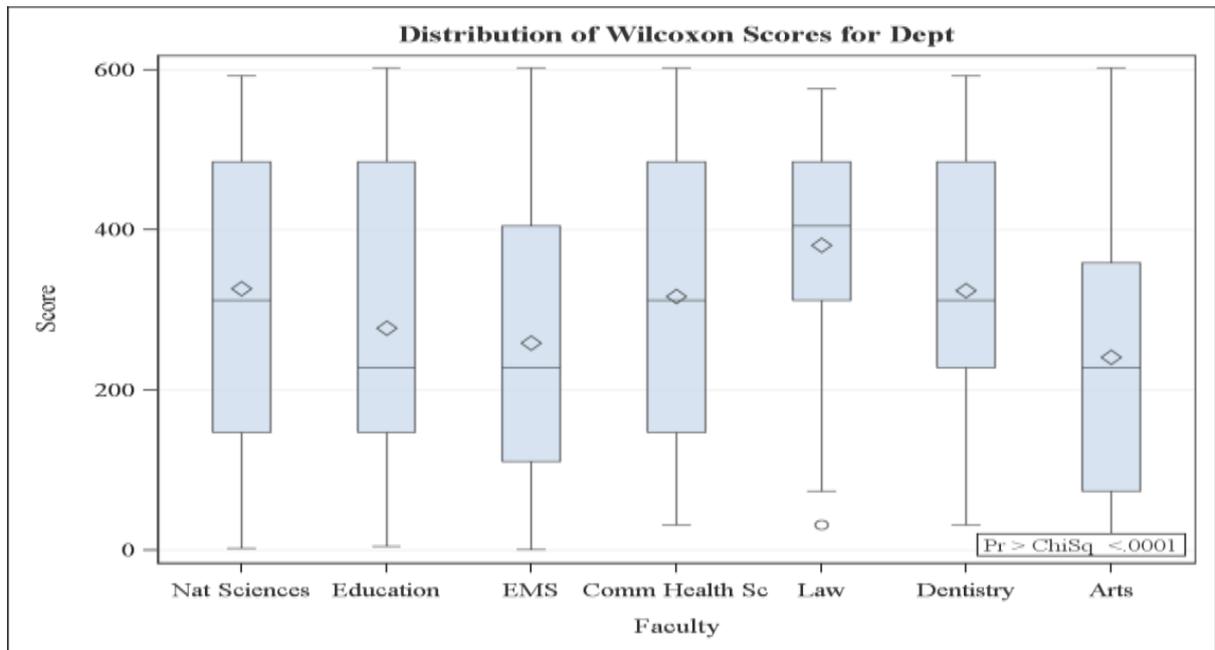


Figure 4.15: The departmental services perception score differs in each faculty

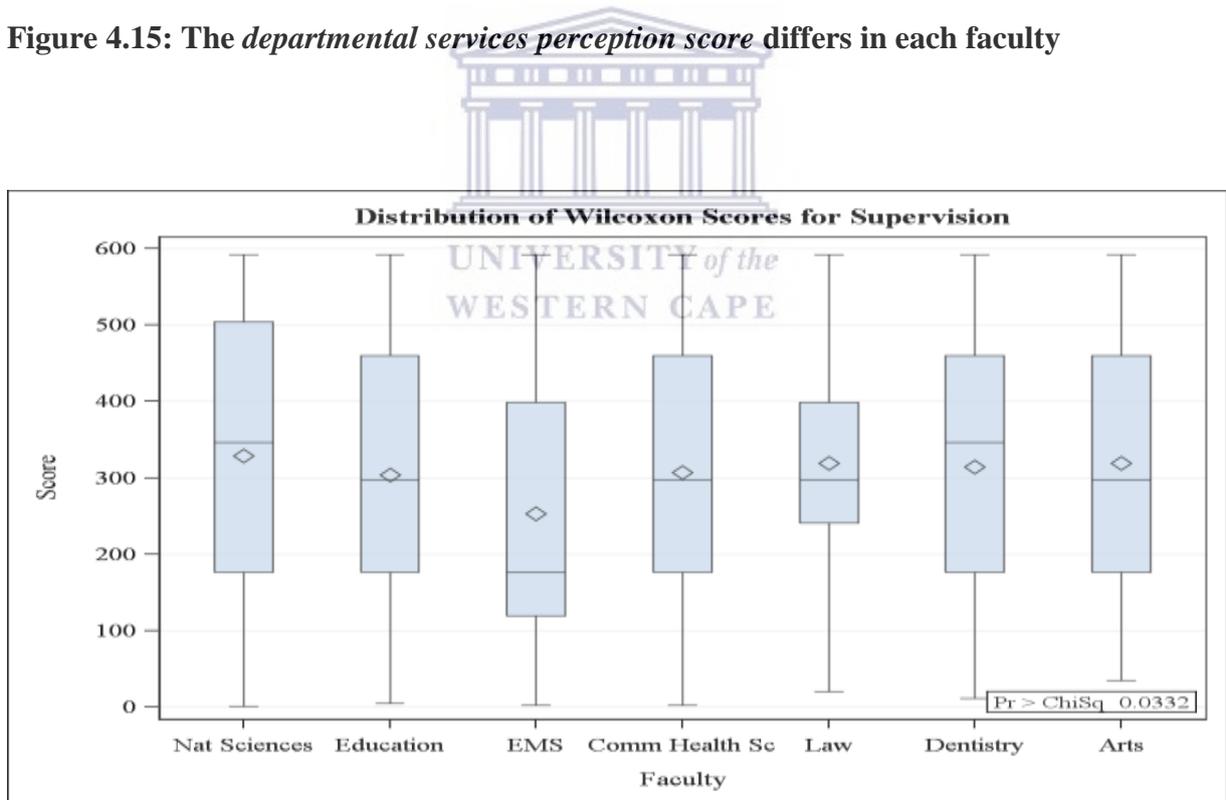


Figure 4.16: The supervision perception score of Masters' and PhD students differ in each faculty

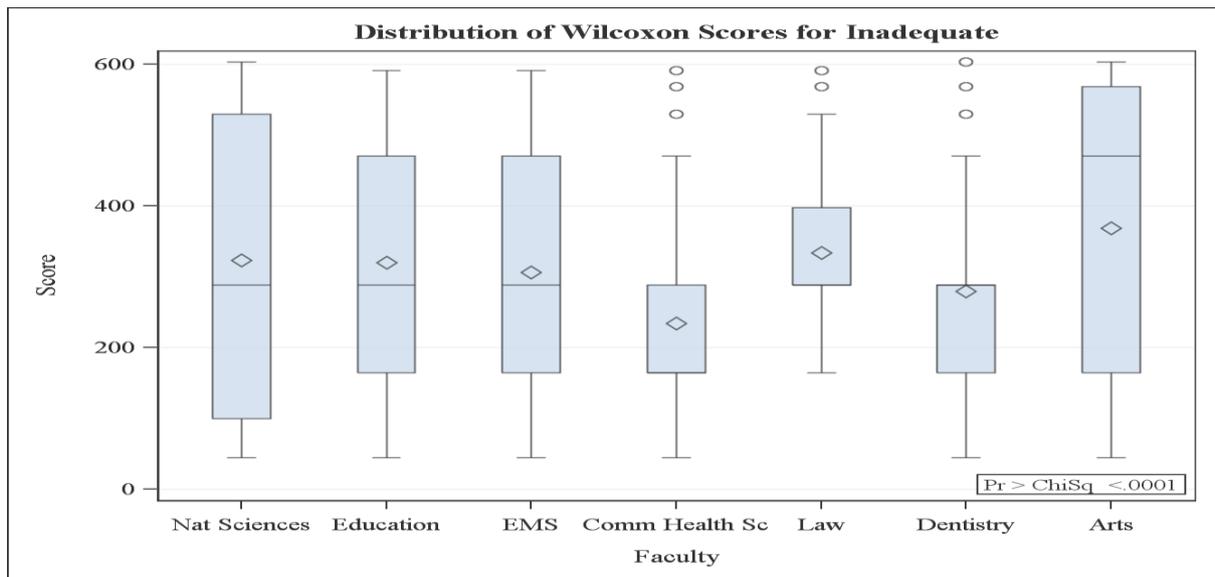


Figure 4.17: The *inadequacy perception score* differs in each faculty

4.10. Conclusion

This chapter provided a detailed explanation of the descriptive analysed statistics on the quantitative research. The following chapter discusses the findings of the qualitative research, following the semi-structured interviews.

CHAPTER FIVE

FINDINGS OF QUALITATIVE DATA

5.1. Introduction

In this chapter, the themes and sub-themes that emerged from the analysed interview data conducted with the research participants, are discussed. This chapter is divided into two sections, with Section-A, focusing on the biographical information of the research subjects, and Section B, focusing on the findings of the interview analysis.

5.2. Section A: respondent information

The biographical information of the sample of 45 research subjects, who participated in the in-depth, semi-structured interviews are presented in this section (see Table 5.1).

Table 5.1: Demographical profile of interviewees

Postgraduate students	Faculties							Total number of students
	ARTS	EMS	CHS	LAW	EDUCATION	NATURAL SCIENCES	DENTISTRY	
Masters	4	3	3	3	2	3	3	21
Doctoral	1	6	3	2	4	7	1	24
Total	5	9	6	5	6	10	4	45

In Table 5.1, a breakdown of the respondents, who were registered in the various faculties at UWC is illustrated. Most of the research participants were registered in the Natural Sciences faculty, followed by the faculties of Economic and Management Sciences (EMS), Community and Health Sciences and Education. The least research participants were registered in the faculties of Arts, Law and Dentistry. The Masters' and PhD respondents interviewed, joined UWC as postgraduate students, with the aim of completing their degree within the stipulated period, according to the university's regulations. Most respondents originated from disadvantaged households, and experienced tremendous social and economic challenges on a daily basis. They referred to poverty as a *disease* that was part of their lives, and the only tool

at their disposal, to break the cycle of poverty, was education. This resonates with the late Nelson Mandela’s statement in the 1994 State of the Nation Address, “Education is the tool to eliminate poverty” (Mandela, 1994:3). Some of this study’s participants were enrolled for first or second year Masters’ studies, while others were enrolled for PhD studies. Some were married with family responsibilities and in full-time employment, while studying part-time. Other participants were studying on a full-time basis, and mostly participating in the work-study programme at UWC. For them it was important to complete their postgraduate education successfully, and to find lucrative employment. However, both Masters’ and PhD participants were faced with challenges, both social and economic, but mainly economic. These challenges are presented in Section B.

