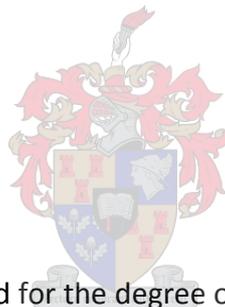


# **TOWARDS EXPLAINING DOCTORAL SUCCESS AT STELLENBOSCH UNIVERSITY**

**Stefanie Josepha Emilie Vandenberg**



Dissertation presented for the degree of Master of Philosophy  
in the Department of Curriculum Studies  
Faculty of Education  
at  
**Stellenbosch University**

**Study leader: Prof. EM Bitzer**

**Co-study leader: Dr BL Frick**

)      **2013**

**DECLARATION**

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I, the undersigned, hereby declare that the work contained in the dissertation is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature:.....

Date:.....

## **ABSTRACT**

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Limited research in South Africa has been conducted on factors contributing to doctoral success, particularly on how doctoral candidates and graduates experience their studies and the transformation of candidates that can be associated with doctoral studies. This lack of information pertains to the successful completion of a doctoral study within a minimum period of time. It is difficult to predict who will eventually successfully complete their doctoral studies if the prediction is merely based on the results of previous qualifications. Such previous achievements are often insufficient and inadequate to ensure the successful completion of a doctoral study.

Knowledge institutions such as universities seem not to pay adequate attention to the transformation of the person of the doctoral candidate and his or her becoming an independent researcher. Often, a narrow concept of the intellect of doctoral candidates is over-emphasised. Knowing, although limited, is transformative as it can often change who candidates are (or become) as graduates. Such transformation and the idea of a doctoral identity has rarely been the focus in doctoral education, as epistemological gain is regarded as being more important.

The aim of this study was to establish a basic understanding of doctoral success at Stellenbosch University, mainly directed at exploring the challenges faced by doctoral candidates and thereby possibly contributing to the future support of doctoral candidates at the institution. By using an interpretive research paradigm and narrative analysis, a number of characteristics were identified as being useful by contributing to a clearer theoretical and conceptual understanding of doctoral success at Stellenbosch University. In the study a number of factors that facilitated doctoral success were also identified, and factors contributing to such success as indicated by participants themselves were defined. A conceptual framework of understanding that may underscore and justify strategies and actions promoting doctoral success are suggested in the study.

## OPSOMMING

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Daar bestaan tans beperkte navorsing in Suid-Afrika oor faktore wat tot die sukses van doktrale studies bydra, veral ten opsigte van hoe doktrale kandidate en gegradueerdes hulle studies ervaar en die transformasie van kandidate wat deur doktrale studies meegebring word. Hierdie gebrek aan inligting het 'n impak op die suksesvolle voltooiing al dan nie van 'n doktrale studie binne 'n minimum tydperk. Dit is moeilik om te voorspel wie uiteindelik hulle doktrale studies suksesvol sal voltooi as die voorspelling bloot op die resultate van vorige kwalifikasies gegrond is. Sodanige vorige prestasies is dikwels onvoldoende en ontoereikend om te verseker dat 'n doktrale studie suksesvol voltooi sal word.

Kennisinstellings soos universiteite gee skynbaar nie voldoende aandag aan die transformasie van die doktrale kandidaat as persoon of aan die proses waardeur hy of sy gaan om 'n onafhanklike navorser te word nie. Dikwels word 'n eng konsep van die intelligensie van doktrale kandidate oorbeklemtoon. Kennis, selfs al is dit beperk, is transformerend van aard omdat dit dikwels kan verander wie die kandidate as gegradueerdes is (of word). Sodanige transformasie en die konsep van 'n doktrale identiteit was nog selde die fokuspunt in doktrale studie omdat epistemologiese voordele as belangriker beskou word.

Die doel van hierdie studie, wat hoofsaaklik gerig was op 'n ondersoek van die uitdagings wat doktrale kandidate moet aanspreek, was om 'n basiese begrip van doktrale sukses aan die Universiteit Stellenbosch te vestig. Dit was dus 'n poging om by te dra tot die toekomstige ondersteuning van doktrale kandidate aan hierdie instelling. Deur 'n interpretatiewe navorsingsparadigma en narratiewe ontleding te gebruik, is 'n aantal waardevolle eienskappe geïdentifiseer wat tot 'n duideliker teoretiese en konsepsuele begrip van doktrale sukses aan die Universiteit Stellenbosch kan bydra. In die studie is 'n aantal faktore geïdentifiseer wat doktrale sukses vergemaklik, terwyl 'n oorsig ook gegee word van faktore wat volgens die deelnemers aan die studie tot sukses sal bydra. Hierdie studie stel 'n konsepsuele begripsraamwerk voor wat strategieë en optrede wat doktrale sukses sal verhoog, ondersteun en regverdig.

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---

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- My son, reminding me of his imminent arrival by kicking me in the ribs when I was procrastinating or slacking.

**LIST OF ABBREVIATIONS**

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AARE	Australian Association for Research in Education
AI	Appreciative Inquiry
ASSAF	Academy of Science of South Africa
ASSAI	Academy of Science of South Africa
DST	Department of Science and Technology
HELTASA	Higher Education Learning and Teaching Association of South Africa
HERDSA	Higher Education Research and Development Society of Australia
HESA	Higher Education South Africa
HSRC	Human Sciences Research Council
NPHE	National Plan for Higher Education
NRF	National Research Foundation
NZARE	New Zealand Association for Research in Education
OSP	Overarching Strategic Plan
UK	United Kingdom
USA	United States of America

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## CHAPTER 1: ORIENTATION TO THE STUDY

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### 1.1. Introduction

There appear to be three elements that are linked to the concept of the 'voice' of doctoral candidates: the epistemological voice, or a voice of knowing; the practical voice, or a voice of doing; and the ontological voice, or a voice of being and becoming (Batchelor, 2006; Barnett, 2009). However, much of the attention concerning doctoral success concentrates on epistemological issues of the doctoral process instead of putting the doctoral candidate first and looking at other aspects outside the intellectual advantage a doctoral study has to offer.

In this chapter I outline and motivate my study which explored doctoral success at Stellenbosch University. I also briefly focus on the main assumptions and limitations of the study, as well as on the ethical considerations that were taken into account. The overview that is provided of the qualitative results of my research in terms of the selected participants creates a backdrop to the context in which my study was conducted, including the sampling of participants and data analysis.

### 1.2. Motivation for the proposed research

Limited research in South Africa currently exists on what contributes to doctoral success. This lack of information pertains to the successful completion of a doctoral study within the minimum period of time, how doctoral candidates and graduates experienced their studies, and what transformational elements can be associated with successful doctoral research. This transformative process involves both the candidate and the institution/university as key stakeholders. Knowing if doctoral candidates would be successful at the onset of doctoral studies would be useful as many parties are involved (e.g. the university, supervisor and the candidate) and all these stakeholders have a vested interest in such lengthy and intensive studies. Moreover, doctoral success as a concept has been receiving more attention recently as universities are pressed to produce more doctoral graduates due to the demands of the economy and changes in job markets.

When candidates enter universities they bring with them prior knowledge and experiences, as well as expectations about what studying at a university will be like. When these expectations are not met candidates may fail to complete their studies (Ulriksen, 2009, p. 517), which comes at great cost to the institutions where they are enrolled. Doctoral studies are expensive for all participants at this level of study. It is therefore of strategic importance that factors indicating success and completion be identified. The identification of such factors may make it possible to develop a framework aimed at facilitating doctoral candidate success. My study concentrated on interrelated aspects moving away from a singular focus on epistemological concerns of knowledge production. Ricoeur (1994, p. 181) suggests that persons should be valued more fully for who they are and their potential for becoming who they are than for what they have achieved.

The economic growth of a country can have an impact on the demands of doctoral studies and candidates. This is also the case in South Africa. Recent economic developments require an increase in doctoral graduates. At Stellenbosch University, reports regarding doctoral enrolments point to an increase in doctoral candidates per year, increasing from 18 candidates between 2007 and 2008 to 88 candidates between 2010 and 2011 (Stellenbosch University Division Institutional Research and Planning, 2010). In contrast to this substantial increase in enrolments, the number of doctoral graduates has only increased by 13.7%, as can be seen in Table 1.1 below.

Table 1.1: Doctoral degrees awarded according to faculty and year

<i>Faculty</i>	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Arts and Social Sciences</i>	20	17	24	16	24	25	14	32	17	25	25
<i>Science</i>	12	19	20	41	26	28	27	33	38	39	50
<i>Education</i>	5	12	8	11	9	11	10	13	11	13	11
<i>Agrisciences</i>	7	13	6	7	13	16	11	13	12	14	17
<i>Law</i>	4	2	1	1		3		2	2	3	7
<i>Theology</i>	10	7	15	9	12	9	7	18	7	9	16
<i>Economic &amp; Management Sciences</i>	5	8	9	7	5	15	9	11	9	6	10
<i>Engineering</i>	12	17	19	9	15	9	16	16	10	17	22
<i>Health Sciences</i>	8	8	11	11	11	11	8	15	14	13	16
<b>TOTAAL/TOTAL</b>	83	103	113	112	115	127	102	153	120	139	174

Source: Stellenbosch University Division Institutional Research and Planning, 2010

The Overarching Strategic Plan (OSPSU, 2009) for Stellenbosch University foresees, inter alia, a growth of 5% per year in postgraduate candidate numbers at master's and doctoral levels.

This plan aims at steering the institution towards the achievement of a number of strategic goals by 2015 – including that 40% of the total Stellenbosch candidate cohort will be studying at the postgraduate level (OSPSU, 2009). This goal ties in with the vision of Stellenbosch University becoming as a research intensive institution in South Africa that is also internationally recognised. The growth in postgraduate enrolments is important not only in building the research image of the university, but also within the wider South African context, according to the South African Department of Science and Technology (DST) (Wingfield, 2010, p. 1). The realisation of such an increase in the number of postgraduate candidates may demand greater investments in postgraduate support programmes, such as skills development of candidates, skills development of postgraduate supervisors, a comprehensive postgraduate support platform and increased attention to postgraduate throughput and completion rates (Van Zyl, 2009).

#### **1.2.1. Doctoral restrictions**

Ulriksen (2009, p. 518) argues that studying is a socialisation process as graduates learn to think, comprehend and engage with their discipline in a specific way. Doctoral education is the first step towards the development of a professional scholarly or social identity (Austin & McDaniels 2006) where the graduate must learn to conduct the study in a way that is recognisable to others as a legitimate way of being a graduate in a specific discipline (Ulriksen, 2009, p. 518). Doctoral graduates are often unclear about what this process entails at the onset of their studies. They are unsure what is formally and informally required of them to obtain a doctoral degree, fit into the academic of their particular discipline, and what accomplishments are necessary in order to be successful in their studies (Campbell, Fuller & Patrick, 2005, p. 155). Also, doctoral studies do not necessarily pay enough attention to the (professional) development of candidates and evidence suggests that doctoral candidates experience tensions and challenges when integrating into or joining academic communities (McAlpine, Jazvac-Martek, & Hopwood, 2009, p. 97). Doctoral graduates may have incomplete understandings of academic life; experience mixed messages about the importance of their work, and may even be unsure if they can align their own values with those of the academy. They are often unaware of the changes they will go

through which may influence their being and which may eventually lead to an ontological transformation within themselves.

My study includes notions about ontology and identity. However, these concepts are social constructs and are therefore potentially controversial (Brubaker & Cooper, 2000). According to Räsänen and Korpiaho (2011), in identity work, the individual is the subject working on his/her or his own subjectivity. The concept of ontology is different from identity as the subject is not necessarily consciously aware of his or her own transformation.

Lovitts (2005), Barnacle (2005) and Baker and Pifer (2011) have pointed out common problems with which doctoral graduates struggle. According to Lovitts (2005), the transition to independent research is difficult for many graduates. Predicting who will eventually successfully complete their doctoral studies is difficult if merely based on the results of previous qualifications, even though candidates are typically admitted into doctoral studies on the basis of their undergraduate and/or previous postgraduate performances. However, such previous achievements are often insufficient and inadequate markers to predict which doctoral candidate will secure a successful completion. In addition, many doctoral candidates feel unprepared to make the transition from structured to independent work and might become academically and/or socially isolated (Barnacle, 2005). Trafford and Leshem (2009) mention the intellectual challenge as a 'threshold' that doctoral candidates have to cross, as they are expected to make an original contribution to knowledge (p. 305). This challenge may be exacerbated by a seeming lack of common and clear descriptors of what doctoral candidates have to do to produce acceptable work at this level (p.307). When graduates experience 'being stuck' when they seek to resolve a technical or conceptual aspect of research, they are unable to make progress and therefore may experience uncertainty about the identity of self and purpose (Meyer & Land, 2006, p. 22).

Kiley (2009) mentions a 'rite of passage' associated with the doctorate. This 'rite of passage' refers to challenges doctoral graduates experience, which may include developing new levels of thinking and researching (p. 293). When such challenges are overcome, candidates understand their learning and themselves and this is evident in their writing, presentation, discussion and even demeanour. Dealing with threshold concepts can be a challenging

experience for doctoral graduates as they have to transform their ways of viewing knowledge and themselves. These graduates not only have to learn the language of their subject area and of their research, but they also have to learn to 'act' with the rigour and conceptual understanding that is expected of them (Kiley, 2009, p. 293). Knowing is transformative as it can change who we are (Dall'Alba & Barnacle, 2007). Meyer and Land (2006) acknowledge these changes taking place within graduates. However, they are convinced that before graduates cross such thresholds, they undergo a form of transformation. They identify two important conditions: being 'stuck' and mimicry (Turner, in Less & Vogt, 1979, p. 234; Meyer & Land, 2006; Kiley, 2009, p. 294). Graduates can be 'stuck' on some occasions when they have to overcome a certain learning challenge. Mimicking is a strategy that many graduates adopt (when they are 'stuck') as they model the ways of learning to which they aspire by imitating the language, behaviour, and presentation of the perceived desirable understanding. Mimicry is used as a long-term way of pretending to know what is required. The rites of passage mentioned by Turner (in Less & Vogt, 1979, p. 234) are characterised by changes in 'states'. States are relatively fixed or stable conditions and the rite of passage describes the transition from one state to another. The transformation consists of three stages: separation, margin and aggregation. Kiley (2009, p. 294–295) describes these stages as follows: with separation the graduate leaves the state that she or he knew, a state that was fixed and understood. Once having separated, the graduate is not in the state in which she or he was previously, nor in the state to which she or he is aspiring to, but rather in a state of margin (also sometimes referred to as liminality). In the last stage, the transition is consummated, which puts the candidate in the new state. I argue that it is within this last stage that the transformation of doctoral candidates is clearly visible. It is also necessary to address the required epistemological changes in this stage.

In my research I focused on different aspects concerning the transformation of doctoral graduates towards doctoral success. One specific aspect, the ontological development of doctoral graduates, has rarely been acknowledged in the literature. Exploring ontological development in relation to doctoral success brought an interesting and unique aspect to my study.

Becoming doctorate implies a transformation over time, a change in being (Batchelor, 2006). Becoming other than what one is already, a transfer of one state of being to another, is interesting to study as it can assist in the exploration of systems aiding this transformation and progress towards a positive experience of the doctoral process. Barnett (2000b, p. 418) mentions that the key educational challenge is not related to knowledge as such, but to a shift in 'being'. Therefore any account of the world is contestable and our sense of who we are and our relationships to each other and to the world are insecure (Barnett, 2000b, p. 419). If one were to put this notion in educational terms, it would mean that pedagogies are required to develop capacities for coping with supercomplexity, which encourages the formation of a human being who maintains a goal-directed balance in the face of radical uncertainty and challenge (Barnett, 2000b, p. 419). Barnett states that educational systems and curricula have to deal with the notion of supercomplexity as universities today are more subject to external influences such as growing candidate markets and the interests of employers. When a country is looking for a greater responsiveness to the job market, 'a universal shift in direction of performativity is emerging: what counts is less what individuals know and more what individuals can do' (Barnett, 2000a, p. 255).

A pedagogy (Barnett, 2000a) which can cope with supercomplexity deals directly with the graduate's experience and his or her being a human being. It makes 'becoming' possible and offers room for personal engagement and negotiation in frames of meaning. This process dislocates the 'self' and this transformation is the restoration of an identity between the 'self' and meanings. This is possible by allowing space for meanings to emerge from within the person.

It seems as if the aspects of being and becoming are less valued and validated in contemporary higher education, although ontology is recognised as fundamental to epistemological and practical development (Batchelor, 2006, p. 787). However, in being a graduate and becoming an expert in a particular field one must recognise the juncture between these constructs. There is a possible fusion of personal and academic identities, although this conceptualisation is often absent in current constructions of academic identity. During postgraduate studies, candidates question themselves about what they know while

working on course assignments, preparing presentations, revising for examinations or writing theses. They receive confirmation of their capabilities by means of supervisory responses to written work, or when their work is published. Nevertheless, in undertaking a doctorate, candidates encounter conflict between individual and collective values concerning their specific discipline and practices, which creates tensions and challenges as to who they are becoming (Austin, 2002). It appears that both positive and negative experiences are central to the development, affirmation and even the contestation of the transformation of the doctoral graduate. Research which has attempted to explore the nature and range of the influence of events and activities that are relevant to the formative development of doctoral graduate's ontological formation seems limited. Ontological development is rarely articulated explicitly and, even though this aspect is likely to change and develop in complexity as candidates progress through their education, there is not much evidence to give a satisfying clarification of this concept.