5.3. Section B: findings of the interview analysis

A summary of the main themes and sub-themes of that emerged from the data analysis of the semi-structured interviews are illustrated in Table 5.2, as follows:

Table 5.2: Main themes and sub-themes

Main Themes	Sub-themes
1. Enrolment and registration	1.1. Departmental and administrative services
2. Funding	2.1. NSFAS scholarships 2.2. NRF and external stakeholder scholarships
3. Accommodation	3.1. Low morale or depressive feelings
4. Completion rates and time-to-degree	4.1. Supervision and inadequate student support

5.4. Main theme 1: Enrolment and registration

UWC has made significant strides with the implementation of its online enrolment system in 2008, to ensure accessible and convenient registration each year. The participants applauded the online system, but were of the opinion that UWC should provide them with some financial support to avoid financial exclusion. One of the participants expressed the following:

“I was unable to enrol or register online because I had huge outstanding study debt that accumulated over the years on my student account. My father was blacklisted, and extended family members couldn’t assist me anymore with registration fees. I applied at the University for Financial Aid but was unsuccessful in my application. At the same time, my parents are frustrated because they do not qualify at the bank for another study loan. They had made bank loans in my third year and for my honours degree. I have decided that I am not going to dropout and have attended class but really feel embarrassed when we were supposed to do online tests. I had to go to my lecturer and even though; he understood my situation and arranged that I could do the online tests it was very humiliating. There were however quite a few students in that class with a similar situation d that he had assisted to do the online test.” (Respondent 8)

The interviewer posed the following question to various participants: “Who assisted you with funding and when did you register?” One responded as follows:

“My grandmother could only manage to help me with registration fees. I was without funding for almost six months before the faculty officer e-mailed me to see her. She informed me that the department managed to obtain a bursary for payment towards my tuition cost. She had arranged with student admin to assist me. She arranged for me to go onto the work-study programme to assist with the private accommodation and food, material cost, printing and other living expenses. I will be forever thankful for the good service she had given me.” (Respondent 34)

More respondents relayed similar experiences, as follows:

“I wasted a year of study because I did not qualify anywhere to get a loan to register due to accumulated study debt of my undergraduate and honours degree. I went to go work accumulate funding to pay some of the accumulated debt. I continue with my studies the following year, two days before the closure of registration. My sister managed to get me the

registration money and made arrangement to pay instalments on the remainder of the outstanding amount that I still owe the university. I felt that the university should consider either scrapping or including registration fees in the overall study cost for Masters' and PhD studies.” (Respondent 7)

“I could not do my online registration due to outstanding debt that caused me tremendous frustration. My husband’s monthly income was not enough to contribute towards my study costs and we could not save enough to cover my registration fees. I went to inform the postgraduate official who worked with the NRF scholarships about my predicament. At the point of time there were no scholarships available, but the official promised the minute there is a cancellation I will be informed. Within three weeks the official informed me that I was offered a NRF scholarship of R50 000 and that I had to complete an agreement form. I was registered forthwith and was ever so grateful for the excellent service that I had received”. (Respondent 9)

“I could not register because I had outstanding study debt. I received a scholarship from an external sponsor through an administrator at UWC who at the same time arranged clearance for me at student credit management. Thereafter I got registered”. (Respondents 45)

Some working students mentioned that their monthly income was not enough for them to contribute towards their studies. Additionally, during the interview process, some participants stated that they had experienced financial constraints during enrolment and registration at the beginning of the academic year, due to accumulated study debt, as some parents, or spouses, were unable to access further bank loans. One of the participants alleged that her father was blacklisted, and was unable to secure another loan for her studies. The participants expressed their appreciation of the university assisting students, through the work-study programme, but the income earned was not enough to pay their study costs in full, and barely sustained them. According to them, the university and external stakeholders should consider supporting postgraduates with full scholarships towards their study costs. In the United Kingdom, doctoral students, either find lucrative internships, or readily obtain employment after completion of their studies, which makes the funding of their studies possible (Eggins, 2008:147; Ehrenberg,

Zuckerman, Groen & Brucker, 2010:147). In countries such as Australia, Canada and the Nordic states, doctoral education is free, while others provide funding, sponsored by a range of stakeholders, for example, research councils, institutions, employers and individuals.

5.4.1. Sub-theme 1: Departmental and administrative services

Most of the participants mentioned that they were happy with the departmental services rendered to them. Some doctoral participants stated that they did not have much interaction with administrators in their departments or faculties, because they dealt directly with their supervisors, instead of the administrative staff. Other participants mentioned that the administrators in their departments always supported them with their requests. One of the participants stated the following:

“The fact that I difficulty to obtain funding towards my studies, I could not purchase all the research material that was needed for my studies. I approached the faculty officer and informed her about my difficulty and she assisted me to copy some of the study material. The faculty office contacted some of the students who in the previous year did the course to sponsor some of the notes to me. The faculty officer’s approach was in such a professional manner that she kept my identity anonymous. Within one month I had all the study material that was needed for my studies. The faculty officer was not obligated to assist me but she went beyond the call of duty to extend kindness and support in a professional, effective and efficient manner.” (Respondent 32)

Another excerpt from a student who was deeply grateful for the excellent service he had received, stated the following:

“I am a first year Masters’ student who was unsure of what modules I needed for my studies. I had approached the administrative officer to assist me with choosing my modules. She was well acquainted with the curriculum thus could assisted me well. I expeditiously enrolled for the subjects that she recommended. She was supportive and the fact that she knows her work is

clear from her assertiveness and decisiveness when she is confronted with an issue.” (Respondent 27)

“I am happy with departmental and administrative support that I received from administrators and academics in my department. They are always helpful and assist with resources such as the printing of reading material, study space and sometimes when the need arose with the temporary use of a laptop.” (Respondents 10)

“Our faculties always render good departmental and administrative services to us. Students are welcome to ask for support when the need arises (Respondents 17-24)

Statistics from the surveys in Chapter 4, Table 4.10 and from interviewees indicated respondents were highly satisfied with departmental and administrative services they received from staff at UWC. In Chapter 2 (Du Toit *et al.* 2002:24) concur administrators and coordinators find it necessary to render good professional services to the student population at universities such as UWC. Furthermore, Chapter 2 indicated UWC had adopted policies in line with the KING III administrative protocol which makes provision for the establishment of a public administration system governed by democratic values and principles such as a high standard of professional norms and ethics.

5.5. Main theme 2: Funding

Inadequate financial support is, invariably, a major obstacle to a Masters’ or PhD students’ success, and the basis for impeding time-to-degree completion. For example, a married student, who considers pursuing postgraduate studies, should realistically, and expeditiously, approach potential sources for funding. A participant with dependants mentioned the following:

“As a married man and father, I am the breadwinner of my household. My wife and I earn low salaries and after we pay for our basic living expenses there is hardly any money left. We have two children and must pay pre-school and school fees on a monthly basis. Throughout my studies I am unable to

qualify for funding because our combined income exceeded the middle-test scoring criteria of the NSFAS system. Every year I apply for a bursary or but the response is always unsuccessful. Over the years I have accumulated huge study debt and are currently blacklisted, so I do not qualify for further loans at banks. My continued study is now in jeopardy.” (Respondent 22)

Another participant had a similar encounter, as the following indicates:

“The biggest challenge for me is financial security. Being a student assistant does not take care of all my financial needs. My parents are now pensioners and cannot assist me financially me with the postgraduate studies anymore. I battle to obtain a scholarship, even though my marks are excellent, and I must work most evenings, weekends and during holidays as a waitress to contribute to some of my study fees. The money that I make is merely a drop in the ocean towards my outstanding study debt. Furthermore, it is very time consuming and have a negative impact on my studies. My parents are trying to support me with food, toiletries and other basic living expenses but they are unable to cope with the up keep of the household expenses. If I do not receive a scholarship for next year, I will have to dropout because of outstanding debt and my parents have huge bank debt due to previous years’ unsettled study loans.” (Respondent 25)

Yet another participant indicated that, although he was studying full-time, he worked as a student assistant in the work-study programme to provide for food and living expenses. The following refers:

“My parents use to pay for my undergraduate and Honours studies because both had good careers. There was thus no need for me to apply for funding because they were more than able financially to pay for my studies and other attendant necessities. However, in 2010 my dad passed away and my mom were still able to manage but she had also retired 2012 and then my problems started. For two years she had to obtain bank loans to pay for my studies and had to settle the outstanding debt with her pension. This year my brother is

paying for my first-year PhD studies, but he recently got married and had informed me that he cannot continue to pay my studies. For next year I will need a scholarship to complete my PhD' and I am scared that I might not get the financial assistance and will have to abandon my studies when I am so near the end.” (Respondent 29)

A few more participants stated that:

“My parents are blacklisted and do not qualify for any bank loans because they are currently under debt review. I had applied for scholarships but was thus far unsuccessful. If I do not get a scholarship in this year, I need to seek for a job to save up some funds and might at a later stage return to complete my studies.” (Respondent 23)

“My sister use to pay my studies but after she got retrenched I had to find other way to get funding towards my studies. I received a departmental scholarship in support of my studies”. (Respondent 34)