The notion of ontology and identity used in my study focuses on the change of 'being' and the transformation process (in that being) in doctoral candidates. Doctoral candidates' 'becoming' includes transformation. They achieve their degree and experience changes in their 'being' which were unattained before the degree. While the doctoral candidate assumes substantial responsibility when entering postgraduate study, success in doctoral studies can be associated with an array of factors or challenges. Universities can assist in facilitating such transformation in doctoral candidates by providing support systems. Such assistance can even contribute towards a higher success rate in doctoral studies.

### **1.2.2. Institutional restrictions**

It is not only doctoral candidates who are in the starting blocks for a new state or experience. Universities have their own boundaries that have to be crossed when it comes to supporting candidates. Limited research has been reported in South Africa on factors contributing to doctoral success, how both doctoral candidates and graduates experience their studies, and what ontological and epistemological transformation can be associated with doctoral research. In my study it was possible to explore some issues concerning the (support) systems within the university as a more comprehensive approach to graduate

education which is necessary if graduates are to remain competitive in the market (Campbell, Fuller & Patrick, 2005, p. 153). There also appears to be a new area of discussion relating to universities and their role as knowledge institutions (Gibbons, 1994; Dall’Alba, 2005). Universities often focus on the transfer and acquisition of knowledge, to the detriment of a holistic understanding of the learning process that takes place while knowledge is constructed. Their focus on knowledge and skill acquisition may detract from an awareness of the transformation within the candidate himself. This focus is inadequate to promote candidate learning (Ramsden, 2003). Incorporating the aspect of ontological becoming may enable universities to better support doctoral candidates and facilitate a higher success rate with these candidates.

Universities do not pay adequate attention to the transformation in the candidate, and they tend to over-emphasise a narrow concept of the intellect (Barnett, 1997; Dall’Alba, 2005). Mouton (2007) argues that the current discourse in South African higher education is obsessed with concerns of efficiency, rather than effectiveness and quality. However, there is currently increased interest in the state of postgraduate candidates and their studies. According to Mouton (2007, pp. 1078–1079), there are at least three reasons for this amplified attention. Firstly, the Higher Education Quality Committee (HEQC) audits have demanded that universities look more closely at various aspects of the quality of postgraduate studies. The quality of management systems and procedures, supervision and examination processes and support to postgraduate candidates have all come under scrutiny. Mouton (2007) argues that according to informal feedback, most universities, including the more established research universities, are not doing enough to ensure that the necessary conditions are in place to ensure the quality of postgraduate studies. Secondly, there is an ageing of active postgraduate researchers in South Africa, which may lead to an increasing decline in overall research production in the country, as well as the steady erosion of the supervisory capacity in the system. Thirdly, there is also an increasing internationalisation and even institutionalisation of corporatism and managerialism in South African universities which brought with it a simultaneous shift in attention from concerns of quality and effectiveness to concerns about efficiency and throughput. This shift has manifested itself in the field of postgraduate studies in the notions that the management

and supervision of master's and doctoral candidates take too long and the rate of conversion from masters to doctoral levels is inadequate.

However, these notions might be based on misconceptions. Arguing that doctoral candidates in South Africa take too long to complete their studies, or that the high number of dropouts is due to ineffective supervision cannot be proven. There is no evidence to support such claims and no such studies have been produced that demonstrate the inefficiency of doctoral candidate production in the country. If such studies could be conducted, Mouton (2007, p. 1082) argues, answers should be sought to the following two questions:

- Whether doctoral candidates in South Africa take longer to complete their degrees than on average internationally, and/or whether South Africa has a higher than average doctoral drop-out rate; and
- Whether the attrition rates must be attributed to poor (supervisory) management of doctoral candidates or weak institutional support rather than other factors.

Only about 40% of all candidates who enter higher education manage to complete their first degree (Mouton, 2007, p. 1080). This is problematic, especially since the National Research Foundation (NRF) declares that 'large numbers of high quality PhDs [need to be produced] to provide the bedrock for an innovative and entrepreneurial knowledge society' (National Research Foundation report 2007/2008, p. 8). The annual report of the Academy of Science of South Africa 2010/2011 also states that not enough high-quality PhDs are being produced in the country in relation to the developmental needs of South Africa (Academy of Science of South Africa report 2010/2011, p. 30). According to the report (p. 9), 'the number of well-trained PhDs in South Africa raises fundamental questions about national capacity, critical partners, innovative programmes, strategic investments and cross-sectoral co-operation'.

The NRF has proposed a solution by developing policies and practices that will monitor supervisory practices and ensure that inefficiencies in this regard are addressed. However, my study demonstrated that such a solution is not the only answer to the above-mentioned postgraduate problems.

Lovitts (2008) indicated that intelligence, motivation, personality, thinking styles, and knowledge interact and are influenced by factors in the micro and macro university environment. These factors might contribute to the successful completion of a doctoral study. However, there also appear to be other important factors contributing to doctoral completion and success. Such factors include ontological (becoming and being a successful novice researcher at a university) and epistemological (the intrinsic and extrinsic value of doctoral research) aspects. Or, as highlighted by Dall’Alba and Barnacle (2007, p. 78):

Knowing, or how we understand the world, arises on the cusp between the history of being – or how being has been thought in the past – and the possibilities of being that are opened up in our everyday practices, projects and activities. In other words, what is – including how things become what they are – and what we know are mutually dependent: ontology and epistemology are inseparable.

### **1.3. Research objectives**

Focusing on such issues concerning doctoral studies and doctoral students, I sought, through my study, to indicate factors contributing doctoral success for doctoral students. While identifying such factors in my study I attempted to move away from epistemological factors influencing doctoral success. My research objective developed from the notion that knowledge institutions pay insufficient attention to the transformation that happens within the doctoral student.

The main research question that I intended to answer was ‘Which changes are experienced by successful doctoral students at Stellenbosch University?’ From this research question I was able to explore some changes taking place as reported by selected doctoral graduates at Stellenbosch University and could thus attempt to identify the interrelation of factors that contributed to successful doctoral completion.

The subordinate questions that had to be answered in order to address the main research question were:

- What concepts are central to doctoral change?
- How are the key concepts related to doctoral change?
- How do successful doctoral graduates recall their journeys of success?

- How can institutional support improve to better support doctoral candidates towards success?

My study aim was therefore to explore how successful doctoral candidates at Stellenbosch University experienced their own growth and change and thereby arriving at a conceptual framework that may better explain and support such changes during doctoral journeys.

#### **1.4. Scope of the research**

With regard to doctoral success, more consideration should be given to the links between knowledge and candidate transformation. Although Barnett (2009) concentrates on being and becoming in higher education, as there is a link between knowledge and being (p. 429), I argue that there are other aspects influencing doctoral success. Within the transformation of a doctoral candidate at the end of their doctoral process, their personal development and epistemological development cannot be easily separated. 'Coming to know brings forward desirable human qualities as distinct from knowing itself and this journey is at least if not more important than the arrival' (Barnett, 2009 p. 433). The answer to the question: Who am I? often relates to the answer to the question: What do I know? (Batchelor, 2006, p. 792). The voice of the candidate is often not heard even though candidates are central to postgraduate studies (Albertyn, Kapp & Bitzer, 2008 p. 750). At the origin of a conjunction between being a candidate and becoming one, one must acknowledge a fusion between personal and academic identities. This is clear when asking any candidate: Who are you? and What do you know? One soon realises that all doctoral candidates go through a certain transformation while being occupied with their studies. However, the importance of such a transformation is not acknowledged enough by universities. Barnett (2009, p. 439) mentions that a genuine higher education cannot contend itself with a project either of knowledge or of skills, or even both. Being is the main idea, for it is being that is fundamentally challenged in and within the world today. More so, the production of doctoral graduates in South Africa is growing. There is, however, a high doctoral attrition rate. According to Mouton (2007), there are systemic issues that need to be attended to:

- too many overburdened and inexperienced supervisors;
- insufficient research preparation for doctoral candidates;

- insufficient national and institutional financial support for candidates; and
- insufficient institutional attention and resources devoted to postgraduate support.

It is not uncommon to hear a candidate or graduate mentioning: 'This course has changed my life' instead of: 'I gained many new skills' or 'I acquired a lot of knowledge'. Such reactions towards a doctoral degree can only be explained if a connection is invoked between knowledge and being and becoming as the candidate was transformed during the course of the doctoral process. There is a notable difference between knowing as such and *coming* to know. It is the 'coming to know' that has person-forming properties and has implications for the transformation of the candidate. It is clear that a human being goes through certain changes when encountering knowledge. Epistemology can have transformative implications. A doctoral candidate goes from knowing to doing and this move lies at the centre of the candidate's new sense of being. The influence and the experience of knowledge appear to be greatly underestimated – especially during doctoral studies.

I conducted a literature review to ascertain which frameworks and models could be useful in contributing to a clearer theoretical and conceptual understanding of the ontological and identity development of doctoral study success while completing a working definition for doctoral success. I identified possible aspects contributing to doctoral success and was able to define the institutional support factors contributing to doctoral success, as indicated by the participants in this research.

### **1.5. Selection of participants**

I selected participants by means of non-probability sampling with a reliance on available subjects. Three participants graduated in March 2010 and three participants graduated in March 2011. Due to the nature of the research, I wanted to interact and interview the participants in person. I therefore had to select people who resided in the same geographical area as I and who were willing to cooperate.

I selected six doctoral graduates who had recently completed their doctoral studies, as well as two individuals close to each of the graduates to form the research target group in this research project. Three graduates who had recently completed their doctoral studies in the social sciences and three in the natural sciences were purposively selected and acted as respondents. To triangulate my results, two individuals close to the graduates were also identified. The main supervisor was included in each case, as well as a person who had a close personal relationship with the participant (such as a wife, colleague, or roommate) who was labelled as the 'significant other'.

Semi-structured interviews were conducted as the focus of my research was situated in the personal (ontological) development of graduates. Each graduate was asked how they had started their doctoral process and what their personal opinion was of the purpose of a doctoral study. From there on they started telling their stories, supported by prompts as the focus of this research question was to elicit stories focused on the respondents' own development. The lists of the questions asked to the doctoral graduates, their supervisors and significant other as well as a table illustrating the triangulation of the questions are provided in Addendum A.

## **1.6. Conclusion**

Postgraduate support is characterised by insufficient institutional attention and resources. If the personal development of the candidate is not supported, the epistemological development may be affected. My study introduces a conceptual framework that stresses the importance of aspects contributing to doctoral success. Doctoral graduates need not force themselves into the identikit model of a successful graduate which is increasingly portrayed in higher education institutions' publicity but they can discover their own individual way of being a graduate. By recognising the significance of such a concept, institutions might assist doctoral candidates better in the future by enhancing the learning experience. This approach might possibly decrease attrition rates and perhaps improve time to completion.

My thesis consists of six chapters. Chapter 1, which describes the research orientation, introduces the study. Chapter 2 deals with the literature review which aided the construction of the conceptual framework. In Chapter 3 the methodology which outlines the research design and methods is presented. In Chapter 4 I report on the empirical findings of the study while in Chapter 5, the concluding chapter, I provide a synthesis of the study by discussing the results and by relating my perspectives from the literature to the empirical results and reflective data.

## CHAPTER 2: LITERATURE PERSPECTIVES

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### 2.1. Introduction

The concept of doctoral success can and should be studied at various levels of complexity. Many authors (Winsberg, 2006; Austin, 2002; Lovitts, 2005; Gardner, 2009; Frick, 2010) have highlighted the challenges involving doctoral success as the focus of their research. They have also noted that the way doctoral research and doctoral education are approached might be highly influential to the outcome of doctoral study. Their research suggests that a number of factors may have an influence on doctoral success, the latter which represents a productive inter-relationship among a number of critical factors. It therefore seems important to approach issues related to doctoral success cautiously and it is against this background that at least four perspectives appear relevant.

According to Heidegger (1962), change in higher education is related to ontological change and as the needs for and expectations of a higher education in society are changing, higher education must transform as well (Heidegger, 1962; Thomson, 2001). Doctoral completion, therefore, implies a particular form of ontological change and development (Barnacle & Mewburn, 2010) that is seemingly necessary in the process of becoming 'doctoral'. For instance, the question arises how doctoral education and doctoral research might be instrumental in the ontological change of doctoral candidates (Thomson, 2003; Dall'Alba & Barnacle, 2007). Typical questions that emerge include the following (Nietzsche, 2006; Flax, 1990; Smith, 2003): What does the concept of ontological change entail? What does the concepts of 'being' and 'becoming' entail within the context of doctoral studies and how are they linked to the very concept of ontological change?

A second and related perspective to ontological change has to do with the transformation in the identity of doctoral candidates. As with ontological change, 'being' and 'becoming' doctoral point to a change of identity as doctoral candidates increasingly involve themselves in the process of becoming researchers, scholars and scientists. Identity formation has not been studied thoroughly in higher education (Delamont, Atkinson & Parry, 2000, p. 5).

Doctoral research also (re)produces knowledge and social identities. These identities are discipline specific, but for all academics the experience of postgraduate research is one in which identity formation is especially important. For most doctoral candidates it involves a degree of identification with their chosen academic discipline. Since universities are major organisations that simultaneously produce knowledge and identities, it can be said that they are both knowledge-processing and people-processing institutions (Gumpert, 2000).

A third view includes the role of transformative learning in doctoral studies. As more universities begin to consider sustainability as a core value in education, there is a need to contemplate the role of transformative learning in higher education (Moore, 2005, p. 76). According to Cranton (1996), the purpose of transformative learning is to implement methods of interpreting experience through critical reflection and self-reflection and to review old assumptions. Transformative learning is of importance in a doctoral process as a doctoral candidate needs to become an independent scholar (Lin & Cranton, 2005) and therefore a successful doctoral candidate. The concept of a successful doctoral candidate is discussed in detail in section 2.2: 'Doctoral Success'. The ultimate goal of transformative learning is to empower individuals to change their perspectives. However, it remains vague how doctoral candidates will transform and into what they are transforming. Other issues such as the different types of transformation taking place during and as a result of doctoral studies, as well as the notion of threshold concepts (Leshem & Trafford, 2007; Kiley & Wisker 2009) are discussed later in section 2.4: 'Identity development'.

A final perspective deals with questions on the role of creativity in the doctoral process and creativity as a seemingly important criterion related to doctoral success. Doctoral candidates are supposed to make an original contribution to their specific discipline (Frick, 2011, p. 495). Creativity is regarded as being inherent to doctoral education (Lovitts, 2005; Frick, 2010). Lovitts (2005), among others, stresses the point of creativity in this process. According to Fullan (2003, p. 18), the moral purpose of education is to make a positive difference to candidates' lives, as well as to help candidates develop their potential as fully as possible at doctoral level. This perspective has the ability to change the very identity of doctoral candidates (Frick, 2011; Lovitts, 2008; Trafford & Leshem, 2009). As my study

focused on determining non-epistemological factors contributing to doctoral success, creativity was considered to be an important factor determining such success. Creativity lies at the heart of a candidate's own identity (Winsberg, 2006).

These four perspectives seem to be important in exploring doctoral success. However, a first point of exploration is the question of what makes doctoral candidates successful in their studies which can provide a proper background for the understanding and exploration of these four perspectives.

## **2.2. Doctoral success**

Success in higher education, particularly the success of doctoral candidates, has been of growing interest (Bitzer, 2011; Gardner, 2009). A doctoral candidate is a growing academic professional (Golde, 1998), occupied with learning the skills, knowledge, habits of mind, values and attitudes of his or her chosen field(s) of study (Gardner, 2009, p 385). According to Gardner (2009, p. 383), the term 'success' in higher education has been widely used to describe multiple outcomes which can include models illustrating understanding how candidates can succeed (e.g. Girves & Wemmerus, 1988; Padilla, Trevino, Trevino & Gonzalez, 1997), the practices best suited for success (e.g. Frost & Fife, 1991; Williams, 2002), the influence of particular variables upon success over time (e.g. Decker, 1973; Fordham & Ogbu, 1986; Burton & Wang, 2005) and even the relationship between specific variables and success (e.g. Hirschberg & Itkin, 1978; Wilson & Hardgrave, 1995; Nettles & Millet, 2006). The definition of this term has enjoyed much attention in doctoral education specifically since only 50% of doctoral candidates actually complete the degree (Gardner, 2009, p. 383; Nettles & Millet, 2006). It has been found that certain factors, such as advising (Baird, 1972 & 1985; Schroeder & Mynatt, 1993), candidate characteristics (Cook & Swanson, 1978; Nettles & Millet, 2006) and grades prior to enrolling in the doctoral study (Girves & Wemmerus, 1988; Burton & Wang, 2005) influence academic success. Any attempted definition of the term 'success', however, remains abstract and vague.

In debates on doctoral success models are often included in order to better understand the best practices for success, the different influences of particular variables and even the

relationship between specific variables and success (Grover & Malhorta, 2004, p. 23; Winsberg, 2006, p. 1; Gardner, 2009, p. 383). For a better understanding of the concept of doctoral success one needs to examine the overall international understanding of this concept. It can then be narrowed down to national and eventually local level.

### **2.2.1. An international view on doctoral success**

Holbrook, Bourke, Lovat and Dally (2004, p. 126) claim that '[t]he objectives for doctoral study are not articulated in convention always, which means that the learning that takes place at doctoral level is something of a mystery'. When the objectives of a doctoral study are not clear, the outcome of the study cannot be clear either. It is of strategic importance that the aspect of 'success' in 'doctoral success' be clarified, for if it is not distinct, the expectations and outcomes for doctoral candidates may remain ambiguous. Doctoral success is a space of increasing complexity. The pressure for the doctoral student is not only to produce a successful doctoral thesis as evidence of the achievements of an original contribution to knowledge in a field, but also at the same time for knowledge institutions to produce graduates who are work ready and knowledgeable about research policies (Boud & Lee, p. 11). This concept can include several different meanings, ranging from professional socialisation to academic achievement and/or graduation (Gardner, 2009, p. 384).

It follows that completion of a doctoral study may not be the only criterion for success, or that it may be too simplistic a measure to explain the developmental processes associated with doctoral becoming. Policies have been produced in general regarding doctorate and doctoral success from a rather thin conceptualisation of what the doctorate is and what it does (Boud & Lee, 2009, p. 10). According to them this results in a set of prescriptions for research degrees that follow economic imperatives. However, they are simplistic in terms of the complications of the various outlines at work in doing doctorate work. This supports Evans, Macauley, Pearson and Tregenza's (2004) perspective that generally the professional doctorates (in Australia) have not had the impact that was expected of them, and that the doctorate has quietly strengthened its grip on doctoral education.

Several indicators are involved when measuring success in a doctoral study. A dissertation or thesis is a usual requirement. Although a candidate may have achieved good grades prior to embarking on the doctorate, it does not necessarily mean that he or she will complete a dissertation. Lovitts (2005, p. 137) argues:

Graduate faculty acknowledge that the transition to independent research is hard for many candidates, and that they cannot predict who will successfully make the transition and complete the doctorate based only on candidates' undergraduate records.

Retention is also a widely used indicator of success in doctoral education. According to Lovitts (2001), retention can be described as persistence, and Isaac (1993, p. 15) states that it 'refers to a candidate's continued enrolment'. Findings from Nerad and Miller (1996) confirmed that of all the candidates who eventually leave their doctoral studies prior to completion, about one third leave after the first year, another third before candidacy and the final third during the dissertation phase. There are various reasons why doctoral candidates leave their studies but these are generally related to issues of integration into the study or department (Lovitts & Nelson, 2000; Lovitts 2001), feelings of psychological and cognitive inadequacy (Golde, 1998), a lack of financial support (Bowen, Rudenstine & Sosa 1992; Bourke, Holbrook, Lovat & Farley, 2004), and dissatisfaction with the study or department (Lovitts, 2001). Lovitts and Nelson (2000, p. 44) contends that 'it is time to give serious attention to one of the fundamental weaknesses of doctoral education – attrition'. Although comprehensive (inter)national data does not exist on the consequences of graduate candidates abandoning their degree studies (Lovitts & Nelson, 2000, p. 44), it is suggested that the long-term attrition rate is about 50%, as mentioned before. Since departments are increasingly compelled to economise, they are put under more pressure as they will be held accountable for the costs of recruiting and training candidates who do not complete their degrees. According to Lovitts and Nelson (2000), attrition is not discipline specific and the overall climate at a given university is not decisive. They argue that attrition is deeply embedded in the organisational culture of postgraduate institutions and the structure and process of postgraduate education.

Another obvious indicator of doctoral candidate success is degree completion. Understandably, different disciplines have different completion rates. The time doctoral candidates take to complete the study is reliant upon many variables (Lovitts, 2001) and differs from discipline to discipline and by candidates' socio-demographic status (Gardner 2009, p. 385). Moreover, doctoral success is influenced by competencies related to the professional realm.

The concept of doctoral success has been explained by measuring it against several outcomes such as retention, academic achievement, completion or graduation, and professional socialisation (Gardner, 2009, p. 384). Also included in the measurement of successful doctoral candidates are the candidates' competencies, such as their disposition towards professional development as well as towards the subject matter, which is also desirable but more of a qualitative measure of success (Hagedorn & Nora, 1996). Becoming doctorate in any academic field is not just a matter of formal learning and assessment in specific domains of knowledge (Delamont, Atkinson & Parry 2000, p. 1). Doctoral education includes notions of creativity, innovation, collaboration, problem solving, ethical conduct, interpersonal communication, interdisciplinary understanding, and entrepreneurial initiative (Campbell, Fuller & Patrick, 2005; De Rosa, 2008; Lovitts, 2005). These notions correspond to Killen's description of quality learning. According to Killen (2003, p. 10), understanding, rather than memorisation; creativity, rather than reproduction; diversity, rather than conformity; initiative, rather than compliance; and challenge, rather than blind acceptance are all outcomes that suggest a complex interplay between the notions of ontology, epistemology and methodology. Although methodologies are inclined to be specific and perpetuated in every discipline (McAlpine & Norton, 2006), the above-mentioned concepts expand beyond the methodological. Doctoral candidates place themselves both ontologically and epistemologically in the learning context. Becoming a 'professional academic' involves much more than just learning the knowledge of a specific discipline. It also involves the acquisition of more general cultural knowledge and personal experience. One must learn not merely about the discipline; one must learn what it entails to *do* it and what it means to *be* a part of it. The outcome of doctoral education has a significant role in

the growth of the professional, industry and commercial fields (Evans, Macauley, Pearson, & Tregenza, 2003, p. 13).

What is often missed when involved in a doctoral study is a focus on what doctoral work actually produces and how it is produced (Boud & Lee, 2009, p.11) beyond the epistemological side of the work. This depends on socialisation into the culture of the discipline (Austin, 2002; Gardner, 2008, p. 329). Socialisation is essential to the success of the doctoral candidate and to his or her development through the degree process. During the socialisation, doctoral candidates learn to adopt the values, skills, attitudes, norms and knowledge; therefore, independency is part of the socialisation process in doctoral study. It is what defines the doctoral degree and its potential recipient (Gardner, 2008). It also rests on a crucial shift from the kind of learning that is characteristic of undergraduate education. Postgraduate candidates often struggle to make the transition from dependent researcher to independent member of the academic or scholarly community (Lin & Cranton, 2005; Gardner, 2008; Lovitts, 2008). Many candidates feel unprepared to make this transition and argue that previous coursework did not prepare them adequately to make such a transition (Lovitts, 2008). This transition is a radical break with mere knowledge reproduction while it simultaneously moves candidates towards knowledge production which they may find difficult to adjust to. The problem of transition is intensified by an academic system where highly successful course takers are given preference for access to doctoral studies. However, this is not a guaranteed prediction for success as a doctoral candidate, as one of the requirements of a successful doctoral degree is that the candidate has made an 'original contribution' to a specific discipline (Phillips & Pugh, 2000, p. 7). However according to Johnson, Lee and Green (2000, p. 145), when doctoral students have to be 'original', it is not so much about them stepping outside the domain of knowledge in which they have been qualified; it is about attaining an authorisation to understand themselves contributing to this domain, being a subject of knowledge.

When exploring what a doctoral degree essentially means, many institutions involved in postgraduate education explicitly press the idea of a professional researcher who works independently (Lovitts, 2005). This transition from dependent learning to independent

research is regarded as being critical, as the candidate has to make a successful shift from 'consumer of knowledge' to 'producer of knowledge' in order to complete a doctoral degree (Delamont, Atkinson, & Parry, 2000, p. 89; Gardner, 2008, p. 328). It is difficult to predict which candidate will make this transition successfully and many supervisors and researchers are unaware of this transition problem (Gardner, 2008; Lovitts, 2001). Lovitts (2005, p. 104) argues that some candidates only achieve this kind of independence in their first postdoctoral or professional position. Gardner (2008, p. 327) contends that the individualised nature of the doctoral study and the need for greater responsibility and creativity on the part of the candidate are factors that may lead to much of the frustration involved in the doctoral process. Although the success of the doctorate is dependent on this transition, limited research exists on the specific transition which is influenced by study organisation and structure (Lovitts, 2005).

Not all the responsibility of achieving success in a doctoral study lies solely in the hands of the doctoral candidates (Holbrook, Bourke, Lovat & Dally, 2004, p. 126). Boud and Lee (2009, p. 11) state that older traditions of doctoral work focus on 'research' rather than 'education' and see the practices of supervisors and study coordination at university and department level implicitly reproducing the ways in which they themselves were inducted into their discipline. Therefore, the role and involvement of faculty members should not be overlooked. The involvement of doctoral candidates with faculty members is very important as the latter serve as teachers, advisors, committee members, mentors, role models and future colleagues (Austin, 2002; Lovitts 2001). In the past, only a small proportion of students went to university; therefore academics could continue in the opinion that they were only catering for the smartest and most dedicated students (Johnson, Lee, & Green, 2000, p. 135). Following this approach, there was an apparent indifference to students. This attitude has changed over the years. Today universities focus largely on educating supervisors and monitoring their performance as well as student progress in order to intervene in the quality of research training provided (Johnson, Lee, & Green, 2000). However, it is still not clear how such faculty members would define success in doctoral education. The important and integral role that faculty members play in the multitude of success variables and how they would conceptualise success are fundamental in structuring

studies and services to increase the experience of doctoral success. However, doctoral success is not uniform (Gardner, 2009, p. 386). When a candidate enrolls in a doctoral study, generally this study is not a university-wide activity but is rather typically conducted for the most part in a single department (Williams, Harlow & Gab, 1970, p. 161), each with its own disciplinary differences when it comes to doctoral success. Doctoral success is experienced differently within and among different disciplines due to the existence of particular qualities, cultures, codes of conduct, values and distinctive intellectual tasks that characterise each discipline (Austin, 2002; Becher, 1981). Consequently, the discipline and the department, rather than the larger institution, become the central focus of the doctoral experience. Biglan (1973) noted that studies of academic cultures and contexts cannot be generalised across different disciplines, while similarly, Becher (1981, p. 109) argued that 'disciplines are cultural phenomena: they are embodied in collections of like-minded people, each with their own codes of conduct, sets of values, and distinctive intellectual tasks'. Therefore, these cultures within disciplines greatly influence the faculty and, consequently, the doctoral candidates within the departments (Golde, 2005). However, Lovitts (2007, p. xiii) argues that standards can be created for doctoral education. The Making the Implicit Explicit (MIE) study found surprising consistency in faculty's characterisation of the dissertation and components of the dissertation. According to Isaac and Walker (1992) and Duke and Beck (1999), a dissertation reflects the training received, the technical skills, and the analytic and writing abilities developed in doctoral study. Such standards would provide stakeholders with a valid and reliable criterion-referenced measure of candidate learning outcomes and educational effectiveness. However, it remains difficult to predict how successful the doctoral candidate will be in the study and later on in his or her career. Williams, Harlow and Gab (1970, p. 161) agree:

Predicting success in a doctoral study would be a most worthwhile accomplishment, providing it could be done with a reasonable degree of accuracy. One problem that has plagued researchers in this important area has been defining the criterion of success.

According to Grover and Malhorta (2004, p. 23), it requires a special kind of person who has the motivation to work hard, going beyond the mere coursework, and to pursue the unstructured process of knowledge creation. It also requires the competence to absorb and

integrate knowledge, apply tools, and communicate knowledge effectively. Not only are the aspects of motivation and management important but the aspect of competence refers to knowledge and communication skills which are broadly assessed through the application process. Emotional intelligence is another construct that can aid in achieving doctoral success (Castro, Garcia, Accountability, Cavazos & Castro, 2011 p. 56). The five domains of emotional intelligence are self-awareness, managing emotions, self-motivation, empathy and handling relationships (Salovey & Mayer, 1990).

Sternberg (1997) claims that emotionally intelligent people accept that obstacles are part of the challenge. They have a 'can-do' attitude and they seek out positive role models. Pritchard and Wilson (2003) suggest that reasons for attrition in first year candidates are emotional rather than academic. Candidates who are emotionally healthy have a greater chance of success (Leafgran, 1989). Although the discussion of the role of emotional intelligence in doctoral success has been brief, it was merely intended to emphasise the argument that doctoral success depends on more than academic intelligence alone.

By taking doctoral education as a form of social practice, Boud and Lee (2009, p. 10) mention that the focus in doctoral education is too often on particular and different levels of policy, programme development and institutional provisions. Rather than merely studying the production of research outputs a shift is necessary in institutional attention to doctoral practices involved in doing doctoral work and producing doctoral graduates.

### **2.2.2. Doctoral success in South Africa**

According to the National Plan for Higher Education (NPHE) (HSRC 2008, p. 1), South Africa's university graduation rate of 15% is one of the lowest in the world. This tendency is of particular concern as the expectations in the labour market – such as those related to employment distribution and the critical shortage of high level skills in the labour market – have shifted considerably. Bitzer (2011, p. 429) points out that in South Africa little research has been conducted on factors that contribute to doctoral success. However, there is a renewed interest in doctoral production in the country (ASSAF, 2010) even though it has a long history in South Africa. The first doctorate that was awarded in South Africa was in law

at the University of the Cape of Good Hope in 1899 and since then South Africa has had 30 000 successful doctoral graduates, about two-thirds of whom graduated in the last two decades (Herman, 2011a, p. i).

Apartheid produced a highly fragmented and racially divided higher education system riddled with inequalities (Sehoole, 2011, p. 56). Since the democratic transition in 1994, doctoral studies have increased and diversified (Herman, 2011b, p. 507). Currently, multiple research agendas and a diversity of purposes and outcomes characterise the doctorate in South Africa. Herman (2011a) claims that this diversity is caused by various factors such the incorporation of different concepts of knowledge, changes in university-industry-government relationships, the growing demand for postgraduate education, and a diverse candidate population together with a changed government policy. Subsequently, the research community has increased its focus on doctoral education. Doctoral education in South Africa is a changing practice (Backhouse, 2011; Herman, 2011b; Jansen, 2011; Mouton, 2011; Nerad, 2011; Sehoole, 2011; Wolhuter, 2011).

One of the current and major discourses regarding doctoral education in South Africa is the increase of doctoral production. There is an emphasis on quantitative concerns (Mouton, 2011, p. 13) to increase the output of postgraduate candidates, especially at master's and doctoral levels. Postgraduate institutions got a clear signal from the government to incentivise doctoral production when the monetary value attached to a doctoral degree was set at three times the value of the research paper – a bold and unique move in terms of international practice (Mouton, 2011, p. 14). Even with the financial benefit attached to doctoral success, South African universities have a high doctoral attrition rate. An attrition calculation conducted 2001 doctoral cohort in the country showed a 46% drop-out rate across all disciplines (Herman, 2011a; Mouton, 2011, p. 18). These results, which correlate with those from studies abroad, revealed that 29% of the doctoral candidates dropped out during the first two years of enrolment.

Doctoral education in South Africa is presented with at least five challenges: (1) increasing the number of doctoral graduates; (2) expanding the supervisory capacity in the system as

supervisors have a heavy supervisory load and are probably supervising between four and six doctoral candidates at any given time; (3) insufficient funding; (4) improving the efficiency of doctoral production as there is an increase of internationalisation and even institutionalisation of corporatism and managerialism in South African universities; and (5) improving the quality of doctoral production (Herman, 2011b, p. 506; Mouton 2007, p. 1079).

Internationally, over the last 30 years, higher education has become increasingly market-driven in several ways (Leonard, 2000, p. 181) and it has become more attentive to how well the national education system is producing what the economy is thought to need. It is clear that South Africa can benefit from an increase in doctoral graduates as economic theorists of the knowledge economy argue that knowledge is crucial to national economic growth and increased prosperity (Powell & Snellman, 2004). In comparison with other countries, South Africa is far behind. Taking 2007 as a benchmark (Mouton, 2011, p. 23) and comparing the doctoral graduate numbers to 34 countries worldwide, South Africa was placed 33<sup>rd</sup>, having 1 274 graduates which translate into 26 doctoral graduates for every million of the total population. However, it is unlikely that the target set by the Department of Science and Technology (DST), of reaching 6 000 doctoral graduates by 2024, will be achieved (Herman, 2011b, p. 505). The problem of doctoral production in South Africa does not lie primarily with completion and attrition rates (Mouton, 2007, p. 1089). According to Mouton (2011, p. 23), there are two main reasons for this state of affairs. Firstly, history is against this goal being achieved. Although there is a significant increase in master's and doctoral enrolments, the doctoral output has not shown the same growth as undergraduate studies. This situation can be ascribed to the fact that institutions have not converted sufficient numbers of undergraduate candidates to continue to postgraduate studies, or honours candidates to enrol for a master's degree and ultimately, enough masters to become doctoral candidates. Herman and Yu (2009) argue that most doctoral candidates make their decisions on whether or not to study for a doctorate during or after their master's studies. This implies that universities should be doing more to market the doctorate to the senior undergraduate level onwards. Secondly, doctoral enrolments have been slowing down and there is little evidence that potential doctoral candidates are expanding in a consistent manner although

in recent years there has been an increase of doctoral candidates from other African countries. However, not many South African candidates are pursuing their doctoral studies overseas (Herman, 2011b, p. 508).

In 2007 the National Research Foundation (NRF) provided funds for 49 doctoral candidates doing a study overseas, mainly in the UK and the USA. It is difficult to estimate how many doctoral graduates will return to the country. Although such candidates benefit greatly from exposure to cutting-edge knowledge, networking and the global knowledge society, it might not contribute significantly towards the desired growth rate of doctoral graduates within the country. Sehoole (2011, p. 53) argues that 'as the demand for greater access to higher education grows, it prompts outward mobility when local demand cannot be met'. Candidates will always move in the direction of educational opportunities, whether they are supported by government, scholarships, or their families' or own resources.