“I am from Ghana and was awarded a partial government subsidy and a partial NRF scholarship but that is not enough for the year. Due to financial problems, my family are living in squalor and unable to even obtain the necessities. By next term I must seek employment to contribute to the household expenses because I at least have an Honours degree and are the only educated member of my family. I have to drop out in April and will hopefully be able to return in 2016.” (Respondent 13)

“I have a partial scholarship, but it is not enough to cover all my study costs. My husband is the sole breadwinner and he use to contribute towards my studies, but we now have twins and he is no longer able to pay towards my studies. If I am unable to secure a full scholarship I am afraid I will have to drop out next year.” (Respondent 30)

However, three of the forty-five participants were coping, financially as the following quotations indicate:

“My parents were financially able to pay for my undergraduate studies. I am currently a lecturer at UWC and qualify for an exemption on study cost. In other words, I do not pay for my postgraduate studies except the registration cost which is a minimal amount.” (Respondent 11)

“Previously my wife used to pay my studies, but I am currently a lecturer at UWC and do not need to worry about study costs.” (Respondent 5)

*“I had full scholarships and do not have to worry about study costs. All I need to do is to concentrate on my studies and excel academically.”
(Respondent 42)*

A student with a partial scholarship expressed the following:

“I am from Ghana and my government had awarded me with enough funding that would last me for at least two years. This funding does however not cover my basic living expenses or travelling expenses. This is my second year of my Doctoral studies and I do not have enough funds to sustain myself. So far I have been unable to obtain financial assistance here in South Africa because I am not a South African national and I am told that once I complete my studies I will not plough the knowledge back into the South African economy.” (Respondent 43)

Most of the participants originated from disadvantaged backgrounds and were experiencing a shortfall of funds on their student accounts. Eleven of the forty-five participants experienced similar challenges, regarding inadequate scholarship funding and stated the following:

“We have partial scholarships and work as student assistants, but because we live on campus our funding is not enough. That is the reason why we have outstanding study debt”.

Thirteen out of the forty-five participants had no scholarships, and mentioned the following:

“We have been unsuccessful in our attempts to obtain financial assistance. It is difficult to cope with the pressure of studies when the lack of funding is a constant worry. It is not merely money required for the studies itself, but funds are needed for food, accommodation, travelling and basic living expenses. This has had a negative impact on our studies and some of us are ready to throw in the towel”.

Upon closer investigation of the views expressed by the participants, regarding the lack of adequate funding, there was a significant disparity in the student funding process. Due to strict or too rigid criteria, even the most deserving, academically gifted, students were sometimes excluded from obtaining funding. Some participants also indicated that their supervisors could not always support students with funds to conduct fieldwork, or to attend conferences.

5.5.1. Sub-theme 2a: NSFAS Scholarships

Some of the participants were of opinion that the NSFAS funding system was unfair to the ‘missing middle’ students, as their parents and spouses’ threshold income exceeded the middle test scoring of NSFAS. Some of the ‘missing middle’ participants considered themselves deprived of the right to study, without worrying about the financial burden. Additionally, they felt deprived of the privilege, enjoyed by other students, who received NSFAS funding at undergraduate level. They claimed that the 40% rebate, which students received, after successfully completing each year, made a considerable difference to the total amount they had to repay, after completion of their studies. The participants were of opinion that they were deprived of the privilege that final year students enjoyed, with the 100% scholarship, if they passed all their final-year courses, and qualify to graduate.

According to the participants, their parents and spouses had accumulated huge bank loans for study debt, which they would have to start repaying, one month after the funding was received by the university. They stress that, although some parents’ threshold income exceed R350 000 per annum, some of them also support other siblings at university or technikons, as well as household responsibilities to fulfil. These participants state that this income is barely enough

to sustain them; therefore, they suggest that the NSFAS system be cancelled, and a new funding model implemented that also supports the ‘*missing middle*’, to avoid the unfair and unjust treatment of some students. However, the DHET (RSA, 2016) reveals that the universities and the state have recently agreed to render support to postgraduate students, whose families have a combined household income of R600 000 per annum. Such students can now apply for the maximum of 8% towards tuition fees. For example, if the annual tuition fees are R45 000, and the state provides 8% thereof, the contribution of the state would be a partial scholarship of approximately R3 600 towards the student’s tuition fees. (RSA, DHET, 2016:4). The student, parents or spouse, are still liable for the remainder of the study costs. Postgraduate students that meet the criteria for the 8% Government Accountability Project (*GAP*) funding. However, this funding only includes students, who are studying towards a scarce skill qualification, such as, B-Tech Architecture/Architectural, B-Tech Biokinetics, B-Tech Biotechnology, Postgraduate Certificate in Education, Postgraduate Diploma in Accounting, and LLB. All other fields are still excluded from this process which will be a problem because some students will still have to struggle with registration costs (RSA, DHET, 2016/2017:10).

5.5.2. Sub-theme 2b: NRF and External Stakeholder Scholarships

Some participants lamented the exclusionary conditions of the NRF funding model, and that some of the external stakeholders also allocated limited scholarships to full-time registered postgraduate students. The part-time postgraduate students indicated that they were not considered for NRF funding or other external scholarships, because they were employed and earned an income. They were resentful because their salaries barely covered their household expenses. These participants supposed that they should also be considered for NRF and external stakeholder scholarships, as their full-time counterparts. They added that the university should form more partnerships with external stakeholders, such as big business, for more inclusive scholarships to be allocated to the institution. They were also convinced that some departments were lagging behind with scholarships in certain fields of study, as the following quotations indicate:

“I am a PhD studying Industrial Psychology and have applied for a scholarship at various institutions. Thus far I was unsuccessful because most

of the scholarships are allocated to students in Science and other scarce skill fields. The grant that I receive does not cover for private accommodation, travelling expenses and living expenses”. (Respondents 35, 43)

“I have partial NRF funding and in addition thereto also an external scholarship that covers all my study costs. I am a researcher and my company support me with funding towards my studies”. (Respondent 38)

“I do my Masters’ in agriculture development and food nutrition. I have applied for numerous scholarships and had received a partial scholarship towards my tuition fees. Hence I have a shortfall on my tuition fees and accommodation cost”. (Respondent 39)

“I received a partial NRF scholarship towards my tuition fees and books. I do not have outstanding study debt and is well on my way with the studies”. (Respondent 14)

“I’ve got a NRF scholarship of R60 000 but received another external scholarship of R60 000. I was told by the NRF administrator that I cannot have the additional R60 000 scholarship. Eventually I had to cancel the external scholarship but ended up having outstanding debt on my student account. I am on the work-study programme and earn a minimal income and since I had to decline the second scholarship a certain amount is deducted from that income towards my outstanding debt. Aside from that job I was also compelled to obtain an additional job over weekends as a waiter to sustain myself. That had put a lot of strain my studies and I feel burnt out”. (Respondent 26)

During the interviews, most of the students mentioned that they were aware of the increase in the postgraduate population at UWC. Some students acknowledged that it was not economically viable for the university, or the general economy, for them to study for free; however, they recommended that funding models be revised for the provision of, at least, partial subsidies to deserving postgraduate students. The general view was that they required financial support from the registration stage. According to Pandor (2007) it is pivotal for

universities to focus in assisting Masters' and PhD students with adequate funding to ensure that financial constraints do not deter their academic progress. Adequate funding would, not only keep postgraduate students in the system, but also boost poor enrolment, attrition and graduation rates. According to the information described above, the amount of partial and full scholarships awards, which UWC receives from external stakeholders, is not enough to support all students with funding as mentioned above.

Most of the participants considered funding a constraint to the progress of their studies. They suggested that the university and government explore a funding model, such as NSFAS, in which, possibly, a 50/50 scholarship-loan model could be implemented to support postgraduate students, in all fields of study. For example, it could include a provision that, at the completion of their studies, those who had benefitted from the scholarship-loan, must complete an internship for a specific period, at the institution that awarded the funds. The student, therefore, would be paying off their scholarship loan, while, simultaneously, gaining experience to in the workplace that simultaneously improve their prospects of future employment.

5.6. Main theme 3: Accommodation

Accommodation plays an important role in the lives of international and national postgraduate students, who have to travel long distances, locally, or from foreign countries. Some participants disclosed there was no accommodation available to them when they first arrived at the university. They admitted that they did not apply in advance for accommodation due to funding constraints. They had hoped that departments and administrators would be able to assist them with funding and on campus accommodation, when they arrived at UWC.

“I was under the impression I can apply for accommodation upon my arrival to UWC. To my surprise I realised that should in advanced applied online to obtain accommodation. Thus, I had to find accommodation around campus but did not have enough finances to so.” (Respondent 26)

Other participants stated the following:

“I arrived from Zimbabwe and found myself in a situation where there was no accommodation available for me upon my arrival at UWC. I applied online for on-campus accommodation but there were no rooms available on campus. I was unsuccessful in my funding application. For a year I had to stay at a Homeless shelter in Bellville. I later joined a church and the pastor offered me a room on the premises for free. All I needed to do is to take care of the maintenance of the church. I lived there until the second year of my studies when I managed to get a scholarship and residence accommodation.”
(Respondent 39)

One student experienced the same problems and stated the following:

“I had no accommodation when I came to UWC from Nigeria. I had to squat with two other students in a one single bed room, where I had to sleep on a blanket on the floor for nearly six months before there was a cancellation and a room became available on campus”. (Respondent 20)

This study reveals the shortage of accommodation at universities, such as UWC, as residence is a non-academic factor that has a huge impact on some students’ achievements (CHE, 2014). Thus, it is crucial that universities, the state and external donor institutions, prioritize the inclusion of accommodation costs into the allocation of scholarship funding to postgraduate students (Bekurs, 2007; Jones, Coetzee, Bailey & Wickham, 2008).

5.6.1. Sub-theme 3: Low morale and depressive feelings

In this current study, some students indicated that they had experienced various unpleasant incidents that, in their opinion, caused depression. This would affect them to such an extent that they would be unable to perform, adequately. Once students were diagnosed with depression, and had to receive treatment, they often have to dropout of university because of the side effects of the treatment. One participant stated the following:

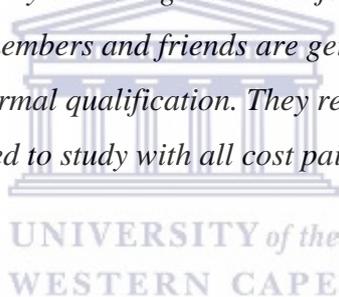
“I became depressed because my studies and heavy workload and financial constraints was too much to deal with. I tried to concentrate on my studies, but

it was difficult because I was on medication that were the reason I had slept a lot and on top of it I cannot find a suitable job to my qualification". (Respondent 26)

Another student had a similar experience at her place of work and stated the following:

"My studies and other work-related issues made me become depressed. I was on sick leave but were mostly sleeping because of the medication that I had to drink thrice a day. I was on sick leave of for a month and were no able to focus on my studies because I constantly felt tired and sometimes useless. I struggled with my studies and financially did not cope on campus". (Respondent 25)

"I became depressed because I studied and obtained my Masters' qualification after so much difficulty in getting time off to do my research. I also experienced severe nepotism and favouritism processes in my working environment hampered my chances get suitable job that compliments my qualification. Family members and friends are getting the jobs in my working environment without formal qualification. They receive the necessary training and are allowed to study with all cost paid while they are in the job". (Respondent 16)



Another respondent stated:

"I started my Masters' study in 2009. I struggled with the studies because I had no idea how to start writing a proposal or to structure a thesis. I was dependent on my supervisor for assistance. With my heavy workload, heavy studies and family responsibility I became severely depressed and had received treatment for more than eighteen months. I had decided to dropout and cancelled my studies". (Respondent 21)

At university, students are exposed to a significant transition regarding lifestyle, friends, roommates, cultures, behaviour, and alternate ways of thinking. Some participants reported

that when they were battling with difficult issues, they easily became susceptible to depression, a concept confirmed by (Bourne, 2015).

5.7. Main theme 4: Completion rates and time-to-degree

Often students would dropout for a certain period, due to unexpected circumstances; however, most students with challenges would often require a substantial amount of time to resolve their problem/s and would return at a later stage to complete their studies, as mentioned in the introduction of Chapter 1. When a student remains in the system longer than expected, it causes frustration. During the semi-structured interview process, one of the participants stated:

“I had received a message from my wife who informed me she was unable to financially cope on her own and that I needed to come home to support our family. I need to go back to Nigeria as soon as possible. I had foreseen that I might have to interrupt my studies to go and work and to return to continue with my studies when my family is financially stable. I will be leaving in June I will continue with my studies and will probably come back to graduate when the time comes”. (Respondent 41)

Time-to-degree plays an important role in the throughput and completion rates of a university. When students do not complete their studies in the expected time-frame, it affects efficiency and places a strain on supervisors and university resources (RSA, DHET, 2009). Therefore, universities should do their utmost best to support postgraduate students with their socio-economic challenges, to enable them to complete in time, improving completion and graduation rates (Council on Higher education [CHE], 2009:16).

5.7.1. Sub-theme 4: Supervision and inadequate student support

In this current study, the responses from the interviewees provided a clear indication of the quality of supervision required for them to be successful. It seemed that most of the participants had a problem with the quality of supervision, the accessibility of the supervisors, and the lack of people skills from their supervisors. The following excerpt refers:

“My supervisor went on sabbatical leave for six months and did not assign a care taker supervisor to assist me in her absence. I am so frustrated and sometimes feel despondent without supervisor support. I have this feeling of loneliness and isolation and do not know who to turn to when I am stuck with my studies. I have reported this incident to the head of department who had given the undertaking that she would investigate the matter. After several attempts the Head of department had assigned another supervisor to assist me”. (Respondent 25)

A participant, who did not know how to structure a proposal, stated the following:

“I have never been involved in the writing of a proposal or in writing chapters of a thesis. I had no idea what the content thereof entails. It was difficult to get hold of my supervisor because when I left messages at her office I was informed that she would get back to me. She never responded. Eventually, when I got hold of her she informed me that she was leaving the institution that I should contact the department to find out who will supervise me”. (Respondent 27)

Another participant, who did not know how to start writing a proposal and chapters, mentioned the following:

“I lack knowledge how to write a proposal. My supervisor had explained what I should do but I feel the need for personal contact with a person that could regularly assist me until I am confident enough to work on my own. After I read an e-mail about the postgraduate division, I visited the department who had assisted me with a mentor who currently support me through my studies”. (Respondent 31)

A student, who had a similar experience, stated the following:

“As a PhD student I feel my supervisor should consider providing more time to support me with the content of my work. He has half an hour or sometimes three-quarter-hour time slots with students because he is constantly busy.

Often I need his attention with the content of my work but feel uneasy to approach him because on previous occasions he was impatient and makes me feel like I am a nuisance”. (Respondent 26)

Yet another participant claimed that her supervisor did not provide feedback timeously, when she submitted a chapter, as up to two months passed before there was any feedback on her work. The following extract refers:

“My supervisor had taken approximately two months to provide feedback on work that I had submitted to her. When I eventually received the work, she did not give proper feedback on the content and layout of the thesis. Mostly I had to struggle on my own and it makes me feel demotivated and depressed. I must rely on fellow PhD students to assist me with the formulation and content of my thesis. I realised that it is important for me to continue with my studies to obtain my degree because I need to improve my living condition”. (Respondent 30)

A participant reportedly experienced some problems, when attempting to register for the Masters’ degree. The following quotation refers:

“I met the criteria and had applied for the Masters’ in human resources and Development Management. I had completed my Honours degree and got 70% average upon completion. I applied way in advance before the closing date. I was not accepted to the programme. I received a letter via post that my application was declined. When I made enquiries, I was sent to the head of the department who informed me my application was unsuccessful because they did not have a lecturer that had the expertise to offer that specific coursework to supervise students. He said there was no funding to employ someone from outside to offer the course. He suggested that I go back to my previous department because there may be someone there who could supervise me”. (Respondent 32)

Although most participants reported they are satisfied with the supervision services provided in their departments, others encountered problems with supervision support. The above-mentioned challenges need serious attention, for the sake of effectiveness and transparency, time-to-degree and graduation rates. More importantly, it was evident that there was the lack of a supervisor/student relationship and ignorance of supervision code and conduct, which was hampering the progress of some students' research projects. According to Bunting, Sheppard, Cloete and Belding (2010), as well as Mouton and Hunter (2001:108), academics with PhDs are required to feed both, the academic profession and knowledge production. Armstrong (2004:600) and Buttery, Richter and Filho (2005:19) assert that when a PhD student needs supervision in an area outside their supervisors' expertise, the supervisors should make the extra effort to become acquainted with developments and trends in that field. Supervisors are supposed to guide and adequately supervise students until the completion of their theses. As indicated in chapter two of this study, the shortage of suitably equipped academic staff and the continuing ageing of the same cohort pose a serious constraint on the fundamental growth in doctoral enrolments in the near future.

5.8. Conclusion

Based on the results of this current study, it becomes apparent that some postgraduate students had some unpleasant experiences during their postgraduate studies that was a matter of concern. Thus, the problems should be prioritized, in order for students to successfully complete their studies, in time. This study examined the trends in time-to-degree and its relationship with social economic challenges, such as funding, enrolment, registration, departmental and administrative service and accommodation that Masters' and PhD students experienced during their study period. The next chapter is the final one that comprises the conclusion and recommendations.

CHAPTER SIX

CONCLUSION & RECOMMENDATIONS

6.1. Introduction

In this current study, it was revealed that UWC had made tremendous strides with its policy frameworks that is in line with the government's National Development Plan (2012) and other policy frameworks as mentioned in Chapter 2 of the study. The National Development Plan (2012) outlines the implementation framework for achieving the vision and goals in line with the White Paper (RSA, DHET, 2013a), as it suggests targets for the size and shape of the higher education sector holistically. The policy frameworks include both postgraduate and undergraduate enrolment growth, including enrolment growth for the disabled.

However, UWC's goal is to grow the postgraduate enrolment numbers to 5726 in 2019 as well as to retain existing students in the postgraduate programmes until completion of their studies (Pretorius, 2019). UWC aims to grow postgraduate enrolment numbers by collaborative digital partnerships, to rapidly build a culture of digital inclusiveness that connects people through various technologies (nationally and internationally). UWC envisages to produce more Masters' and PhD students in critical scarce skill areas to reduce the national scarce skills gap. As previously mentioned in Chapter 2, the systematic annual increase in postgraduate enrolment numbers continues to display a positive response to human potential and socio-economic development growth. UWC's IOP serves as a guiding framework for leadership to monitor, evaluate and analyse enrolment trends in line with other policies as stated above and as mentioned in Chapter 2.

The aims and objectives of this study were adequately assessed and the gaps found were evaluated to find solutions in line with policy imperatives of UWC and the state. This study concludes with recommendations for improvement in the enrolment and registration processes of postgraduate students, administrative and departmental services, supervision support, the availability of accommodation, and the funding mechanisms. It further discusses ways to address student preparedness as well as student depression, in order to decrease time-to-degree and to improve on time completion rates.

6.2. Enrolment and registration

Research question 1: *What were the obstacles that postgraduate students experienced during the enrolment and registration process at UWC, and what measures were implemented to address these issues?*

The persistent problem of funding towards enrolment and registration and historic debt is still a huge drawback that impedes postgraduate study. In addition to the growth of enrolment, UWC has become aware of the “balance of enrolment shifts in relation to the postgraduate ratio, capacity, strategic academic goals and quality educational experience of students” (Tremblay, Lalancette & Roseveare, 2012:20-22). The fact that postgraduate students had some difficulty to register as mentioned in Chapter 4 and Chapter 5 by respondents, UWC had to revisit and broaden its postgraduate scholarship support on campus. The institution’s aim and goal is to have a scholarship support system in place by 2021 to render support to existing postgraduate students to such an extent that their student accounts will completely be settled the following year upon registration. The 8% grant towards tuition fees that NSFAS implemented for postgraduate students are only relevant to students who do not have any outstanding debt or historic debt on their student accounts. These students can successfully register without worries of financial constraints whereas it was and currently is a different scenario for the ‘missing middle’ postgraduate student with study debt on their student accounts.