Besides challenges with regard to the increase of doctoral candidates and supervisors, the financial aspects of a doctoral degree must also be considered. According to Kehm (2009), the issue of funding entails strategies in two areas: the funding of the institutions to establish and run doctoral studies, and the funding of doctoral candidates so that they are able to devote appropriate time to their studies. Unfortunately, the NRF has not been able to support doctoral production adequately even though it has been the main funding source of most of the doctoral studies (Herman, 2011b, p. 509). Part of this problem is the three-year duration of the funding as this often does not allow enough time for candidates to complete the study. Herman (2009) argues that for many candidates the level of funding is unacceptable.

The doctoral population also has changed in terms of gender, race, age, familial status and educational background, which also has implications for the funding. Many doctoral candidates have a family to support. The majority of the candidates were working for a salary prior to the commencement of their studies and most of them continue to work during the study (Herman, 2009). Other concerns with regard to funding are the delays in

accessing funds and the funding agents' continuously changing strategies. If South Africa wants to scale up the number of doctoral candidates, it will require high levels of funding.

However, in view of the above-mentioned challenges, it remains questionable whether doctoral production is efficient. Mouton (2011, p. 24) argues that there are two ways of effectively increasing the efficiency of doctoral production: reduce the time to degree of successful candidates and reduce the attrition rate so that more candidates remain in the system. In comparison to other countries, South African doctoral candidates are doing relatively well with an average of 4.8 years in 2007 (Mouton, 2007), especially considering that the majority of the candidates are part-time candidates. The time to degree could be reduced by investing more money into supporting doctoral candidates so that they are able to study full time. This is increasingly supported by the NRF and Higher Education South Africa (HESA). In addition, South African doctoral attrition rates compare very favourably with international trends and appear to be not much higher than that of the USA. Still, attrition is expensive. At a drop-out rate of 20% (Herman, 2011, p. 40), about R1.3 billion in government subsidies is spent each year on candidates who do not complete their studies.

The causes for doctoral attrition are multifaceted and not fully understood. Doctoral candidates tend to attribute the reasons for dropping out to the institutions, while faculty members attribute them to the candidates (Gardner, 2009; Lovitts, 2001). Although it is necessary to achieve a decrease in the attrition rate in order to increase the number of doctoral candidates (Herman, 2011a, p. 512), attrition is an unfortunate reality of doctoral studies and preventive measures will only have a limited effect as the majority of the reasons for attrition are personal (Golde, 1998, 2000, 2005; Gardener, 2009).

Since supervising doctoral candidates is labour intensive and not easy, doctoral education is another challenge when it comes to successful doctoral education. It is not just an overload of candidates that has an influence, but the quality of the supervision that is also important. It is thus suggested that South African universities link their doctoral studies more closely to industry and the public sector. This is already taking place in countries such as Australia, Brazil and European Union countries (Nerad, 2011, p. 4). However, such initiatives would

need a shift in the focus of doctoral education. The emphasis will have to be on the training in research and other transferable skills, while the knowledge produced takes second place (Backhouse, 2011, p. 32). This approach is stressed by the job market today as a doctoral degree is sought after in labour markets that are looking for such highly trained minds and a range of transferable skills. According to Backhouse (2011), the labour market discourse can create concerns for the efficient supervision of candidates and in meeting the expectations of their future employers. Universities are thus challenged to focus on encouraging young people to undertake doctoral studies so that they have longer active research lives, which would result in a greater return on investment. An increase of successful doctorates may therefore have a major influence on South Africa's economic development.

### **2.2.3. Stellenbosch University and doctoral success**

After having discussed doctoral success from both an international and a South African point of view, it is important to examine the relationship between doctoral success and Stellenbosch University as the developed framework for doctoral success is in relation to this university. The ASSAF report (ASSAF 2010, p. 35) states that doctoral research provides invaluable education and training aimed at producing highly skilled knowledge workers capable of transferring their intellectual and technical expertise to wide-ranging global contexts. Stellenbosch University is therefore concerned with increasing its doctoral output. The Overarching Strategic Plan (OSP) foresees, inter alia, a growth of 5% per year in postgraduate candidates for Stellenbosch University. This plan aims at steering the institution towards the achievement of a number of strategic goals by 2015 – including that 40% of all Stellenbosch candidates will ideally be enrolled at the postgraduate level (Overarching Strategic Plan for Stellenbosch University, 2009).

Studies at this level, however, are expensive for all sponsors. Research at Stellenbosch University on the ageing of active scientists in public science in South Africa has produced a growing concern about the provision of quality supervision to the next generation of scholars and scientists (Mouton, 2007, p. 1079). Likewise, the Centre for Higher and Adult Education did a study which provided candidate feedback and reflection on supervision practices within a postgraduate research entity (Albertyn, Kapp, Bitzer, 2008, p. 762). Such

studies can result in the improvement of quality to enhance more effective and efficient supervision of postgraduate candidates.

With regard to completion rates in postgraduate studies it seems clear that such rates are related to contextual issues that confront candidates. This includes workload and the extent of structure provided as well as the relevance of research to a workplace. Research by Lovitts (2005) has indicated that candidates regard interpersonal support, concerns regarding scientific rigour, quality control of the research product, and managerial aspects such as monitoring and time management as being important. These issues seem highly relevant to the Stellenbosch scenario as will be alluded to later.

In terms of enrolment for two-year doctoral studies at Stellenbosch, Table 2.1 below indicates that the number of doctoral candidates remains relatively constant. One exception was for the period 2006 to 2007. If enrolment for 2007 is compared with that of 2006, a rise of 35 doctoral candidates is evident. This represents an increase of 21.2%. This increase is important as, according to the Stellenbosch University Report of 2010 (van der Merwe, 2011, p. 24), the university envisages becoming the leading research intensive higher education institution on the African continent. In 2010, the university had 10 044 postgraduate candidates, which constituted 36% of the candidate body. Not only did the number of doctoral enrolments increase steadily, but the percentage of successful doctoral candidates climbed as well (Table 2.2).

Table 2.1: Number of doctoral enrolments at Stellenbosch University from 2000–2008

Source: Du Plessis & Menkveld, 2010, p. 5

<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
181	159	148	149	176	176	165	200	202

Table 2.2: Successful doctoral qualifications after six years

Source: Du Plessis & Menkveld, 2010, p. 6

Year	Number of enrolments	Number of obtained qualifications	Percentage of obtained qualifications
2000	181	91	50.28%
2001	159	81	50.94%
2002	148	91	61.49%
2003	149	85	57.05%

Table 2.2 represents the percentage of successful doctoral candidates for four consecutive years between 2000 and 2003. Candidates who achieved a doctorate within a period of six years after enrolment show that although the number of enrolments stabilised between 2001 and 2003, the success rate, on average, rose substantially.

For each annual cohort between 2000 and 2003, Figure 2.1 illustrates the percentage of doctoral candidates who obtained a qualification in the minimum time frame (two years), minimum time frame plus one year, minimum time frame plus two years, minimum time frame plus three years, or minimum time frame plus four years.

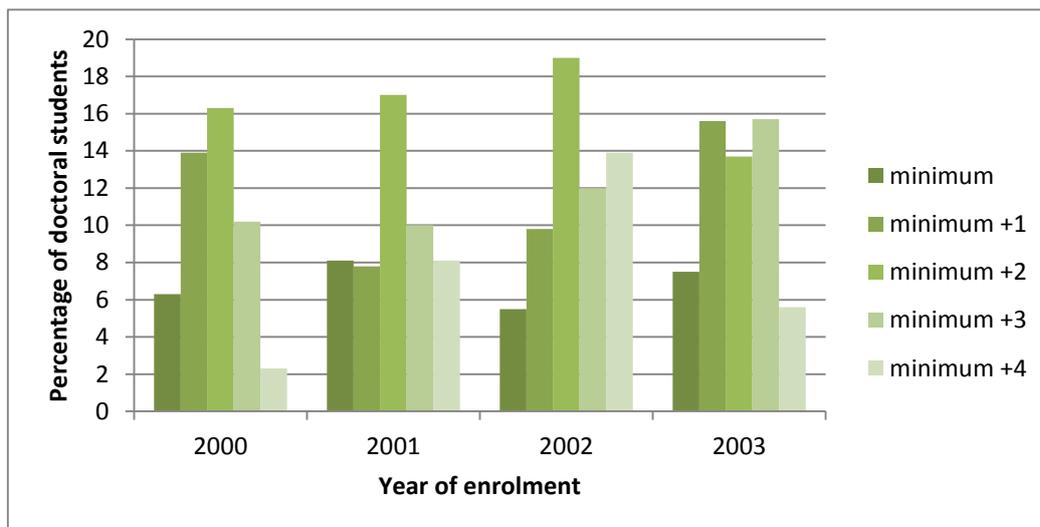


Figure 2.1: Rate of success after six years (2000–2003)

Source: Du Plessis & Menkveld, 2010, p. 7

From Figure 2.1 it is clear that most doctoral candidates qualified after the minimum time frame plus two years. However, this percentage varied between 13.33% (2003) and 18.92% (2002). Only a minimal number of doctoral candidates qualified in the minimum time frame or in the minimum time frame plus four years. The percentage for the minimum time frame varies between 5.41% (2002) and 7.33% (2003) and for the minimum time frame plus four years it varies between 2.76% (2000) and 15.54% (2002).

With regard to doctoral success at Stellenbosch University, it is not only the number of doctoral candidates who finished their doctoral studies successfully, but also the number of doctoral candidates who left the university without a doctoral degree that must be considered.

Figure 2.2 below indicates the state of completion for 2000–2003 with regard to the percentage of candidates and the year of enrolment.

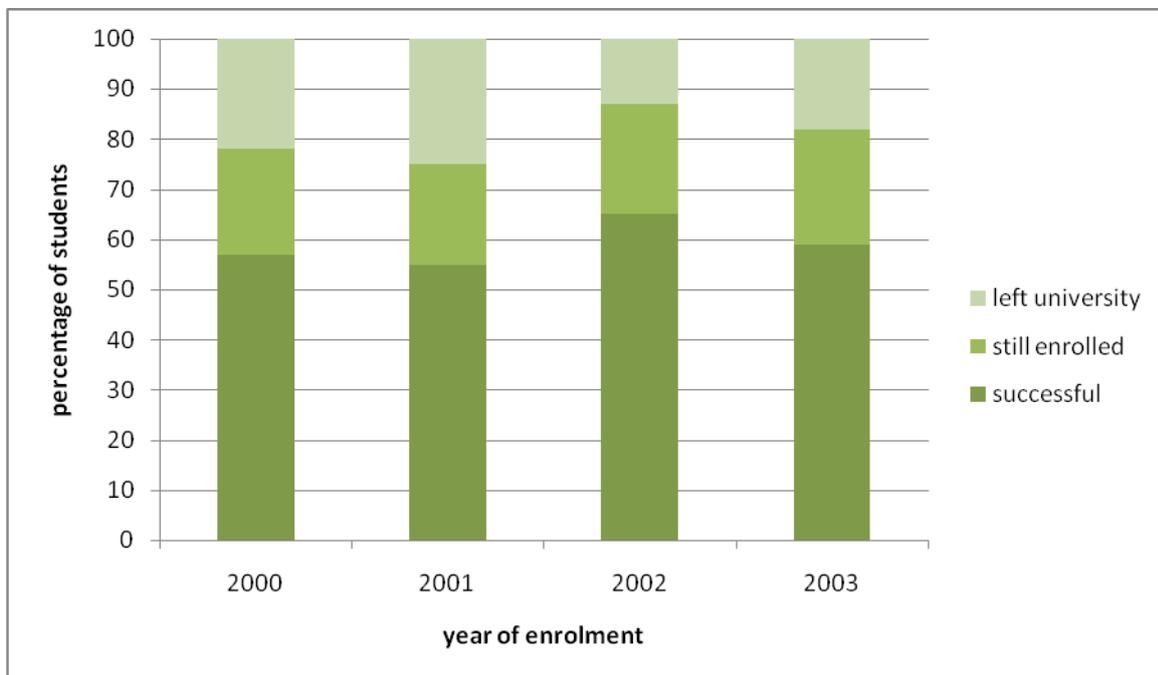


Figure 2.2: State of completing a doctoral degree after six years (2000–2003)

Source: Du Plessis & Menkveld, 2010, p. 7

From Figure 2.2 it may be deduced that more or less 20% of the different cohorts were still enrolled at Stellenbosch University for the years shown and that an average of 18% left the

university without a qualification. All these figures demonstrate that there are substantial differences between cohorts of doctoral candidates with regard to success rates, candidates still enrolled but not qualified yet, and candidates who left the university without a qualification. These numbers are presented in order to understand why the focus on doctoral success is so important and why Stellenbosch University is continuously searching for (new) ways to support candidates.

In order to better support candidates, Stellenbosch University established a Postgraduate and International Office (PGIO) in 2010. The PGIO aims to assist in increasing the number of postgraduate candidates and in enabling these candidates to complete their studies inside the minimum required time frame (Stellenbosch University Report 2010, p. 25). Besides offering support to doctoral candidates through the PGIO, Stellenbosch University ensures that the Library and Information Service offers these candidates dedicated professional support for and services in reference, information and knowledge management by providing efficient specialist management of information resource collections. The 2010 report (p. 26) states:

The environment of the vice-rector remains committed to the University's vision [...]the three divisions are working collectively towards rejuvenating and diversifying the research corps, towards strengthening the candidate support structures at the postgraduate level, towards securing sustainable resources and infrastructure for research, and towards broadening the University's knowledge base.

It thus seems important to explore doctoral success as each successful doctorate plays a part in defining the quality of research of a country. Sufficient attention to doctoral candidates in order to increase research, development and innovation seems to be of crucial concern as the doctorate is regarded a generator of high level knowledge and skills. Also, newly generated knowledge acquired through doctoral education is widely acknowledged as an important strategic and economic resource (ASSAF, 2010, p. 35). It is thus crucial to recognise the role of the successful doctorate in proceeding towards economic growth and innovation which may attract new investments and create new jobs and markets.

### **2.3. Ontological perspectives**

Having discussed the issue of doctoral success in quantitative terms, it is imperative also to discuss the qualitative aspects which may be influencing the probability of doctoral success. I argue that one of the aspects that could influence doctoral success is a change in the ontology or the very being of doctoral candidates. This ontological transformation, I believe, is a personal change doctoral candidates experience as knowledge workers and as they become scholars and researchers in a field. This next section clarifies the concept of ontology and how it is considered to possibly influence the doctoral candidate in achieving doctoral success.

According to Dall’Alba and Barnacle (2007, p. 679), ontological aspects in higher education have tended to be subordinated to epistemological concerns. This means that the notions such as the transfer and acquisition of knowledge skills, either generic or discipline specific, have been emphasised rather than the personal transformation of the candidate or the influence of a doctoral study on the person’s being. The question of whom or what a doctoral candidate becomes is important (Barnacle, 2005, p. 179). Frick (2011) argues that doctoral becoming is conceptualised in three main developmental areas: ontology, epistemology and methodology.

From this previous section alone, it is clear that ontology is a complicated concept and one that can include numerous aspects. In order to better understand ontology in the context in which it is used with regard to doctoral success, different perspectives are explained and illustrated in sections 3.1–3.4.

#### **2.3.1. What is ontology?**

The word ‘ontology’ is derived from the Greek *onto-logos*, meaning the science of being (Oxford Dictionary, online version, [www.oxforddictionaries.com](http://www.oxforddictionaries.com)). Ontology is a systematic account of existence or the study of the categories of things that exist. If one takes this definition of ontology further, it can be argued that what exists is that which can be represented (Viljoen, 1994, p.1). This provides a simplified and well-defined view of a specific area of interest or domain. In essence, ontology is a specification of a

conceptualisation, which means that it is a description of the concepts and relationships that can exist for an agent or a community of agents (Gruber, 1995).

'Ontology' is also used in everyday language for researchers who need to share information and want to create a comprehensive knowledge model (Noy & McGuinness, 2001; Wang, Chan & Hamilton, 2002). Developing an ontology has different reasons and, according to Noy (2001, p. 79), some of the main reasons are to share a common understanding of the structure of information among people, to enable reuse of domain knowledge, to make domain assumptions explicit, to separate domain knowledge from the operational knowledge and to analyse domain knowledge.

Different forms of ontology are used in different contexts. In the context of this study I ontology plays a large role. Ontology involves the study of 'being' in general and it can also be used as a science prior to all others in which particular forms, modes or kinds of being are studied. Such ontologies are designed and specified by a collection of names for concept and relation types organised in a partial ordering by the type-subtype relation. Therefore, 'an' ontology is the statement of a logical theory (Gruber, 1995).

### **2.3.2. Ontology in education**

Although the term 'ontology' is mainly used in the context of philosophy, for the purpose of this study I needed look at ontology in relation to education. One prominent philosopher who linked ontology with education was Martin Heidegger. I discuss his perspectives next.

#### *2.3.2.1. A Western perspective: Heidegger*

As mentioned before, ontological change has rarely been the focus in education as epistemology was previously regarded as being more important (Dall'Alba & Barnacle, 2007, p. 679). Therefore, limited research has been done regarding the change in doctoral candidates when acquiring or generating new knowledge. When discussing ontology from an educational point of view, one needs to abandon the dichotomy between an educational reading and a philosophical reading. It is necessary to undertake a simultaneously educational and philosophical dual reading of writings which are defined by their

fundamental ambiguity, that is, by their reference to two social spaces, which correspond to two mental spaces (Bourdieu, 1975; 1991, p. 3).

A new area of discussion relating to universities and their role as knowledge institutions has emerged (Gibbons, 1994; Barnett, 2000b; Dall’Alba, 2005). Universities often focus on the transfer and acquisition of knowledge, to the detriment of a holistic understanding of the learning that takes place while knowledge is constructed (Dall’Alba & Barnacle, 2007, p. 682). If universities acknowledge the ontological influence of knowledge, support can be provided to doctoral candidates to facilitate the implementation of knowledge and eventual candidate success. Due to institutions’ prevalent focus on knowledge and skill acquisition, one can presume that they are sometimes unaware of the transformation within the candidate. This focus is inadequate in promoting candidate learning (Ramsden, 2003) as such a narrow focus treats learning not only as unproblematic but also as linear. Doctoral candidates are sometimes not assisted or supported in situating and localising knowledge within specific manifestations of practice or sometimes they have to integrate newly acquired knowledge into practice by themselves. This creates a challenge for the candidates and therefore it may affect their development and eventually their being, thus influencing ontological change.

According to Barnett (1997) and Barnacle (2005), knowledge institutions do not pay attention to transformation in the candidate as they tend to over-emphasise a narrow concept of the intellect (Barnett, 1997; Barnacle, 2005). Heidegger argues that as beings we are changing, therefore education must transform as well. Our understanding of education is made possible by the history of being. As our understanding of what beings are is changing historically, our understanding of what education is is transformed as well (Heidegger 1962, p. 56). Dall’Alba and Barnacle (2007) claim that ‘[a]lternative accounts of knowing can be mobilised by challenging the idea that mind and reason occupy a privileged and detached stance in relation to the body and world’. Knowledge, which leads to ‘knowing’, is always situated within a personal, social, historical and cultural setting, and knowledge transforms from the merely intellectual to something that is inhabited and enacted.

As knowledge influences one's way of thinking, making and acting, knowledge is a way of being. This argument is closely linked to the previously mentioned discussion between epistemology and ontology as university teaching concentrates on 'being in the world' instead of on 'knowing the world'. This approach appears to take a primary place in the conceptualisations of university teaching (Barnacle 2005; Dall'Alba & Barnacle, 2007). Learning in higher education needs to be transformed to include and acknowledge the ontological change in candidates. It is not only the transfer of knowledge that is important; it also needs to be understood as having been created, embodied and enacted. It can be seen as epistemology in service of ontology.

Higher education institutions have certain shortfalls which make it difficult to monitor ontological change or contribute to ontological change (Dall'Alba & Barnacle; 2007): these include the de-contextualisation of knowledges from the practices to which they relate; emphasis on a narrow conception of knowledge rather than learning; overemphasis on the intellect; a focus on epistemology and methodology at the expense of ontology. The task of such institutions is incomplete if they merely focus on knowledge acquisition. Supervisors of doctoral candidates should be aware of the importance of a candidate's development outside the intellectual added value acquired during his or her studies (Barnett & Coate, 2005). They need to assist candidates in integrating knowing, acting and being. Dall'Alba and Barnacle (2007, p. 241) argue that becoming a researcher 'involves entering into these ways (of ontological becoming) of thinking, acting and being'. Becoming is an open process as it is never complete and has to draw upon the aspects that assist learning (such as commitment, openness, wonder and passion) but it also has to deal with aspects that limit the learning (such as resistance, prejudice and anxiety). Ontological development influences the supervisor as well as the candidate and how supervisors can assist the candidate in their development towards becoming successful doctorates and becoming researchers.

In many candidates there seems to be a change from taking in knowledge to producing knowledge (Barnacle, 2005). According to Heidegger, our changing historical understanding of 'education' is grounded in the 'history of being', so we can extract from this notion that

the current move towards an ontological understanding of education is a logical development as our 'being' is constantly changing. We are more aware of the importance of ontology. It must be kept in mind that doctoral education in itself involves a certain transformation: it is about becoming doctorate (ASSAF, 2010, p. 40).

Due to globalisation in post-industrial economies of the West, there is not only a change in views about what knowledge is, but also the change about the conceptions regarding knowledge, including its purpose and role. Economic development is dependent on new knowledge (Gibbons, 1994). In many instances researchers therefore need to find opportunities to commercialise their research findings by establishing links between their studies and the relevant industry. Due to this role and the transformation of universities, the traditional role and values present flaws and limitations. There has been a greater emphasis on the acceptance of knowledge produced in the context of how we can use it (application) and this has led to an increase in the participation from the professions and applied disciplines in research degrees (Barnacle & Usher, 2003).

The outcome of a research degree is the body of knowledge that is created by a skilled knowledge worker who is capable of deploying new knowledge commodities within specific application contexts. The process of acquiring this knowledge may have an ontological influence on the doctoral candidate. Therefore, as the candidate is transformed by education, education must transform as well. As mentioned before, Heidegger argued that as beings we are changing; therefore education must transform as well (Thomson, 2001). There are two major elements of transformative learning: first, the critical reflection or critical self-reflection on assumptions which include the critical assessment of sources, nature and consequences of habits of mind. Participating fully and freely in dialectical discourse to validate a best reflective judgment (Illeris, 2009, p. 94) constitutes the second element.

An ontological focus in education is advisable in higher education (Barnacle, 2005; Dall'Alba & Barnacle, 2007) as Heidegger, as early as 1911, diagnosed an ontological aspect related to higher education (Thomson, 2001; 2003). He was ahead of his time as he recognised an

ontological problem. According to Heidegger, the educational crisis lies with the 'technological understanding of being'. Our 'being in the world' which is shaped by the knowledge we pursue, uncover and embody; thus existence is formed by knowledge as we constantly practise what we know. According to Heidegger, it is necessary to deconstruct our traditional educational institutions as we increasingly instrumentalise, professionalise, vocationalise, corporatise and technologise education. He maintains that the 'history of being' makes a better understanding of the historical development of educational institutions such as universities possible (Thomson, 2001, p. 246).

Modern universities appear to have lost sight of the shared goals with originally justified endeavours of the academic community as a whole and therefore its members have begun to look outside the institution for some purpose to give meaning to the lives of research (Thomson, 2001). The research results of several disciplines are receiving external support, and therefore disciplines are trying to present themselves in terms of user value. This mentality is also adopted by doctoral candidates who may see advanced education only as a means to an economic advancement.

The different disciplines at universities seem to have lost their unifying purpose and have developed internal standards which are only appropriate for their domain. These standards are becoming more disparate as the domains are increasingly specialised. This leaves the university not only with disciplinary fragmentation but also without common standards. Only through a revitalising reunification of the university will the ontological development of a candidate be accomplished. Heidegger states this as follows (in Peters 2002, p. 134):

We cannot understand education as the transmission of information, the filling of the psyche with knowledge as if inscribing a tabula rasa [...] This understanding of education is false because we are thrown beings, always ready shaped by tradition we can never get behind and so we cannot be blank slates or empty containers waiting to be filled.

Our understanding of education, and advanced education in the form of doctoral studies in particular, needs a revolution of 're-ontologisation' (Heidegger, 1998; Thomson, 2001, p. 254). According to Heidegger (in Thomson, 2001), real education lays hold of the person and

transforms him or her in its entirety. Genuine education leads us back to ourselves, to the place we *are*, teaches us to dwell *there* and transforms us in the process. This transformative journey is reflexive and is revolutionary as it brings us full circle back to ourselves, first by turning away from the world in which we are most immediately immersed, then by turning us back to this world in a more reflexive way. This is also discussed in the work of Schön (1983, 2010) who argues that institutions of learning should be invented and developed as systems capable of bringing about their own continuing transformation.

However, Heidegger does not seem to suggest that a higher education needs to include ontological development or transformation but rather needs to be ontological, where candidates realise that knowledge entails more than mere resources and so becomes free to understand otherwise. The supervisor needs to facilitate this transformation. From this perspective it may be argued that education can or will never be complete(d).

#### *2.3.2.2. An African perspective: Ubuntu in higher education and doctoral studies*

An African perspective on higher education presupposes that there exists an African educational philosophy. Such philosophy may be found in the African notion of Ubuntu and its possible relatedness to higher education. As a result of the problematic history of South African (higher) education and its apartheid past, much of the higher education discourse has been determined by a Western (Eurocentric) paradigm (Van Wyk & Higgs, 2004, p. 198). Some authors argue that 'Africanisation' should not only concern demographic representation. Prah (2004, p. 105), for instance, contends that 'African culture should occupy a central position in the overall social activity of Africans'. Education is now a primary site of transformation where before it was a primary site of contestation under apartheid (Pendlebury, 1998, p. 334). This transformation is not only paramount for education's own sake but also because education is recognised as being crucial for transforming other spheres of social life.

According to Beets and Le Grange (2005, p. 1198), Africanism should not involve abandoning or discarding the cultural attributes and practices of the West, since no culture exists in

pristine form outside of the influences of other cultures. Africanising should be concerned with the value that African culture practices and ideals (such as Ubuntu) might add to transformation. Aspects related to an African philosophy are necessary in higher education (Van Wyk, 2005, p. 14). These aspects provide a different approach than the achievement of mere performance indicators in educational transformation as they concentrate on our humanity rather than on instrumental excellence which serves nothing other than itself.

African ways of thinking might be invaluable in making education more accessible to African students and researchers. If an African higher educational discourse were fundamentally concerned with Ubuntu, higher education would be in the service of the community and personal wellbeing (Van Wyk & Higgs 2004, p. 206). According to Van Wyk and Higgs, it would also require higher education in the African context to pay attention to interpersonal and cooperative skills. This would play a crucial role in promoting and sustaining communal interdependence and concern with the welfare of others that is encouraged by Ubuntu. It is this interdependence that would highlight the fundamental principle governing African life, namely that persons depend on others just as much as others depend on them. Higher education and the research conducted by its doctoral candidates should not be separated from life, but strive after making meaning for individual researchers and the communities they are part of.

It may be challenging to bring a re-orientation around ontology into the discourse on doctoral studies and its qualitative success, but it holds the promise of material change and transformation of doctoral graduates – particularly in the time and era of the so-called ‘developmental university’ (see Barnett, 2012) and its role in developing contexts. In this sense, another qualitative aspect is the issue of doctoral identity, which is discussed next.

#### **2.4. Identity development**

Identity is a much contested concept (O'Byrne, 2011, p. 8). According to Kogan (2006, p. 162), identity is a concept which has traditionally been ‘of central, symbolic and instrumental significance in the lives of individual academics’ and indeed in research into the working lives of academics. With an understanding of identity comes a focus on the roles not only of

one's biological and psychological foundations, but also of cultural contributions to the ways in which one both shapes and is shaped by the surrounding milieu (Kroger, 2007, p. xi). Identity is both a continuous, conscious and unconscious process. It is shaped by three interacting elements: one's biological characteristics; one's own unique psychological needs, interests, and defences; and the cultural milieu in which one resides. It is in the latter respect where a doctorate may exert particular influence on the identity development of doctoral candidates.

#### **2.4.1. Identity, entity or complexity?**

Defining identity is difficult as there are several interpretations of what constitutes identity. An understanding of what identity means and how it evolves over the course of a life span has been investigated from various perspectives over the past 60 years (Kroger, 2007, p. 4). It even relates to different terminology such as 'self', 'ego', 'I' or 'me'. To explore identity, the work of Erikson (1956) comes into play. Erikson (Erikson, 1968; also in Bendle, 2002, p.6, 11) described identity as involving a subjective feeling of self-sameness and continuity over time. In different places and in different social situations, one still has a sense of being the same person. In addition, others recognise a continuity of character and respond accordingly to the person they 'know'. Thus identity ensures a reasonably predictable sense of continuity and social order across multiple contexts for the holder as well as the beholder. According to Archer (2000, p. 255), identity is based on social realism, a stratified view of the person whose different properties and powers emerge at each level. Making up the individual human subject involves four strata: the self, the person, the agent and the actor. Each aspect is characterised by its own distinct properties and powers but each is located in the individual person and they are therefore interrelated. To acquire a full understanding of the process of identity formation, one must gain a full understanding of the individual aspects that make up the person and how these interact and affect each other (O'Byrne, 2011, p. 12).

To better illustrate this, Figure 2.3 depicts a stratified personal and social identity in a dialectic relationship.

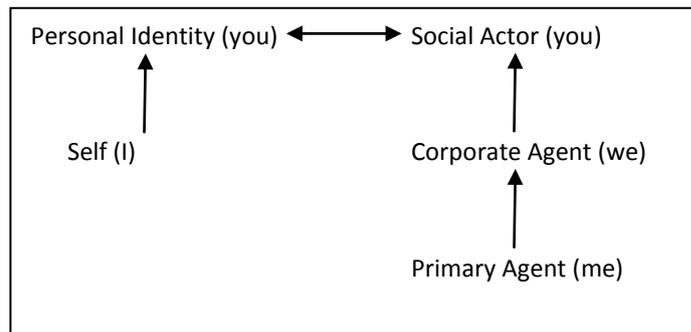


Figure 2.3: Stratified personal and social identity in a dialectic relationship

Source: Adapted from Lockett & Lockett (2009, p. 474)

The emergence of the 'self' as a 'self-identity' is the first stage in the process of identity formation. It is this self-identity that amounts to a 'continuous sense that we are one and the same being over time' (Archer, 2000, p. 7). This individual experience, 'a continuous sense of self', is ontologically unbreakable as it is based on early practical activity in the physical environment prior to sociality and language (Lockett & Lockett, 2009, p. 474). This achievement is assumed in higher education. Archer (2000, p. 189) claims that it is one of our most crucial human properties and powers and it develops early in life. It is this sense of self that makes us distinctly human and provides the necessary anchorage for the person, agent and actor alike. It also allows the range of varied life experiences, reflections, conditionings and expectations each individual has to be united in one human being.

The formation of personal identity, the second stage, is necessary to operate in the world. The individual, in possession of a sense of self, has concerns in the practical order (about performative competence), the natural order (about physical well-being) and the social order (about self-worth) (Archer, 2000, p. 313). Archer proposes the development of 'personal identity', which depends on an individual's capacity to reflect on and prioritise concerns (regarding physical well-being, performative achievement and self-worth) which in turn relate to the three orders of reality (the natural, the practical and the social). One must address concerns arising from all three orders of reality, but it is not necessary to assign equal importance to all of them. If concerns are present, the individual engages in an internal conversation where the relative importance of the various concerns is considered.

The person who is characterised by his or her own unique constellation of ultimate concerns, and allows for these concerns, interacts with the social as well as with the natural and practical orders of reality. This interaction generates the final two strata of social realism and the stratified subject: the agent and the actor. According to Archer (2000, p. 254), these are social identities: 'our social selves, which emerge, respectively, through involuntary involvement in society's role array'. Individuals have to work out the dialectic between answering the questions, 'What do I want?' and 'How do I go about getting it?' (Archer, 2007, p. 19). As discussed earlier, Archer suggests that personal identity emerges through this internal conversation that leads to a 'unique pattern of commitments' (2000, p. 241), which she argues is the content of personal identity. This involves emotional as well as rational evaluation and commitment.

#### **2.4.2. Academic identities**

Having discussed the notion of identity, the identity developed by a doctoral candidate as a qualitative pointer for success needs to be explored. A doctoral study does not just involve becoming an expert in a particular topic area, but comprises a transformation of identity: that of becoming a scholar or researcher (Barnacle & Mewburn, 2010, p. 433). Doctoral research produces and reproduces not only knowledge but social identities as well (Delamont, Atkinson & Parry, 2000, p. 4). According to Henkel (2000, p. 255) the concept of academic identity implies a 'complex and heterogeneous mix of individual and community values, linked to particular forms of knowledge or epistemological frameworks and a sense of worth or self-esteem'. Because disciplines themselves are complex entities and by no means homogeneous although they do represent particular forms of knowledge or frameworks, it may be argued that academic identities are discipline specific. The kind and amount of change that takes place differs between people and contexts as well as disciplines. Academic identities are not only influenced by the specific discipline; they are also influenced by the various communities to which individual academics belong (O'Byrne, 2011, p. 8). However, according to Barnacle and Mewburn (2010), the significance of identity formation within doctoral education tends to be overlooked.

The transition from a dependent to an independent researcher can be hard for doctoral candidates. Because this transition has certain implications for their identity and self-esteem, failure becomes more than just a matter of things going wrong technically or pedagogically (Delamont, Atkinson & Parry, 2000, p. 2). However, one must keep in mind that academic identities are diverse, not only because of the diversity of the academic system, but also because 'there is more than one way to construct an academic professional self' and because candidates have to rely on their personal resources for identity forming (Nixon, Beattie, Challis, & Walker, 1998, p. 292). These identities are flexible, multi-layered and susceptible to change over time (Winberg, 2008) as individuals follow a range of different trajectories in forming academic identities (Jawitz, 2007).