In addition, through fundraising initiatives UWC had signed various MOAs and MOUs with local and national stakeholders in support of postgraduate scholarships at Honours, Masters’ and PhD level. Some donors do not feel comfortable to provide scholarships to fund third or fourth degrees. They prefer to provide financial support to students for undergraduate studies, some would provide financial support up to Honours studies. However, many are of the opinion that Masters’ and PhD students must work to accumulate funding to pay for their own studies (Moshal Scholarship Programme, 2019). Some students that had obtained a scholarship before the registration period or that had a continuous scholarship can get cleared to register with a bursary letter from the donor in the ensuing academic year of study. Those

that were nominated by their department for a bursary can get written confirmation from the departmental coordinator in charge of the particular scholarship.

6.3. Service challenges

Research question 2: *What were the challenges that postgraduate students experienced, regarding administrative, departmental, accommodation and supervision services?*

6.3.1. Administrative and departmental services

UWC has excellent practical policy guidelines in place to streamline an effective, transparent and co-ordinated administration component, as well as good service delivery in each faculty and department. The link between good administrative services and policy guidelines, is that properly structured service delivery is dependent on the institutions' policy guidelines to regulate its functioning. This interdependency determines how effective, good and transparent administrators, or coordinators, fulfil the role of governing a department. As previously mentioned in Chapter 2, good governance improves administrative service performance and accountability, and ultimately enhances service delivery rendered to the student population, as stipulated in the King Report III (King Committee on Corporate Governance for South Africa, 2009). In addition, it enhances productivity and effectiveness in support of academic staff, with the tracking of student performance. Ultimately, the institutions' improved student development services, provide better structural and organizational alignment, co-curriculum collaboration across faculties and departments (UWC, 2014a:10).

As respondents had mentioned in Chapters 4 and 5, according to the perception scores of the study, students are highly satisfied with departmental and administrative services and resources across faculties on campus. Most of the respondents are of opinion that administrative and academic staff members go beyond the extra mile to ascertain that they have adequate resources and support while they are working on their research projects. One of the respondents in Chapter 5, mentioned how an administrator assisted with NRF funding after attending classes with no or little hope of obtaining funding towards her studies for the year. UWC had improved its student administrative system across the institution not only to strengthen administrative

governance procedures, but also to improve throughput and graduation of its students, working in strong alignment to pursue mutual purpose and output.

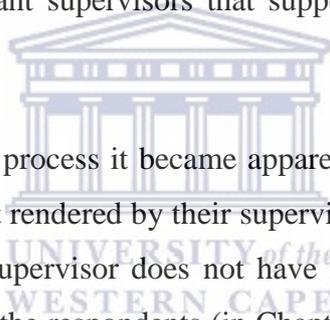
6.3.2 Accommodation challenges

UWC strives to assist as many postgraduate students as possible with accommodation upon enrolment, but cannot assist all students due to insufficient residences on campus. Essentially, it is important that, when postgraduates apply to study at UWC, they, simultaneously must, apply for residence accommodation should they wish to stay on campus. Consequently, students would be informed, in advance, whether they would be accommodated in campus residences, or whether they should seek private accommodation. If students are not successful with securing accommodation on campus, administrators might be able to assist them with information of boarding houses around campus, and elsewhere. As some boarding houses work closely with residence coordinators and the financial aid office to ensure that postgraduate students are provided with nearby and cost effective accommodation. In addition, it is important for students to apply for scholarships, in advance, to ensure that they have adequate funding, which includes private accommodation costs. Subsequently, it is important that students seek accommodation in safe areas, within walking distance to campus, to avoid additional transportation costs, as mentioned in Chapter 2 (CHE, 2014). In Chapters 4 and 5 students were highly satisfied with accommodation conditions on campus or elsewhere where they lived. However, in Chapter 5 some respondents that are commuting mentioned it is important for them to find a scholarship that includes travelling costs. Essentially, adequate residence accommodation is a general problem with regards to postgraduate students and because some students are older, they prefer their privacy and prefer to live in private accommodation. However, UWC is committed and strives to find a solution to the accommodation problem in the near future.

6.3.3. Supervision support

UWC's Research Ethos and Code of Conduct contain clear guidelines on what is expected from both the research supervisor and the researcher during a research project. In this current study, especially in Chapter 5, it became apparent that some supervisors did not pay much

attention to the existing research policy frameworks, on how to engage with their supervisees. The failure to advise and motivate students through the process of choosing a topic, or to assist them, in a proper manner, with the conceptualisation and structure of their research topic, does not inspire confidence in the abilities of the supervisor, and influences the lack of progress of the student. The lack of staff with adequate knowledge and skills in specific fields of study, not only affects student completion and graduation rates, but also impacts negatively on the institution, as well as the economy of the country. Gabrielle (2001) opines that the unique experience of a supervisor, in a specific field, not only benefits the student, but also helps to improve and broaden the supervisor's understanding of a specific topic, as knowledge is seldom static. In most cases, students lack the confidence to approach supervisors with their problems, due to a breakdown in communication between them (Guri-Rozenblit, 2009). Kiley and Mullins (2004) observed that the quality of the supervisory process, and ultimately the output, is a direct function of the supervisor. In Chapter 4, students generally indicated that they were satisfied with the services rendered by their supervisors in their departments. Some students felt that they had brilliant supervisors that supported them in all aspects of their studies.



In addition, during the interview process it became apparent that some students were not so satisfied with supervision support rendered by their supervisors. This is to such an extent that some students mentioned their supervisor does not have adequate knowledge and skills to properly supervise them. Two of the respondents (in Chapter 5) also mentioned that they had experiences where their supervisors were not adequately equipped in their field of study. They felt frustrated and had to seek the necessary support from the postgraduate division. It sometimes happens that a student experiences problems with the supervisor but does not immediately speak out because the student is scared of victimisation. It is equally frustrating if a student respects a supervisor and sees the supervisor as a role model, but after some disagreement the student is subjected to some form of abuse to such an extent that thesis submit time are extended. UWC had strengthened its' supervision monitoring and evaluation systems by implementing a postgraduate monitoring and evaluation progress review system in each faculty.

6.4. Funding

Research question 3: *How did students cope with partial scholarships/loans, or no scholarship/loan while studying at UWC?*

Inadequate government and external scholarship support for Masters' and PhD students was mentioned by various respondents as one of the most impeding factors influencing student completions. Various collaborative partnerships were formed and expanded by UWC, at national and international level, to address the long-standing, pressing challenges of scholarship support on campus. However, with the influx of more postgraduate students, more external partnerships are required to increase postgraduate scholarship support, which currently, is progressing at a slow pace. In both Chapters 4 and 5 some of the 'missing middle' respondents mentioned that they were dependent on loans and funding from family members and friends to support their studies. Respondent's perception was that since NSFAS had introduced a new funding model that included the 'missing middle' postgraduate students to receive 8% towards their total tuition cost in 2017, it is only a small portion of funding towards their study costs.

Respondents are of opinion that NSFAS should consider a full scholarships system that is also beneficial to the 'missing middle' students at postgraduate level, similar to what undergraduate students receive annually. The respondents were of the opinion that government should review the NRF system urgently, to increase the limited full and partial scholarships provided to successful postgraduate students each year. Furthermore, respondents is of opinion that they realised the overhaul of a funding system is magnitude responsibility for to government to resolve over a period of time. They stated the solution of the funding systems is not only for government to resolve but it must be a collaborative approach of national and international public and private stakeholders. Participants also stated that the NRF should review their funding allocation to postgraduate students, to ensure that postgraduate students that excel academically, that continue to study from Honours to PhD level received funding from them until completion of their studies. Participants feel that the shortage of PhD's specifically those in scarce skill fields in the country to some extent is a result that the 'missing middle' postgraduate student was deprived the right to fair and equitable funding towards their

education. They feel that this was an unjust to a lot of students that had to quit their studies because they had to go work after under graduate or honours studies to uplift them and their family households.

6.5. Inadequately prepared students

Research question 4: *How did inadequately prepared students cope with the existing gap in research skills and knowledge, after being promoted from Honours level to Masters' level, or from Masters' level to PhD level?*

The injustice of the apartheid era, to this day, still haunts the higher education system, with the inadequate preparedness of university students, who are endeavouring to succeed at postgraduate level. On entering postgraduate studies, postgraduate students had to perform at a professional academic level; however, some of them have not been trained, or informed about the realities and pressures of research, critical thinking, choosing a topic and the structure of a thesis. The culmination of this inadequate preparedness has led to a lack of confidence and progress, as well as performance, as mentioned by some respondents. UWC has implemented a tracking system, to timeously alert academics of the risk areas in graduate performances, in order to provide mentor training, where necessary. UWC must regularly improve its strategic plans, in the quest to find creative ways to increase success rates. Supervisors should regularly assess the progress of postgraduate students, to ensure that they are coping, and to frequently provide feedback on work performance, and guide students to attend research activities organised by departments or the university. Some Masters' students (see Chapters 4 and 5) revealed that they were inadequate prepared to perform adequately in certain areas of their study to such an extent that they dropped out of the programme. Students who feel inadequately prepared should make use of the postgraduate training and development sessions and writing retreats offered by the postgraduate division to enhance their skills.

6.6. Student depression

Research question 5: *How did postgraduate students cope, after experiencing depressive episodes, during their study period at UWC?*

UWC has an in-house Community and Health Sciences Faculty, with a medical unit and highly qualified medical practitioners and specialists, to render a service to Masters' and PhD students, who suffer from depression, and are unable to cope with their studies. Postgraduate study is a major life event that could generate depressive feelings, due to the drastic life experience of many changes happening simultaneously. Students, originating from a disadvantaged background, are often vulnerable, especially those who have high expectations, with little, or no financial, or social support structures, to sustain them. Depression has become a common phenomenon amongst students at universities. Although the depression perception score was low, about thirty percent of students (in Chapter 4) stated that they had, in the past few months, become depressed due to heavy study workload or other pressures. Two of the interviewed respondents (in Chapter 5) became depressed due to extreme nepotism and favouritism in their workplace. It is important that universities like UWC respond positively to student wellness by establishing student wellness facilities and student network groups to provide psychological support, as well as coping mechanisms, throughout their studies. Student depression over the past few years at universities in South Africa had escalated for various reasons, in some extreme cases, students became severely depressed and have committed suicide. This is not only students, but a senior academic professor at University of Cape Town had also committed suicide due to depression and various other reasons (Sunday Report:7, July 2019).

6.7. Time-to-degree and completion of studies

Research question 6: *What were the internal or external socio-economic factors that affected the time frame, within which postgraduate students were expected to complete their degrees?*

Some students at UWC do not complete their studies within the expected time-frames due to various problems they encountered during their postgraduate studies as indicated in Chapter 2 and Chapter 5 of the study. One of the respondents that was interviewed mentioned that he had to urgently leave to go home to Nigeria due to family responsibilities. The respondent indicated that he was uncertain when he will return to complete his thesis. He further stated that he might not study within the following two years due to circumstances at home. Some postgraduate students mentioned during the interview process (Chapter 5) that they are full-time employed,

and have family responsibilities, and often unforeseen circumstances prevent them from graduating in the prescribed time.

This study has highlighted various factors that influence the expected timeframe of the degree. The institution had strengthened existing policy frameworks and has addressed postgraduate student and staff development to meet UWC IOP (2016-2020) targets (see Section 6.8). The National Plan (2012) outlines the implementation framework for achieving the vision and goals in line with the White Paper (RSA, DHET, 2013a), it establishes suggested targets for the size and shape of the higher education sector as a whole, that includes both postgraduate and undergraduate enrolment growth, employment equity of academic staff, and training and development programmes for staff and students. The framework further outlines staff and student participation rates in development programmes, institutional and programme mixes and equity efficiency goals and participation rates. It provides a framework and outlines the processes for the restructuring of the institutional landscape of the higher education ICT systems, especially in scarce skill fields (HESA, 2017). The Ministry is committed to use various earmarked funds to realise particular policy objectives such as, for example, research capacity-building through training and development programmes at postgraduate and undergraduate level and increased access for poor students and the disabled to higher education. The Ministry is committed to support universities to improve student support services, accommodation, research grants and scholarship support and academic support (HESA 2017).

The effective use of funding as a steering lever requires the development of a new funding formula based on the funding principles and framework outlined in the White Paper (RSA, DHET, 2013a). The Ministry is in the process of finalising the development of a new funding formula. A draft funding framework will be released for consultative purposes towards the end of March 2020. It is anticipated that a new funding formula will be phased in from 2021. This combination of planning and funding levers to achieve policy objectives involves a model of implementation in which the Ministry will determine the overall goals for the higher education sector and establish incentives and sanctions to steer the sector towards these goals.

6.8. University of the Western Cape's interventions

UWC has taken an interest in this study and had strengthened its policies in line with the results of this study and with government policies as stated above. The IOP serves as a guiding framework for leadership to monitor, evaluate and analysed the impediments as mentioned throughout this study. The institution's goals are as follows:

- UWC is committed to grow its postgraduate enrolment numbers more in scarce skill programmes and to improve e-skills programmes through collaborative digital partnerships (nationally and internationally). This is to rapidly build a culture of digital inclusiveness that connects people through various new technologies.
- UWC's international standing and connectedness raises awareness, prominence and stature that improved the institutional chances in securing large-scale joint funding for postgraduate training and development and research abroad. The institution is a leading player in national and international research projects in a number of disciplines addressing the global challenges of our time.
- UWC had strengthened existing major partnerships, opened the door to new partnerships, and focussed attention in expanding relationships with universities in the developing world and in Africa.
- UWC had strengthened its student administrative system across the institution as mentioned in Chapter 2, so that administrative and academic governance procedures, throughput and graduation of its students work in strong alignment in pursuit of mutual purpose and output.
- UWC is committed to resolve the accommodation problem on campus, therefore the institution had bought a plot of land in a nearby area that is walking distance from campus. The residence building project will hopefully be completed in 2022. As a result more postgraduate students will benefit from this accommodation in the near future (UWC Internal Policy Document, 2019). Private landlords are also busy with huge

building development projects within five minutes walking distance from campus that would benefit both postgraduate and undergraduate students (Seal, 2019). Adequate security will be employed to monitor and guard the premises (Seal, 2019).

- As mentioned in Chapter 2, UWC is actively involved in fundraising activities at national level. Some of the Seta organisations are currently sponsoring the institution with funding at postgraduate level, although it is limited to a certain maximum amount per student. Some of the criteria allow for split funding over a period of two to four or five years depending on the type of qualification the student is studying towards. Some of the Seta organisations had agreed to sponsor postgraduate programmes at UWC in 2016 for 2017, whereas other Seta's started their sponsorship to UWC in 2018 and 2019.
- UWC has signed various MOAs and MOUs with private external donors for research grants and postgraduate scholarships but it is also limited and at a slow pace. The postgraduate funding initiative needs continuous monitoring and evaluation and commitment from UWC if the institution wishes to make a valuable contribution towards financially needy postgraduate student's registration costs at the beginning of an academic year. UWC strives to be committed in finding ways to support financially needy postgraduate students especially the "missing middle" students with some sort of funding towards their studies, accommodation and living expenses. This is not an easy task especially with some donors who do not have an interest in sponsoring postgraduate studies for example the Moshal Scholarship programme. UWC did its utmost best to support as much as possible postgraduate students with funding towards their studies. In essence, with the slow pace of scholarship support from external donors and the increase in postgraduate enrolments, the institution has a long way to go before it can declare to assist all financially needy postgraduate students in the system with adequate funding. However, the postgraduate funding gap is huge and it is highly impossible for the institution to accommodate all postgraduate students with funding towards their studies. Free studies is not a possibility for all thus if a "missing middle" student does not have a scholarship, it is important that those of the high income households contributes with payments towards their child or children's studies.

- Over the past two years, UWC had positively responded to the challenges of postgraduate students supervision support. Supervision support became under scrutiny to such an extent that the institution had strengthen its supervision policy and had established a supervision committee in each faculty since 2018. In addition, when supervision versus student problems are reported to senior officials of these committees, they do their utmost best to resolve the problems. If the problem cannot be resolved by this committee it gets reported to faculty Higher Degrees Committee. If the Higher Degrees Committee cannot resolved the problem it is referred to Senate Higher Degrees Committee that have meetings on a monthly basis. UWC recently also initiated an anonymous online system, where students can anonymously report any unpleasant supervision experiences.
- UWC's postgraduate division offered various types of workshops as mentioned in Chapter 2 to assist inadequately prepared postgraduate students with knowledge and skills needed for their research. As mentioned in this study, the postgraduate division has been in existence since 2004 and actively involved in offering training programmes to postgraduate students. Some of the programmes were offered as a short course during the week and on Saturdays. However, during the interview process it became apparent that some inadequately prepared students were just not interested in taking these courses whereas some other students admit that they were not aware that the division existed. Many universities had established postgraduate divisions and departments as mentioned in Chapter 2 to assist inadequately prepared postgraduate students with additional training towards their studies (HESA, 2017:43). The training is to eradicate inadequate student performance at postgraduate level (Workman 2011). Across the continent, universities attempt to maintain high levels of quality postgraduate performance, with increased throughput and graduation rates (Van den Berg, 2015).
- It is important that postgraduate students honour the expected timeframe of their qualification especially those who are dependent on donor funding. If they do not meet certain research miles stones, it will have a negative effect on continuous future funding. Various reasons have been mentioned for prolonged time to degree, but this not only affects donor funding, it also reduces the availability of residence

accommodation, and negatively affects subsidies earned by completions. UWC implemented a tracking system as a tool to alert academics and supervisors timeously, of the students' progress and performance with their research. In addition, UWC had implemented a financial penalty mechanism for those students who do not complete in the expected timeframe of their degree. The penalty tool might enhance student performance to complete Masters' or PhD studies on time.

6.9. Training and development of staff

UWC has become an outstanding research innovation institution and has also given attention to staff development and training programmes to meet the target of staff with PhDs in line with policies. Senior academics are actively involved in various training and development programmes and workshops to empower younger supervisors. The training also ascertain that upcoming researchers and academics in the second or final year of the PhD received the necessary training to enable them to make a success of their careers and to complete their studies in the expected timeframe of the qualification.

6.9.1. The Centre for Innovative Education and Communication Technologies

Since 2013, the Centre for Innovative Education and Communication Technologies (CIECT) had positioned itself within the context global transformation of higher education institutions (HEIs) in response to a wave of dynamic education sector reforms. The centre is progressive and is on the fore-front of UWC's training and development of staff and students (Stoltenkamp, Kies, Braaf, Pretorius, Ahmed & Daniels, 2013). The centre provides all the necessary technology online training and development programmes and workshops from basic to advance to staff, students and the community to upskill them with technology skills as required. The academic training includes the adoption of educational technologies to enhance teaching-and-learning practices, education management, research and administration. Due to the increase in enrolments at both postgraduate and undergraduate level the strain on higher education institutions has intensified. Therefore, the inevitable integration of technology into training programmes, has become important.