It is not only the identities that are flexible and constantly changing (though slowly). Higher education as a system and context for practice is not static, but is constantly shifting, evolving and changing. Therefore the meanings associated with 'being' an academic and what constitutes 'academic work' are always changing (Archer, 2008, p. 385) so that candidates joining the academic system now, are joining a different system than those who joined it a decade ago (Henkel, 2000, p. 180). Academic identities are being actively shaped in response to changes in university structures and external environments (Clegg, 2008, p. 340). When contexts change and priorities are shifted, 'grasping hold of identities that one can feel comfortable with is no easy matter' (Sikes, 2006, p. 563). The continuous change is due to universities being constantly pressurised to deliver with more relevant and useful knowledge and skills and (Davies & Petersen, 2005, p. 33) who are able to compete in the current job market. These changes continue to shape the nature, organisation, form and meanings of higher education at the macro level (Barnett, 2003) and at the same time at the level of individual and collective academic professional identities (Davies & Petersen, 2005).

Therefore increased attention is given to understanding the nature and development of academic identities (Becher & Trowler, 2001; Henkel, 2000; Taylor 1999; Tight, 2000; Trowler & Knight, 2000). Davies and Petersen argue as follows (2005, p. 33):

The 'Enterprise University' and the signifying practices that come with it are, it seems, everywhere apparent – although its inevitable effects on academic work and

day to day practices, and on academic identities, has yet to be adequately researched.

Notions of professionalism and of what constitutes academic work and what it means (or what it *should* mean) to be an academic are being constantly disrupted (Archer, 2008, p. 386). Academia is a challenged territory which involves persistent struggles over the symbols and boundaries of authenticity. It is these questions of authenticity that are central to the formation of social relations among academics. According to Archer (2008), individuals and groups are competing to ensure that their particular interests, characteristics and identities are accorded recognition and value. Becoming an academic is not a smooth or automated process, neither is it straightforward or linear. It involves conflict and instances of inauthenticity, marginalisation and even exclusion. It along these lines that Colley and James (2005) understand the framing of professional identities as disrupted processes which can involve not only becoming, but also unbecoming.

A key stage in the socialisation process for academics is doctoral research.

Doctoral research is a relatively prolonged process of change and transition in status, a rite of passage. For all academics the experience of postgraduate research is one in which identity formation is especially important. For most candidates and in most disciplines the enculturation process involves a certain degree of identification with their chosen academic discipline. The crystallisation of such academic identities, their acquisition and their form, vary from discipline to discipline. Barnacle (2010, p. 441) argues that research degree candidates need to develop an ability to shape their identity performances and maintain coherence through multiple performances of different identities with different material semiotic dimensions. The thesis on which the doctoral candidate is working during the course of the study is not merely the product of the candidate, but represents a network of relations of which the candidate is a significant, but not the sole, part. It is both the discipline and the institution that play an important role in the development of the academic identity (Becher & Trowler, 2001, p. 47; Henkel, 2000). According to these authors, the discipline is regarded as the central organising vehicle within higher education. Belonging to a disciplinary community involves a sense of identity and personal commitment. Henkel (2000, p. 22) goes further and acknowledges that the discipline is the central context within

which academics construct their identities, their values, the knowledge base of their work, their modes of working and even their self-esteem. The discipline is the place where a sense of academic identity flourishes. Universities are major institutions in the modern world, which simultaneously produce knowledge and identities. They are not only knowledge processing institutions but also people processing institutions (Delamont, Atkinson, & Parry, 2000, p. 4).

It seems clear that the concept of identity formation in the case of doctoral candidates consists of a personal aspect and an academic aspect, which implies a link between an independent development of identity and learning. According to Merriam (2004, p. 60), numerous studies have documented that growth and development are outcomes of transformative learning. This aspect is discussed next.

## **2.5. Transformative learning**

Transformative learning seems, in many respects, related to being a successful doctoral candidate as it assists in the transition from a dependent to an independent scholar (Lin & Cranton, 2005). This learning can only occur when the doctoral candidate is able to critically reflect and engage in rational discourse as both of these activities are characteristic of higher levels of cognitive functioning (Merriam, 2004, p. 60). Doctoral candidates have to move away from being anxious while mimicking and memorising knowledge. They cannot continue to operate in an isolated community of learning. In order to become successful, these candidates have to start developing, thinking independently, being confident and being a part of that community.

Having a doctoral degree is not just about having accumulated knowledge. It also involves knowing how to think about this knowledge. Doctoral candidates should question their knowledge, since, as Freire (1970, p. 58) states, 'Knowledge emerges only through invention and reinvention, through the restless, impatient, continuing, hopeful inquiry men pursue in the world, with the world, and with each other.' Successful doctoral candidates challenge themselves to take risks, to invent and reinvent, and to take on active and lifelong inquiries.

A personal transformation occurs when such candidates become convinced that they can take a purposeful departure from the past and support their decisions with their own scholarly work. This independent learning, I believe, has a direct impact on the doctoral candidate and influences the outcome of the study.

### **2.5.1. Towards independent learning**

People tend to question previously held assumptions on encountering something that was not anticipated. Transformative learning takes place when candidates start to question their own previously uncritically assimilated assumptions, beliefs, values and perspective. This type of transformation is achieved by acknowledging power and the so-called shadow side of the doctoral candidates. Lin and Cranton (2005) make a distinction between the persona and the shadow. The persona is the 'perfect' candidate who, for a dependent candidate, will aim at perfection which includes the imitation of the knowledge of teachers. The shadow is the 'dark' side of the candidate and contains aspects of the self that are not recognisable, or are invisible to others. Although the persona surpasses the shadow side of the candidate, transformative learning is dependent on recognising the shadow.

The last step in becoming an independent candidate is a journey to transformative individuation. Jung (1971) describes this process as the unconscious being brought to consciousness while developing a dialogue with the self so that there is a better understanding of the shadow. To become a fully independent candidate it is necessary to create a voice that is different from the group's; therefore, differentiation from the other doctoral candidate is necessary for transformation (Lin & Cranton, 2005).

Transformative learning has implications for supervisors at all levels of education. Doctoral candidates are usually seen as successful if they have met the necessary requirements of a particular course or study. However, independent doctoral candidates do not inevitably meet such requirements. Previously uncriticised educational assumptions need to be questioned to facilitate the independence of doctoral candidates (Mezirow, 2000). In order to do this, supervisors need to challenge their own beliefs and encourage doctoral candidates to do the same and also to challenge the beliefs of others. Supervisors can bring

about such transformative learning by praising innovation instead of traditionalism, presenting alternative viewpoints. They can also assist doctoral candidates in encouraging them to critically question certain things and supporting activities such as role-playing and debates, as well as encouraging them to express their points of view (Lin & Cranton, 2005, p. 457). Dependent doctoral candidates need to break traditional mind sets and learn how to become self-governing knowledge agents in order to become independent. They have to learn how to take responsibility for their own ideas and validate their beliefs with critical thinking without reverting to the traditional education system. However, this situation can create a paradox or tension when supervisors try to teach doctoral candidates to become independent thinkers and researchers without taking into account the discrepancy in power between their own position and that of the doctoral candidates.

All the above-mentioned factors are essential for creating an environment where the doctoral candidate may transform from a relatively dependent to a relatively independent, but successful, graduate. However, in order to become a successful doctoral graduate, a candidate has to demonstrate that transformative learning has taken place by illustrating the originality of their knowledge contribution by being creative during candidature.

## **2.6. Creativity in doctoral success**

Creativity is inherently connected with a doctoral study as a candidate is expected to make an original contribution which needs to extend the knowledge boundaries of his or her discipline (Frick, 2011, p. 495). Therefore, the transformation from a dependent to an independent researcher necessitates psychological and social transformation. Lovitts (2005) stresses the point of creativity in this process and regards creativity as inherent and integral to doctoral education. Doctoral candidates have to learn certain competencies and skills that are most of the time not part of the undergraduate experience. In the following paragraphs I explain why I believe that every doctoral candidate needs a certain level of creativity as creativity is regarded as one of the major aspects related to the difference between undergraduate and postgraduate studies.

The basic structures of knowledge may be taken as a given at the undergraduate level of studies, but for the doctorate the creation of knowledge is a more uncertain process (Delamont, Atkinson & Parry, 2000, p. 2). Little research has been done on the creative process at doctoral level, even though such knowledge could aid doctoral candidates in making a positive transition to independent research (Backhouse, 2009a; Frick, 2011). Conceptualising creativity is not easy as various theorists have many possible explanations for this phenomenon (Piaget, 1971; Torrance, 1988). According to Piaget and Valsiner (1930, p. xii), scientific creativity is not limited to some scientists' formulation of new workable hypotheses and does not only include the useful concepts or information that comes from a doctoral candidate; it also includes the numerous try-outs and resubmissions. Creativity lies not only in the end-product, but also in the preceding process (Dewett, Shin, Toh & Semadeni, 2005, p. 2). Creativity is an important measure by which organisational skills of scholarship can be judged and it is most often defined as the production of novel and useful ideas or products (Daft, 1984; Amabile, 1996; Oldham & Cummings, 1996). According to Bargar and Duncan (1982, p. 1), the doctorate is generally viewed as the candidate's earliest accomplishments in creative scholarship and research. It is the first time that a candidate can experience the patterns of thoughts and feelings indigenous to a life of intellectual inquiry.

Discussing the creativity that is expected from a doctoral candidate can be problematic as creativity used in the concept of a doctoral study is not well defined and is often used in a similar way to the everyday use of the term. According to Frick (2011), the concept of originality features prominently in defining the outcome of a doctoral degree. According to Runco and Charles (1993, p. 537), original ideas do not necessarily mean that they are creative or executed creatively, but being creative may enable candidates to become independent researchers and successful doctoral candidates.

Lovitts (2005, 2008) uses the diagram below (Figure 2.4.) to demonstrate the multiple factors influencing both degree completion and creative performance in order to achieve doctoral success.

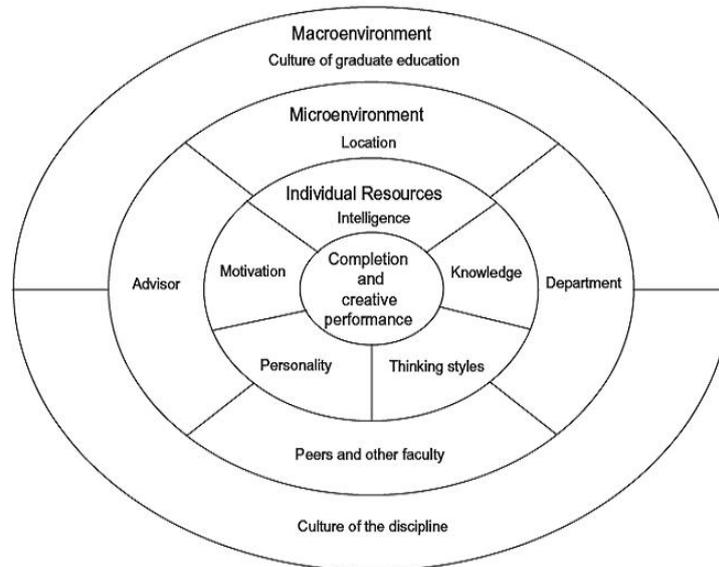


Figure 2.4: A model of factors influencing degree completion and creative performance

Source: Lovitts 2008, p. 298

According to Lovitts, five individual resources (intelligence, knowledge, thinking styles, personality and motivation) influence completion and creativity. These resources are influenced by and interact with factors in the micro and macro environment. They are inherent to all postgraduate candidates and are further developed during postgraduate studies. At the same time they are embedded in, interact with, and influenced by the micro environment which is the immediate setting where the doctoral study is taking place (Lovitts, 2008). It is the environment where the doctoral graduate works as well as where interactions take place. These resources are not distributed equally across candidates at a university (Lovitts, 2001).

The macro environment is the context – socio-cultural and institutional – in which doctoral candidates live and work. It embodies the norms, values and beliefs of their surroundings. These resources guide their actions and interactions and it is the candidate's reactions to these resources that could decide the quality of their produced work. The model in Figure 2.4., which is underpinned by research from Lovitts (2008), indicates that the measure of creativity and successful completion of a doctoral degree goes hand in hand. However,

some studies point out that a too heavy emphasis on creativity may hamper doctoral success (Lipschutz, 1993; Park, 2007).

Doctoral graduates are expected to have become independent researchers and should demonstrate achieving scholarly independence by illustrating creativity in an original contribution to a particular field of inquiry. However, this ill-defined yet implicit expectation of creativity in doctoral research can make it difficult for candidates to know what is expected of them. The indeterminacy of the expectation does not make it easier for the candidate as dependency may have been imprinted since the onset of his or her academic career (Bargar, 1982, p. 2). Dependency is enabled by years of institutionalised education shaped by the educational systems. Candidates are not prepared adequately for independent research as they have to conform to the requirements of external authorities that evaluate the candidates' success or failure. Parker (2003, p. 541) argues that today's curriculum in general still largely works with 'dependent/independent/autonomous' models of candidate progression as the philosophy behind education is more about what candidates know rather than about what they need to know. Consequently, what is expected of many postgraduate candidates is often merely to acquire rather than to question knowledge. Dependent candidates often only repeat what they have been taught without questioning, and merely assume that knowledge is verified by those who convey it. Clearly, this type of knowledge is undesirable in doctoral education. Candidates who are not able to think for themselves may find it difficult to create or construct knowledge and will struggle to become responsible for their own learning processes and progress (Lin & Cranton, 2005).

Although it is desirable for doctoral students to be able to generate knowledge and therefore become accountable for their own learning process, these requirements are not solely appropriate for becoming successful doctoral students as illustrated by the above-mentioned concepts.

## **2.7. Conceptual framework**

Having discussed a number of aspects which may relate to doctoral success, the question emerges of how these aspects hang together, how they influence one another and how they

may be connected. Although it can be argued that an array of factors or aspects may influence doctoral success, it appears that the four aspects that have been discussed in this chapter can play an important part in doctoral success.

The conceptual framework suggested in Figure 2.5 illustrates the potential interrelationship of these four perspectives.

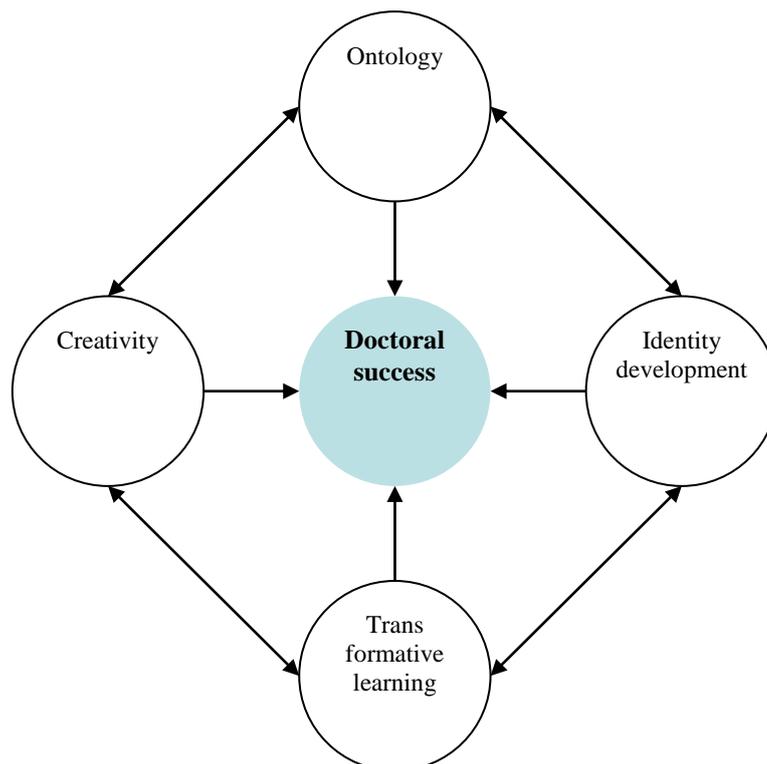


Figure 2.5: Conceptual framework for explaining doctoral success at Stellenbosch University

Figure 2.5 illustrates how the four perspectives may be connected and interrelated and how they can influence each other; and how, together, they may play a part in doctoral success. In discussing this figure, I will discuss each element and its relation to the following element. What emerged from the literature explored in this chapter as well as from my own observations is that doctoral success seems to be (pre-)occupied with epistemological elements of the doctorate. The focus of universities is often merely on the intellectual value of the doctorate rather than on the influence of the entire doctoral education experience on the candidate. Heidegger identified this phenomenon as the 'ontological crisis' in higher education. What may not be sufficiently acknowledged is that personal transformation may

take place when doctoral candidates participate in doctoral studies. The potential transformative effect of doctoral studies is, however sometimes ignored.

Also, there seems to be at least some relationship between knowledge and being (Barnett, 2009, p. 434) as knowing has implications for becoming. Ontology acknowledges the existence of a person as 'being' not static but constantly changing in interaction with the experiences that person is going through. Participating in a doctoral degree study takes several years of commitment and involves the candidate in learning new skills and attitudes which are necessary to successfully complete the degree. Inevitably, these experiences influence the candidate as a person. The candidate's newly acquired knowledge has to be put into practice, which can create several challenges and affect his or her being and identity. The candidate is not only *becoming* a doctor, he or she also learns what it is to *be* a doctor. It can be argued that knowledge institutions can benefit by recognising the influence knowledge has on a student. Offering suitable support to doctoral candidates in the implementation of their newly acquired knowledge and skills could further facilitate doctoral success.