6.9.2. International collaborative training and development programmes

Developing the Scholar Programme (DSP), United States Development Programme (USDP), and the Academic Doctorate Advancement Project towards Transformation (ADAPTT) are programmes that were initiated to upskill the up-coming academics (Frantz & Sokupa, 2018 and Smith 2019). The programmes aimed at teaching inexperienced academics how to develop their research profiles; how to conduct systematic reviews and data base searches both at national and international level. They are equipped with skills to conduct professional ethical research and to write funding proposals. Furthermore they are trained on how to become a good supervisor, facilitator, mentor, or coach in order to lead a research team or a department in future.

Furthermore, (Frantz & Sokupa, 2018 and Smith 2019) goal is to play an enabling role by integrating people, resources and opportunities that make it possible for researchers, at every stage of their career, to develop and excel. The authors are actively involved in international funding opportunities and exchange programmes to provide adequate funding support to academics on these programmes. This allows them to have adequate funding for publications and to attend necessary conferences and to do the research without having financial constraints.

UWC has become an outstanding research led institution that combines research training with increased e-skills programmes.

6.10. Challenges

The challenges mentioned in this section indicate some proposed improvements to support postgraduate students at UWC. Funding remains a continuous challenge that needs to be revised regularly. The allocation of funding must be considered when officials negotiate with sponsors for scholarships. In some cases there is an overlap of funding where some departments receive too much support and certain study fields are left with limited or no funding.

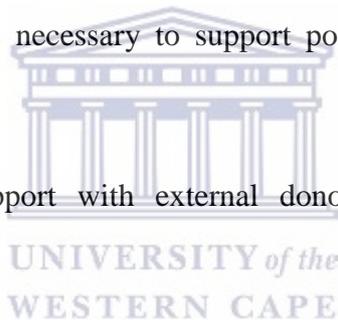
As mentioned in Section 6.3.2, on campus accommodation for students is still a very important aspect that needs urgent attention. When students reside off campus it could result in long and expensive daily traveling.

Time-to-degree, completion of studies and retention of students will remain a challenge unless postgraduate students in the system are continuously assessed and monitored.

6.11. Recommendations

UWC has made tremendous strides, through various policy frameworks, to improve the content and quality of its postgraduate programmes, by the implementation of various strategies, programmes and projects. The high quality academic performance of Masters' and PhD students, has given rise to an increase in several major international scholarships through partnerships and capacity building programmes with international stakeholders. UWC had managed to improve the success rate, as well as completion rates of postgraduates. However, it is evident that UWC lags behind with postgraduate scholarships, to support students with adequate funding towards their study costs. Consequently, the researcher recommends that the following should be revisited and considered for improvement:

- A new funding model is necessary to support postgraduate student with adequate funding;
- Negotiate internship support with external donors for after the completion of postgraduate studies;
- Ensure that toiletries are included in the emergency food parcels that students receive as the need arises;
- Negotiate with sponsors to abide by the Code of Conduct, according to their MOAs, in terms of payments made to the institution. For example, if the MOA states that the scholarship is for the 2016 academic year, the payment must be made to UWC in 2016, and not in the following year, as it creates frustration and anxiety among the students;
- UWC should negotiate with donors to transfer bursary payments no later than the end of July each year otherwise they must pay the accumulated interest starting the 01



August of the specific year on their entity, for each student account as a penalty for late payment similar to that of neighbouring universities do;

- UWC should consider a discretionary fund in support students' accommodation, food and book payments whilst waiting on donors to pay bursary funding to the institution;
- Since there is not yet an discretionary grant at UWC it is important for the institution to ensure that full-time postgraduate students in waiting of their scholarship payments during the year received the same privileges with pick n' pay vouchers as the undergraduate students.

Furthermore, UWC must consider to centralize the postgraduate division to deal with the following aspects:

- Research administration and academic staff;
- Research training and development;
- Training and development for international projects;
- National scholarship administration;
- International scholarship administration.



The postgraduate division has a highly qualified director and adequate administrative staff to render quality service to the postgraduate student population. Funding systems are in place but the division does not play an adequate role in terms of postgraduate bursary support that suits a postgraduate division's profile.

6.14. Future research prospects

This study's results provide an opportunity to expand the research by collaborating with other researchers on similar studies, at both national and international level. It would be interesting to see which postgraduate challenges are similar or different at various institutions. Ways on how the various unresolved challenges need to be addressed can further be explored in the

future. The researcher will continue to explore the postgraduate challenges at UWC and other universities to find positive outcomes to existing obstacles at universities.

6.15. Conclusion

This section of the study concludes the study on the challenges impeding Masters' and PhD students from successfully completing their postgraduate studies at the University of the Western Cape from 2009-2013. Numerous pieces of legislation and policies, appear to be viable and had brought about solutions to the existing shortcomings, The university had addressed the impediments mentioned throughout this study but there are still some areas that need improvement. Looking back over the a twenty-five years of democracy and UWC's 2010-2014 strategy, the institution has had productive years, where much change and excitement has led to some resounding successes and achievements. Through sound financial management and strong performance management, UWC has achieved in most areas. UWC's leadership prioritises human capacity development as the catalyst and strives to provide optimal solutions to fill the gaps in the system by ensuring world-class knowledge creation.



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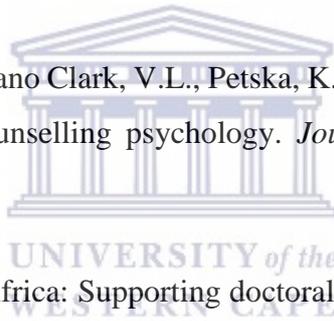
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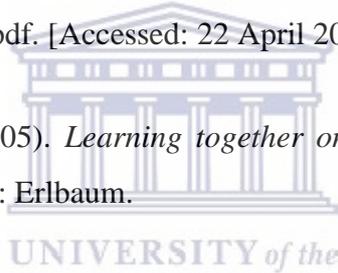
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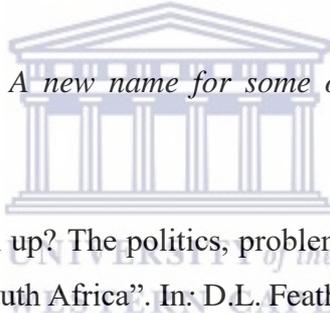
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APPENDICES

Appendix 1: Letter of consent - Senate Research Committee



DEPARTMENT OF RESEARCH DEVELOPMENT

26 April 2017

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:
Prof L Holtman and Ms P Lewis (Postgraduate Studies)

Research Project: Challenges of postgraduate students at the University of the Western Cape 2009-2013.

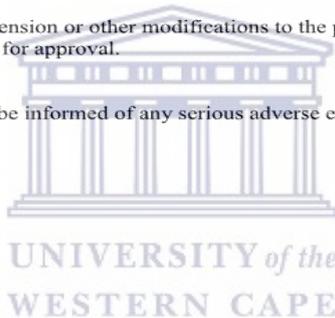
Registration no: 13/1/15

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.

A handwritten signature in blue ink that reads 'Josias'.

*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 21 959 3170
E: pjosias@uwc.ac.za
www.uwc.ac.za

A place of quality,
a place to grow, from hope
to action through knowledge

Appendix 2: Letter of consent - School of Government



FACULTY OF ECONOMIC AND
MANAGEMENT SCIENCES
SCHOOL OF GOVERNMENT

4 February 2013

To whom it may concern,

RE: STUDENT QUESTIONNAIRES - SCHOOL OF GOVERNMENT

Requested by :Priscilla-Anne Lewis, St.number: 2257663

This letter serves to inform that permission is granted to conduct focus group discussions and distribute questionnaires to registered students within our post-graduate programme. It has been agreed that this process will take approximately 1 month and will take place in classroom 1B on the ground floor in the School of Government Building.

For further details please contact our office on 021-9593803 / 50.

Sincerely,


Mrs. L Festers
Senior Administrator



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Africa
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www.uwc.ac.za

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a place to grow, from hope
to action through knowledge

Appendix 3: Information letter 1



UNIVERSITY of the
WESTERN CAPE

Letter to respondents - Re: Questionnaire

5 February 2012

Dear Participant/Student

I am currently busy with my PhD study at the University of Western Cape, Faculty of Natural Sciences, and Department of Population Studies.

My topic is: Challenges of postgraduate students at UWC since 2009-2013. The focus is to look at hampering factors that cause postgraduate students to dropout without completing their qualification. This study will further review other obstacles that postgraduate students has experienced with regards to enrolment, registration, the lack of funding, effective departmental and administrative services, mentor and supervisor support, accommodation, retention and graduation rates.

As explained in my e-mail and telephone conversations with you, I would appreciate it if you as a postgraduate student can support me by completing a questionnaire in support of my research project. Seven hundred questionnaires will be distributed to participants on 12 February 2013 at Room 1 B, Ground Floor, School of Government at convenient time slots that suits the need of participants. The questionnaire will be collected towards the middle of March at the same venue at time slots that suits the need of participants. You will have approximately 1 month to complete the questionnaire. I will follow-up on the completion of

the questionnaire on a weekly basis. Should you complete the questionnaire before the expected timeframe, I will plan to collect it from you as agreed upon.

Kindly signed the letter of consent should you agree to complete the questionnaire. The questionnaire consists of 45 questions and was developed in a convenient possible manner. The questionnaire was developed in a convenient manner that participants would find it easy to complete. I would appreciate it if you could answer all or possibly most of the questions. Should you feel uncomfortable, you have the right to reserve your comment.

Please note: The information are kept in a locked cupboard where the researcher has access to it. The results would be published as part of the research study. All participants and information will be anonymous, and no names will be mentioned in any reports, discussion documents, publications or articles. All information documents will be destroyed as soon as the thesis has successfully been approved.

This questionnaire was described in a language that I understand and voluntarily agree to participate.

Date:	
Participant:	UNIVERSITY of the WESTERN CAPE
Tick:	

Thank you for your participation.