Ontology is concerned with 'being' and transformation. With reference to a doctoral candidate, the use of the term 'ontology' suggests that there is an existing 'being' before the doctoral candidate begins with the doctoral study. Each of the doctoral candidates has an existing identity and during the study they are also working towards, or developing, their identity as an academic. An identity is not only influenced by biological or psychological aspects; it is also influenced by cultural contributions in a conscious and unconscious process. Delamont, Atkinson and Parry (2000) acknowledge that doctoral research produces and reproduces not only knowledge but social identities as well. These academic identities are not only influenced by the discipline in which the doctoral candidate is doing research, but they are influenced by various communities to which the doctoral candidate belongs. This means that different people in different contexts and disciplines form their identities differently.

The importance of identity formation within doctoral education is often overlooked (Barnacle & Mewburn, 2010). However, the notion of academic identities is receiving more attention as they are actively shaped in response to changes in university structures and external environments. There has been increased consideration towards academic identities because universities have to produce more useful and relevant doctorates who are also able to compete in the current job market, since the doctoral degree is now viewed as a preparation for a variety of careers in addition to an academic one (Baker & Lattuca, 2010, p. 807). Acknowledging the formation of academic or research identity development can help in assisting doctoral candidates to be increasingly job ready after finishing a doctoral degree. Realising that their new identity may enhance their employability may be a motivational booster for candidates participating in a doctoral study. When one redefines the sense of identity as academics, it is important to recognise the possibilities and opportunities provided in the current climate in which we work today. Doctoral research produces not only knowledge but an identity as well. Completing a doctoral degree does not merely involve becoming an expert in a particular area or topic, but it also includes a transformation of identity: an identity of becoming a (independent) scholar or researcher.

Moving from being a dependent scholar towards being an independent one is one of the major changes in the identity of a successful doctoral candidate. It has been argued that candidates have to acquire transformative learning in order to make this transition. To become a successful doctoral graduate it is necessary for a candidate to be able to do research independently. The doctoral study is not merely about trying to know as much as possible about the discipline; it is about knowing how to think about the knowledge and about becoming a confident part of the academic community. Doctoral candidates have to learn how to take accountability for their own ideas and validate their beliefs; they should become more critically reflective. Completing a doctoral degree involves the transformation of becoming a responsible scholar. This transformation must be anticipated by institutions so that they can provide opportunities for transformative learning by allowing and facilitating change in the doctoral candidate and changes in the production of knowledge.

Creativity is necessary in transformative learning as doctoral candidates have to extend the knowledge boundaries of their disciplines. A successful doctoral candidate is seemingly a creative student. Doctoral candidates illustrate their independence by showing creativity in their making an original contribution. Creativity is integral to and inherent in postgraduate education. The doctorate is regarded as one of a candidate's first endeavours in creative scholarship and research (Bargar & Duncan, 1982). Creativity is not only demonstrated in the end product, but should also be visible in the entire doctoral process. Such creativity could aid doctoral candidates in making a positive transition to independent research (Backhouse, 2009a; Frick, 2011). Trafford and Leshem (2009, p. 305-306) argue that although creativity is not well defined in the context of doctoral education, it appears to be a contributing factor to doctoral success.

Since doctoral studies are a personal and individual process for the candidate, these above-mentioned perspectives cannot be generalised to all doctoral candidates. They are not static and do not influence every doctoral candidate in the same manner or the same degree. The four perspectives discussed above may, however, facilitate doctoral success. They will be further discussed in view of empirical work which will be reported on in the next chapters.

## **2.8. Conclusion**

As Williams, Harlow and Gab (1970, p. 161) noted, it would be worthwhile for doctoral success to be predictable, provided that the prediction could be done with a reasonable degree of accuracy. However, doctoral success seems dependent on perspectives beyond the control of an institution and the factors that influence a candidate's ability to successfully complete a doctoral study are complex and numerous. Success in doctoral studies does not seem to be only related to variables such as gender or previous academic accomplishments – there are multiple factors involved in the achievement of a doctoral degree which are not necessarily of an academic nature.

From a theoretical perspective, at least, candidates seem to go through (ontological) transformation. This may imply that doctoral becoming can be seen as a process of moving from being a scholarship candidate to becoming an independent and responsible scholar. A

process of becoming other than what one is already, a transfer of one state of being to another, is a phenomenon that is complex, but most interesting to research. In most societies the successful completion of a doctoral degree is perceived as the apex of individual academic achievement. However, many doctoral candidates never finish their degree. The criteria for and factors leading to doctoral success have always been a point of contention and they will remain contentious, even in the light of new evidence.

## CHAPTER 3: RESEARCH METHODOLOGY

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### 3.1. Introduction

This chapter describes the research methodology followed in the investigation of the research question: *What characterises doctoral success at Stellenbosch University?* The research paradigm that informed this study is interpretive, and a case study design was used to generate and interpret empirical data. Narrative inquiry methodology elicited qualitative data, which was obtained through interviews with triads consisting of recently graduated doctoral candidates, their supervisors and significant others. The term ‘significant other’ was given to a person who was closely involved with the doctoral graduate during the period of study and could therefore answer questions in relation to the doctoral process as observed by the significant other. The data generated by interviews was analysed by means of narrative analysis. The gathered and interpreted data was not limited to the selected doctoral candidates. The latter part of this chapter also refers to data representation and reports on the limitations and ethical considerations of the study.

### 3.2. Research paradigm

The methodology employed in this study falls within an interpretive paradigm. An interpretive paradigm of scientific work is concerned with an understanding of knowledge systems and the way in which they are constructed to create meaning and where sensitivity to context sensitivity is of utmost importance (Henning, Van Rensburg, & Smit, 2004). Gummesson (2003, p. 482) states that ‘all research appears to be interpretive’ which indicates that interpretation is inherent to all human effort that aims to understand the world; it therefore forms part of all types of research. However, it is apparent that in generating qualitative data using techniques such as interviewing, observation and document analysis, various kinds of interpretation are needed. The goal of an interpretive lens on knowledge is to explore the behavioural processes of interaction and the meanings, values and experiences of purposefully sampled individuals and groups in their natural context (Kitto, Chesters, & Grbich, 2008, p. 243). Therefore, interpretations start from the moment a researcher begins with a project and continue until the very end. The interpretive research approach has not only gained a broader acceptance across disciplines in the social

sciences, it has also shifted in more radical and sometimes less structured directions (Lowenberg, 1993, p. 57). In education (as in other disciplines) there is often disagreement on the terms and derivative concepts associated with interpretive research approaches. The existing misconceptions related to this are closely connected to the confusion about the meaning of qualitative research and the underlying assumptions of the various qualitative research methods.

To define the interpretive approach used in this study, a link to the work of Mead (Mead in Margolis & Catudal, 2001, p. 52) and Walsham (1993, 2006) is informative. Their work explores the interactions between individuals and their social worlds. It also investigates the symbolic systems that structure and give meaning and significance to social life for individuals (Owens, 2007, p. 300).

Walsham argues that interpretive approaches to research start from the position that 'our knowledge of reality, including the domain of human action, is a social construction by human actors' (Walsham, 2006, p. 320). People make sense of the world by their theories concerning reality and shared meanings, which are a form of inter-subjectivity rather than objectivity. Inter-subjectivity attends to the meaning we give to our experiences. Our lived experience is the ground from which all understanding grows. What we know is always negotiated within culturally informed relationships and experiences; the talk and text of our everyday lives. I interviewed recently graduated doctoral candidates. This first-hand knowledge is therefore valid only within the specific context. Babbie and Mouton refer to this as 'credible inter-subjectivity' (2001, p. 273). Together with the respondents in the study, the researcher is reflexively the co-creator of meaning. An interpretive approach is attuned to the dialogical context of human understanding, arguing that we cannot step outside of our inter-subjective involvement with the world of our lived experience and into some mythical, all-knowing, and neutral standpoint (Angen, 2000, pp. 384-385).

Reality as we know it is interpreted inter-subjectively through the meanings and understanding gathered from our social world. There can be no understanding without interpretation, even in science or quantitative research, and understanding cannot be

separated from context. For this study, due to the focus on the subjective experiences within a particular social world, it was necessary to use an interpretive approach. This type of research depends on the inter-subjective creation of understanding and meaning. The interpretive nature of the data generated in this study is aptly summarised by Geertz (1973, p. 9): 'What we call our data are really our own constructions of other people's constructions of what they and their compatriots are up to.'

This study focused mainly on the experiences of doctoral candidates who had completed their studies at Stellenbosch University. More specifically, it explored the changes that doctoral graduates or alumni experienced, and how these experiences may have affected their becoming doctorate. It was therefore crucial to interview these doctoral graduates as well as their supervisors and their 'significant others'. Hence, it was essential to make use of a number of explorative cases.

### **3.3. Research design**

Case study research involves collecting real-world data from which concepts can be formed and propositions and theory can be tried. The purpose of case study research is usually systematic and holistic, which provides for rich accounts of relationships between a host of events and factors. The term 'case study design' is used to describe a way of doing the research (Verschuren, 2003) instead of referring to the study of one single case or unit (Yin, 2009). A case study design can also reveal the inner working life of an individual and can be a source of knowledge concerning the wider cultural features of that individual. These wider cultural features can relate to reigning discourses and the representations of these discourses involves the use of narrative methods.

Even when the term 'case study' refers to a single unit, it can involve the examination of multiple variables. This interaction of the unit of study with its context forms an important part of the investigation. Researchers making use of case studies take multiple perspectives into account and attempt to understand the influences of multi-level social systems on respondents' perspectives and behaviours. The defining characteristic of case studies is its emphasis on an individual unit. The use of one single case has several limitations, regarding

both analytical power and pervasiveness and generalisability of the results (Verschuren, 2003, p. 123). In this study, the focus was on the cases of several doctoral candidates and the perceptions related to and generated from their supervisors and significant others; thus multiple sources of evidence. This assisted in the triangulation of data, enhancing its validity. In case studies it is important to use multiple sources of data. This approach can involve using more than one method, multiple interview or observation occasions, and a variety of informants. However, the number of informants and researchers, the number and type of methods, and the number of interview occasions depend on the nature of the research questions.

Until recently, case studies have been viewed as being less 'scientific' (Babbie, 2007, p. 280). Campbell, Stanley and Gage (1966), for instance, rejected the 'one shot case study' as having almost no scientific value. Their judgment was based on what they regarded as the near impossibility of ascribing causation in a single case, where no pre-test is available and few variables are measured at post-test. This type of research was labelled as 'the uncontrolled case study' (Kazdin, 1981). However, Cook, Campbell and Day (1979, p. 96) argued that the rejection of case study research did not include 'case studies as normally practised' in social and behavioural sciences.

#### **3.4. Narratives: Searching for story-makers**

After data are generated, the analysis of case study data involves the organisation of data, the question of whether generalisation is appropriate to the case study and the issue of theory development. Organisation of the case study findings should not be underestimated as the amount of data collected for each case can be substantial. Organisation and communication of data should only be done after developing clear conceptual categories for the empirical data, which serve the focus of the data. The discussion of the categories of the data should be done separately from the presentation of the findings (Patton, 1990). The multi-dimensionality of the findings must be regarded in the research reports. This is done by presenting the multiple patterns of phenomena and by describing the context and conditions under which the patterns appear. In this study, the findings of the data were tested with previous knowledge, which includes direct experience with similar cases, as well

as with previous research and theory. Case studies have the potential for theory development, although not many researchers attempt to relate their findings to previous theory and research, or discuss the theoretical relevance of their findings (Babbie, 2007, p. 283).

For this study, interviews were essential to address certain aspects (such as the influence of the study on the 'being' or experienced changes of the doctoral candidates or how their identities changed during the doctoral process) which were of interest to the study, but without taking away the 'freedom' of the narrative. Investigation and data collection through narrative inquiry was used in this study as it was important to try to retain a narrative-like quality that exists in social life (Neuman, 2006, p. 475).

In the following paragraphs I discuss the use of narrative inquiry and semi-structured interviews and I provide a short description and motivation of the participants in the study.

#### **3.4.1. Narrative inquiry**

Although I made use of guiding questions during interviews, I relied mostly on the openness of participants to talk freely about their doctoral experiences. According to Plummer (2001), a narrative is a story told by an individual or a group of individuals. Narrative methods assist in liberating the voices and stories of people who would ordinarily remain silent. Personal narratives permit interpretation in a preceding and cultural context as they also highlight the course of a life over time (Babbie & Mouton, 2007). Barthes and Duisit (1975, pp. 237–238) indicate how narratives take many different forms: written and articulated language, moving pictures, photographs and paintings. Narratives began with cave paintings and later developed into oral accounts that were passed down from generation to generation. Narratives are prevalent in research in the humanities, the arts and literature and have recently started to claim their place within the social sciences (Owens, 2007, p. 309). According to Clandinin and Connelly (1994), the narrative relates to both a method and a story. 'Method' refers to the process by which a researcher collects the story and translates it into a narrative, while 'story' refers to people telling stories of their lives and the lives of other people. However, it is impossible to understand human intentions while ignoring the

setting in which they make sense. Therefore, the contexts within which narratives are formed are important in order for a researcher to gain a fuller understanding of the data collected. In the case of this study the narratives were based on the experiences and perceptions of the graduates.

To define 'narrative' for the purpose of this study, I refer to Neuman (2006, p. 229) who describes a narrative as a type of qualitative data, a form of inquiry and data gathering, a way to discuss and present data, a set of qualitative data analysis techniques and a kind of theoretical explanation (Neuman, 2006, p. 474). In this study at least five core elements were covered in recording the narratives:

1. telling a story or tale, in case of this study: experiences and perceptions; presenting unfolding events from a point of view;
2. a sense of movement or process;
3. an involved individual engaging in action and making choices;
4. coherence or the whole holding together; and
5. the temporal sequence of a chain of events (Abell, 2004; Griffin, 1993).

Narratives are indicative of how people organise their everyday practices and subjective understandings. In this context it is a quality of experience and a form by which people construct their identities and locate themselves in what is happening around them (Neuman, 2006, p. 474). Using narratives in a research project requires that the researcher will act as his or her own methodologist (Owens, 2007, p. 300). This means that the researcher is moving away from, although not discarding, the rigid structures that constitute the traditional qualitative methods such as interviews, which were used in this study. As mentioned before, semi-structured interviews were used to guide the story towards specific core aspects that were of importance for the study.

The focus of this study was on the potential changes which occur in doctoral candidates in becoming successful graduates. Therefore the interpretation of the selected candidates' stories and those of their supervisors and significant others were essential to this study. It rendered a description of reality as the respondents' development was investigated. As raw data, a narrative refers to the condition of social life. Such a methodological approach rests on the epistemological assumption that human beings make sense of random experience by the imposition of story structures (Bell, 2002). As Johnstone states (2008, p. 635), '[T]he essence of humanness, long characterised as the tendency to make sense of the world through rationality, has come increasingly to be described as the tendency to tell stories, to make sense of the world through narrative.'

A key way of coming to understand the assumptions held by the doctoral alumni who participated in this study was to examine their stories, in this case their doctoral experiences, and those of the other respondents, and to become aware of the underlying assumptions that they embody. This type of study offers unique possibilities to improve communication between the researcher and the respondents to the study.

Inter-subjectivity has a strong influence in the process of generating and analysing narrative data. Angen (2000, p. 384) argues that values and beliefs will show themselves in actions whether people stop to think about them or not. This had a direct influence on my study as the values and beliefs of the doctoral graduates who were interviewed influenced not only their participation in the research, but also their responses to the questions. However, narrative methods alone are not necessarily the explanation to all possible asked questions as they would appear to be dependent on the skills of the researcher to construct a story that the reader can engage with and enter the unique world of the individual represented in the text.

The narrative used in this study was obtained by semi-structured interviews which are discussed in the next paragraph.

### **3.4.2. Interviews**

In this section I provide a largely theoretical discussion with regard to gathering data from interviewing. I then describe how I obtained the data for this study. First I briefly describe the participants and how interviews were conducted.

I obtained narrative data from a purposively selected group of doctoral graduates from Stellenbosch University. Not all doctoral graduates were willing to be interviewed and not all willing graduates were still living in the area or were able to schedule an appropriate interview time. It was also important to have a variety of participating graduates representative of different disciplines, academic and social backgrounds, age and gender. The interviews were semi-structured and the questions asked were influenced by an appreciative inquiry (AI) approach which means that these questions were directed towards the recollection of positive experiences as all graduates had already completed their studies successfully. The interviews were conducted in Afrikaans or English, depending on the preference of the participant although the participant often changed language during the interview. I interviewed all the participants specifically in relation to doctoral success at Stellenbosch University and my opening question to the graduates was why they had been interested in obtaining a doctoral degree and what they thought the purpose of doctoral studies was.

Qualitative interviewing places an isolated participant at the centre of the picture (Owens, 2007, p. 307). It is therefore important to reassure the participant at the start about the purpose of the research and interview, as well as the confidentiality of the study. A tactic that I used during the interviews, especially when a participant was somewhat nervous, was to do most of the talking during the first few minutes. I lost some minutes of the interview time, but this was compensated for by getting the participant to relax, which improved the quality of the rest of the interview. As result the responses were of a much deeper nature in terms of honesty, truthfulness and profundity. It is possible to use Wengraf's Biographic Narrative Method (2001) to approach respondents who are highly articulate and just ask one question followed up by exploratory probes to clarify and deepen meaning (Owens, 2007, p. 304). However, not all respondents have the capacity to respond to one question. They rely

on the skills of the interviewer to provide prompts for additional data. Therefore, to secure meaningful narratives, the researcher needs to be adaptable and has to have a high degree of flexibility to be able to use different tactics. Plummer (2001, p. 145) encourages the use of techniques such as 'funnelling' in the interview situation. This is a technique in which questions and linked probes keep an interview going. The 'standard funnel' is applied where the researcher uses closed questions that open into more in-depth questioning. The type of funnelling used in the interviews for this study was 'inverted funnel' where I started with five or six general questions and became more focused around specific areas. It is important for the researcher to be attentive and responsive and to be familiar with the informant's linguistic turn because the researcher is reliant on the interview as a means of gaining access to the experiences and evaluative accounts of respondents.