If you have any queries concerning this research please do not hesitate to call the researcher Ms P Lewis at (021) 9389458, e-mail: 2257663@myuwc.ac.za or the supervisors/project coordinators Professor L Holtman at (021) 9592451, e-mail: kleynhans@uwc.ac.za or Professor R Blignaut at (021) 9593034, e-mail: lselbourne@uwc.ac.za.

Appendix 4: Information letter 2



University of the Western Cape

Private Bag X17

Bellville

7535

Website: www.uwc.ac.za

Letter to participants– Re: Interview Discussion

5 March 2013

Dear Participant/Student

I am currently busy with my PhD study at the University of the Western Cape, Faculty of Natural sciences, Department of Statistics and Population Studies.

My topic is: Challenges of postgraduate students at UWC since 2009-2013. The focus is to look at hampering factors that cause postgraduate students to dropout without completing their qualification. This study will further review other obstacles that postgraduate students has experienced with regards to enrolment, registration, the lack of funding, effective departmental and administrative services, mentor and supervisor support, retention and graduation rates.

As explained in my e-mail, I would appreciate it if you as a postgraduate student can support me as a participant in the interview discussions that will be held at the School of Government on 19 March 2013. The venue is: Room 1 B, Ground Floor, at School of Government. The interviews are scheduled from Tuesday 19 to Tuesday 26 March 2013. The interviews will be approximately 30 to 45 minutes per student. I will confirm your time slot with you as agreed upon.

Kindly signed the letter of consent should you agree to participate in the interview discussions that is part of the data collection process of the study. You have the right not to answer any questions that you are not comfortable with.

Please note: The information are kept locked up in a cupboard where only the researcher will have access to it. The results would be published as part of the research study. All participants and information will be anonymous, and no names will be mentioned in any reports, discussion documents, publications or articles. All information documents will be destroyed as soon as the thesis has successfully been approved.

This study was described in a language that I understand and voluntarily agree to participate.

Date:	
Participant:	
Tick:	

The logo of the University of the Western Cape is centered in the background of the form. It features a classical building with a pediment and columns, with the text "UNIVERSITY of the WESTERN CAPE" below it.

Thank you for your participation.

If you have any queries concerning this research please do not hesitate to call the researcher Ms P Lewis at (021) 9389458, e-mail: 2257663@myuwc.ac.za or the supervisors/project coordinators Professor L Holtman at (021) 9592451, e-mail: kleynhans@uwc.ac.za or Professor R Blignaut at (021) 9593034, e-mail: lsebourne@uwc.ac.za.

Appendix 5: Consent form



University of the Western Cape

Private Bag X 17, Bellville 7535, South Africa

Tel : +27 84 707 2550

E-mail: plewis@uwc.ac.za

CONSENT FORM FOR POSTGRADUATE UNIVERSITY STUDENTS

Title of Research Project: Challenges of postgraduate students at the University of the Western Cape: 2009-2013

The study was described in a language that I understand and I voluntarily agree to participate

Name	
Signature	
Witness	
Date	

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator's Name: Professor R Blignaut – rblignaut@uwc.ac.za

Appendix 6: Quantitative survey questionnaire

Students' Perceptions and Satisfaction Level at UWC

The purpose of this survey is to get your feedback about your UWC experience. It should take approximately 10 minutes of your time. Please respond to the following questions by circling if you Strongly Agree (SA), Agree (A), Disagree (D), or Strongly Disagree (SD).

1. I need to take out a loan to continue studying. SA A D SD
2. It is fairly easy to get a postgraduate bursary/scholarship in my field of study. SA A D SD
3. Financial aid is important to continue my studies. SA A D SD
4. I need to work to pay for my studies. SA A D SD
5. I am satisfied with the services I receive from the Bursary's Office. SA A D SD
6. I am satisfied with the way student account queries are handled. SA A D SD
7. Academic staff in my department is familiar with university procedures. SA A D SD
8. Academic engagement in my department is important. SA A D SD
9. Academic standards at UWC are like other research universities in South Africa. SA A D SD
10. I am frequently intellectually stimulated in my department. SA A D SD
11. I am satisfied with the departmental academic services provided for PG students. SA A D SD

12. I am satisfied with the services I receive from the PET project/Division for PG studies. SA A D SD
13. I am satisfied with the services I receive from the Student Administration Office. SA A D SD
14. I am satisfied with my living accommodations at UWC. SA A D SD
15. I am satisfied with the availability of library resources at UWC. SA A D SD
16. I am satisfied with services provided by my Faculty Office. SA A D SD
17. I am satisfied with the availability of space (study rooms) provided to Masters' and Doctoral students in my department. SA A D SD
18. My supervisor and I have an agreement or contract in place to manage the different aspects of my thesis work, including our meetings. SA A D SD
19. I feel my supervisor respects the MOU contract by keeping to all the agreements. SA A D SD
20. I feel my supervisor gives valuable and intellectually stimulating input that assists with the progress of my thesis. SA A D SD
21. I feel my supervisor is supporting me throughout the thesis process. SA A D SD
22. I feel my department is supporting me throughout the thesis process. SA A D SD
23. I feel my supervisor knows my research field. SA A D SD
24. I feel my supervisor holds me accountable with respect to my thesis progress. SA A D SD
25. I feel my supervisor and I meet regularly and to my satisfaction. SA A D SD

26. I feel my supervisor gives me feedback on my written work in an appropriate timeframe. SA A D SD

27. I have considered withdrawing from my current studies. SA A D SD

28. I feel I am inadequately prepared to continue my current degree. SA A D SD

29. I feel I am not getting the professional guidance I need to complete my current degree. SA A D SD

30.

1. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?

No		1
Yes		2

2. Please feel free to provide additional comments about your experience at UWC. You can use the back of this page for additional space.



Please check the appropriate response for the information listed below:

31 Nationality:	South African		1	Specify: _____
	Other African		2	
	Other		3	

32. Gender:

Female		1
Male		2

33. Age in years?

--	--

34. Marital status.

Single		1
Married		2
Divorced		3
Separated		4

35. My home language is:

Xhosa		1
English		2
Afrikaans		3
Zulu		4
Other		5

If OTHER: PLEASE specify _____

36. During apartheid, people were placed in different racial groups. In which group do you think you would have been placed?

Black/African		1
Coloured		2
White		3
Indian		4
Other		5

37. Where do you live when you are at the university?

Home with relatives		1
UWC Hostel		2
Rented accommodation with friends		3
Rent a room alone		4



38. What faculty are you registering in?

Natural Sciences		1
Education		2
Economic and Management Science		3
Community and Health Sciences		4
Law		5
Dentistry		6
Arts		7

39. What type of student registration?

Full-time		1
Part-time		2

40. Current employment status?

Unemployed		1
Part-time at UWC		2
Part-time elsewhere		3
Full-time at UWC		4
Full-time elsewhere		5



Appendix 7: Qualitative interview schedule



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Interview questions

Topic: Challenges of postgraduate students at UWC since 2009 to 2013.

The research project explores postgraduate students' experiences at UWC during the study period. The interviews are strictly confidential and anonymous. The interview information sheets of participants will be kept locked up and will be destroyed after the study is finalized.

1. What Faculty or department are you registered in?

.....
.....

2. Are you a Masters' or PhD student?

.....

3. What would you like to achieve with your post graduate studies/or why are you pursuing the Masters' or PhD?

.....
.....

4. As a postgraduate student what are the challenges you experience that you think makes you feel demotivated to complete your studies?

.....
.....
.....

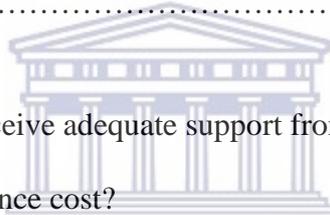
5. How is your studies funded? Please tick

Scholarship or Loan

6. Do you think finances are a reason for a postgraduate student to dropout or stop out?

.....
.....

7. Do you think students receive adequate support from their supervisors with regards to research cost and conference cost?



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.....
.....

8. In your opinion do you feel that you are receiving adequate supervision support?

.....
.....
.....

If no - can you recommend ways how supervision support can be improved?

.....
.....

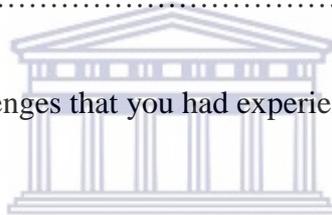
How do you experience your faculty in terms of administrative and departmental support?

.....
.....

9. Do you think UWC has adequate accommodation support for postgraduate students on campus?

.....
.....

10. What is the type of challenges that you had experienced with accommodation?



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.....
.....

11. Is there a student body that assists post graduate students on campus? Did you ever need their assistance? Please tick

Yes or No

12. Do you think postgraduate students have adequate support and resources on campus?

.....
.....

13. Are you aware of the research training workshops that the Division for Postgraduate Studies offers on campus? Please tick

Yes or No

If yes – please explain

.....

14. How do you find UWC as an institution? Please describe

.....

15. Do you have any other concerns or recommendations you would like to share?

.....

Date:



UNIVERSITY of the
WESTERN CAPE

Respondent Number:

Respondent Signature:

Appendix 8: Editorial certificate

26 November 2018

To whom it may concern

Dear Sir/Madam

RE: Editorial Certificate

This letter serves to prove that the thesis listed below was language edited for proper English, grammar, punctuation, spelling, as well as overall layout and style by myself, publisher/proprietor of Aquarian Publications, a native English speaking editor.

Thesis title

POSTGRADUATE STUDENTS' CHALLENGES AT
THE UNIVERSITY OF WESTERN CAPE:
2009-2013

Author

Priscilla-Anne Lewis

The research content, or the author's intentions, were not altered in any way during the editing process, and the author has the authority to accept or reject my suggestions and changes.

Should you have any questions or concerns about this edited document, I can be contacted at the listed telephone and fax numbers or e-mail addresses.

Yours truly



E H Londt
Publisher/Proprietor

Idea Corporation t/a



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