Interviewing places an isolated participant at the centre of attention (Owens, 2007, p. 307). Therefore, some respondents might possibly not be used to this kind of pressure which could cause the interview to be tense and problematic. When interviews are difficult to conduct or when respondents are not open enough to conduct a meaningful interview, the researcher must apply his or her interpersonal skills. Egan (2009) suggests that 'micro-skills' be used to 'tune in' to people. This means that the researcher relies on his or her sensory skills instinctively and be aware of non-verbal communication in order to enhance the interview relationship. Another approach is to 'tune in' to people by active listening (Egan, 2009, pp. 65-66). The researcher has to be present psychologically, socially and emotionally. Therefore, listening involves at least four elements: listening and understanding verbal messages; observing and reading non-verbal behaviour (e.g. tone of voice, posture and facial expressions); listening to the context of the whole person in the context of their social setting; and listening to the less pleasant experiences or things that may require challenging. Detailed observations are a useful tool that can give more breadth and depth and can assist understanding in certain situations. The researcher acknowledges that the world is complex, multifaceted and socially constructed while utilising these kind of approaches in conducting interviews. Using observational methods alongside interviewing enabled me to explore, understand and interpret how others construct and experience their worlds.

Another important skill involved while conducting interviews is empathic listening. According to Egan (in Owens, 2007, p. 305) empathic listening is an 'intellectual process that involves correctly understanding another person's emotional state and point of view'. This seems to be an important skill in an interview situation as it plays an important part in building relationships. An added skill that evolves while conducting interviews is 'shadow listening' (Owens, 2007, p. 305). During an interview, the researcher always has a conversation with him- or herself. In my study, for example, during the interviews my mind often wandered and made certain statements such as: 'This is really interesting; I should refer to that point later on in the interview.' This skill can deepen an interview, allowing the interviewer to probe emergent feelings.

Whatever type of research, the researcher has to have certain attributes in order to conduct interviews. One of the most important qualities seems to be good social skills (Walsham, 2006, p. 322). Researchers can work to improve their social skills through self-reflection and with input from others such as friends, colleagues and supervisors. A researcher needs the ability to take 'no' for an answer, but still have the persistence to try a different approach to a question. The researcher has to acquire a certain level of respect from selected respondents in order to be taken seriously and obtain full involvement. This is mainly done by briefing selected respondents. By contacting and explaining the study to the selected respondents before the actual interview, the researcher could acquire respect from the respondents and therefore get the full attention which was necessary to conduct a fruitful cooperation and an in-depth interview.

For this study, the prospective participants were fully briefed about the purpose of the study and how their information was to be handled. Their confidentiality was assured and was always guaranteed. I informed them that they would not be identified in the study, either in written work or in reporting back to Stellenbosch University. It was essential to be sensitive to time pressures in fixing a suitable interview time and then not overstaying my welcome during the interview. It was better to finish interviews and lose some interaction time – if interviewees were clearly pressured – than to irritate them by taking too much of their time especially when it came to interviewing their supervisors. The questions during the

interviews were sequenced in such a way that the respondents remained focused on the subject of the study. All respondents expressed their willingness to cooperate and gave their consent for the recording of the interviews. Where there were uncertainties about the meaning of some of the answers, their responses were repeated in order to verify the data.

The process of interviewing goes hand in hand with maintaining an ethical stance (Owens, 2007, p. 305) in relation to the researcher and the participant. I kept in mind that I was a visitor at the respondents' homes or places of work and leisure. There was a premium on preserving personal space, privacy and, above all, the dignity of each person. Therefore a more conservative approach to observation was adopted, making it not too obvious for the participant that I also took note of their body language, gestures, facial expressions and other non-verbal indicators of communication. If these observations are too obvious, it might cause respondents to become self-conscious and therefore limit and constrain their spontaneous reactions.

This study involved an active engagement with recently graduated doctoral students, their supervisors and significant others; therefore several interviews were conducted. Eighteen participants were interviewed. Six doctoral graduates were purposefully selected from Stellenbosch University. Three participants who graduated in March 2010 at Stellenbosch University were interviewed, as well as three graduates from March 2011. Of the six graduates, three were from the social sciences and three were from the natural sciences. For each graduate, his or her supervisor, as well as a 'significant other' of the graduate, was interviewed. The latter was a person who was closely involved in the life of the participant and could follow the influence of the doctoral process on the graduate.

The interviews in this study were recorded digitally. This had both advantages and disadvantages. One of the advantages the recordings had was that these were an accurate record of what was said compared to notes taken during the interview. No matter how extensively notes were taken, they could never have reflected exactly what was said, without compromising the quality of the interview. However, field notes were taken concerning direct quotes or facial expressions. I made use of observations and spent some

time during the interviews on observing the respondents. This freed me to concentrate on engaging with all the respondents as recordings do not capture the tacit, non-verbal elements of an interview although they are crucial aspects of the interview experience. Walsham (2006: 323) notes: 'We may not know exactly how we assess people, as human cognition remains something of a mystery, but we know that we do not judge people's view or attitudes solely on what they say.'

### **3.5. Narrative analysis: Personal experiences in oral versions**

The data generated in this study was analysed by means of narrative analysis. This kind of analysis allows the researcher to 'map out' the narratives and give them a formalised grammar/structure (Neuman, 2006, p. 475). Narrative analysis can be seen as a specialised form of discourse analysis because it searches for the way respondents make sense of their lives by representing them in a story form (Henning, Van Rensburg & Smit, 2004, p. 122). People give meaning to their existence because the story relates to them or is for some reason compelling. These stories have a certain structure and it is this natural form of expression and representation that intrigues the narrative analyst in the social sciences. As raw data, a narrative refers to the condition of social life (Neuman, 2006, p. 475).

When the data is analysed, the researcher applies characteristics of the narrative used by the participant to try and discover a pattern of language and action that may be of significance (Clandinin & Connelly 2000; Bell, 2002). Not only the story in itself, but also elements of the content of the story are of importance as all these aspect together give a better understanding of the change within the respondents. The researcher recognises the narrative character of social life and analyses the data in ways that retain and unveil their character. The narrative is portrayed as an outline or a model that also serves as an explanation. As Riessman (2003, p. 705) mentions: '[P]ersonal narratives are, at core, meaning making units of discourse. They are of interest precisely because narrators interpret the past in stories rather than reproduce the past as it was.' While applying characteristics of narrative used by the people who are interviewed, data is analysed from partly or wholly narrated information to find a pattern of action that may be significant (Bell, 2002). When analysing the data, it must be kept in mind that the data is a performance as it

presents and acts at the same time instead of being solely a representation (Riessman, 2003).

The 'preferred self' is also part of this analysis (Henning, Van Rensburg and Smit, 2004, p. 123). Discursive indicators that need to be captured of this 'preferred self' (and are in a way part of the data analysis) is the way the respondents position themselves, the way they portray others and the way they emphasise certain parts of the storyline. As a researcher examines and analyses qualitative data for its narrative form and elements, s/he focuses on events, connections among events, and temporal features, such as the order, pace, duration and frequency. In identifying a pattern of the narrative and the implications for understanding an action, while extracting the indicators and grouping them into categories of shared meaning, may culminate in a pattern. Such an analysis shows regularity, rhythm and cohesion, like all data patterns. The sequence of events is treated as an object of inquiry, which means that the data gathered from each participant is analysed holistically instead of as separate entities. Once the narrative is discovered in the data, it is extracted and preserved without destroying its meaning-making ability or structure (Franzosi, 1998, p. 522). Therefore, every interview was immediately transcribed verbatim and analysed together with the notes taken during the interviews. Direct quotations are presented throughout Chapter 4.

### **3.6. Authority of qualitative data**

In this section I discuss the authority of qualitative data with regard to quality, validity and triangulation. In the last section I discuss the ethical considerations of this study.

#### **3.6.1. Quality**

There are various ways in which the quality of a study can be enhanced. Kvale (2002, p. 309) suggests that '[v]alidation depends on good craftsmanship in an investigation, which includes continually checking, questioning, and theoretically interpreting the findings'. Craftsmanship means precision throughout the research process, from design to presenting the findings (Henning, Van Rensburg and Smit, 2004, p. 148).

According to Morse (1994), peer review of data for authorisation is not recommended as a researcher's peers never have the same involvement with the data as the principal investigator since their involvement is less direct. Due to this lack of association with the respondents and the data, peers lack the ability to judge whether the interpretations made have given adequate consideration to all perspectives. However, peers can help by assessing whether the researcher has argued cogently and written persuasively (Angen, 2000, p. 384). In this study all procedures and decisions were questioned critically and possible theoretical links were explored.

Research using qualitative data is concerned with meaning-constructing activities. It constitutes both a dynamic interaction between the participant and the narrated event, which in this research was the doctoral experience of the graduate; and between the graduate and the narrative event, which is the assumption of a certain responsibility to an audience for a display of communicative competence (Borland, 1991, p. 63). Narratives will change as the performance contexts change, discover new audiences and renegotiate the sense of self. Therefore, the decision was taken to interview only recently graduated doctoral candidates.

Lincoln and Guba and Lincoln (1985, in Babbie, 2007) produced some influential work with regard to the clarification of the notion of objectivity in research using qualitative data (Babbie, 2007, p. 276). According to them, the key criterion or principle of generating and analysing is trustworthiness, which implies neutrality of its findings or decisions. The basic meaning of trustworthiness lies at the heart of any research project using qualitative data. It is the ability to answer the question of how a researcher can persuade the reader (including him- or herself) that the findings of a study are worthy of attention. This raises the issue of data validity.

### **3.6.2. Validity**

Due to the considerable debate about what it means to do valid research (Angen, 2000, p. 378), it becomes problematic for researchers making use of qualitative data to reach the

desired goal and meet the requirements of trustworthiness. The issue of how researchers arrive at valid knowledge in the social sciences has prompted a debate between the proponents of quantitative procedures and those who prefer a qualitative approach to generating data. Qualitative methods used to be accepted only in an exploratory approach to inquiry that required further validation by quantitative methods (Leininger, 1992). The validity of research findings based on qualitative data has become 'the most controversial issue' (Bailey, 1997, p. 21). To acquire validity in such cases, it is impossible to apply the same rigorous adherence of methodological rules and standards used in approaches where quantitative data is used. It is only when the research community settles on some shared understandings of what it means to do good interpretive research that quantitative methods will continue to be perceived as being legitimate (Angen, 2000, p. 379). Qualitative methods rely on a variety of understandings and corresponding types of validity in the process of describing, interpreting, and explaining phenomena of interest (Maxwell, 1992, p. 279).

Validity does not carry the same connotations in qualitative data as it does in quantitative research. It is not a companion of reliability, which is examining stability or consistency of responses, or generalisability, which is the external validity of applying results to new settings, people, or samples (Creswell, 2009, p. 190). According to Kvale (2002), validity, reliability and generalisability are the 'holy trinity' in the natural sciences. A judgment based on this trinity has become the definitive test of all research but this is not the case. For example, the internal validity of case studies is doubtful as the findings cannot always be generalised (Verschuren, 2003, p. 122; Yin, 2009, Merriam, 1988).

Qualitative data analysis is less standardised than quantitative data analysis. It is often inductive. Schatzman and Strauss (1973, p. 108) explain:

Qualitative analysts do not often enjoy the operational advantages of their quantitative cousins in being able to predict their own analytical processes; consequently, they cannot refine and order their raw data by operations built initially into the design of research.

As qualitative methods rarely use statistical analysis, they are often criticised for their lack of rigour. However, the data analysis can be systematic and logically rigorous, although in a

different way from that of quantitative or statistical analysis (Neuman, 2006, p. 457). In the past, few qualitative methods explained how they analysed data and therefore the data analysis was not made explicit or open to inspection. Qualitative analysis does not draw on a large, well-established body of formal knowledge from mathematics and statistics. The data that is used is relatively imprecise, diffuse and context-based. It can have more than one meaning, but this is not necessarily seen as a disadvantage (Neuman, 2006, p. 459). The results of qualitative data are in principle generalisable to theoretical propositions but to populations or universes (Yin, 2009). With regard to this study, I had to rely on logical inference instead of statistical interference.

The researcher's independence of results is often questioned, as in many variants of case studies, and as the researcher plays an interactive role instead of acting at a distance (Verschuren, 2003, p. 122). The methods that are used in case studies may easily be linked to the personality of the researcher, as in the case of participant observation and unstructured in-depth interviews. This results in a form of truth that is negotiated within dialogue. Kvale (2002, p. 239) notes, '[V]alid knowledge claims emerge as conflicting interpretations and action possibilities are discussed and negotiated among the members of a community' (Kvale, 2002, p. 239). People are engaged in social discourses and through their past and present interactions with the world around them they constantly inform and reformulate the understandings, interpretations and claims of knowing. However, this is also done in science as all forms of knowing are socially constructed. Everything is dependent on the belief and values of that person. As Madison (1988, p. 44) states, '[T]he objective world of science is but an interpretation of the world of our immediate experience.' The reader should be allowed to judge the degree of confidence placed in the study, therefore Hammersley (1995) redefines validity as confidence rather than a certainty as people only know reality from their own perspective in it.

### **3.6.3. Triangulation**

Triangulation compares the results from either two or more different methods of data collection (for example observation and interviews) or two or more data sources (for

example interviews with different members of a group) (Mays & Pope, 2000, p. 51). For this study, triangulation was used in order to allow accurate convergence using data from three different angles (Angen, 2000, p. 384). These angles came from the graduate, the supervisor and a significant other after which the data originating from these triads were analysed and compared.

Denzin (1989, p. 236) defines triangulation as:

a plan of action that will raise sociologists [and other social science researchers] above the personal biases that stem from single methodologies. By combining methods and investigators in the same study, observers can partially overcome the deficiencies that flow from one investigator or method.

Triangulation is considered to be one of the best ways to enhance validity and reliability in qualitative research (Babbie, 2007, p. 275). This procedure ensures that the weakness from one data source will be compensated by strengths in another as this makes it possible to adjudicate between different accounts. It encourages a more reflexive analysis of data and enhances comprehensiveness.

Another way of ensuring the validity of data is to ask respondents to check whether data was accurately reflected (Henning, Van Rensburg & Smit, 2004, p. 149). Checking if the respondents agree with the researcher's data is not new as it has been pointed out by many authors (Huberman & Miles, 2002; Le Compte, Preissle, Tesch, & Goetz, 1993; Merriam, 1998). The respondents will look at the findings from other positions and knowledge bases and this will make the researcher alert to continue to question her- or himself and include the respondents' view at the meta-level analysis. However, this was not done in this study as it was impractical with graduates who had already left the institution. Instead, I used triangulation by interviewing the candidates' supervisors and significant others to validate the findings of the graduates as well as to check the findings for bias, neglect, and lack of precision. Henning, Van Rensburg and Smit (2004, p. 149) suggest that '[r]esearch is a rationalised version of reality, through the skill of researchers who test their worth through this extremely rational argumentation and assessment of propositions'.

Together, verification strategies used and discussed contribute to and build reliability and validity, thus ensuring rigour. Thus, the rigour of qualitative inquiry should be beyond question, beyond challenge, and provide pragmatic scientific evidence that must be integrated into our developing knowledge base (Morse, Barrett, Mayan, Olson, & Spiers 2002, p. 13). However, most research still uses the more traditional qualitative methods of data collection. There is nothing wrong with those methods as long as they fit the purpose of the research.

My skills and experiences as a researcher became increasingly important during interview situations. I had to have the skill of facilitating or representing the silent word of individuals which means empathically capturing situations, feelings and experiences, and transforming them into text. The use of a reflexive stance becomes important when using inclusive research methods because it examines what the motivation is and why and how people are using a particular tool (Owens, 2007, p. 311). This also addresses the problem of objectivity because it makes the research process more transparent. However, one must reflect on whether the traditional ideas of objectivity and truth can still stand today. According to Smith (1984, p. 390) the research community should realise that they are actually 'beyond method'. The methodological criteria, no matter how rigorously applied to qualitative work, will not produce the objectivity desired by positivist researchers (Angen, 2000, p. 379).

### **3.7. Ethical considerations**

I obtained ethical clearance from the Stellenbosch University Ethics Committee (Addendum C) before any empirical work in this project was started. Participants had full knowledge of the purpose of their involvement and the research and I informed them of the procedures and risks involved in the research. As informed consent is one of the most fundamental principles towards achieving ethical acceptability (Andersen, 1990, pg. 22) participants had the opportunity to give their written informed consent (a letter of consent was pre-drafted) and were informed about the protection of their privacy and sensitivity (Addendum D). Participants were not named and their identities were disguised in the reporting of the results. They could withdraw from the project at any time. My research project was

conducted according to the Ethics and Research Statement presented by the University of Stellenbosch.

Being a master's student myself, I was interested in factors contributing to postgraduate study success as many of my friends who attempted a doctoral study failed to complete it successfully. Rather than trying to determine factors influencing/affecting the completion of doctoral study, I decided to concentrate on the opposite and focus on factors contributing to doctoral success. This approach permitted observation in action rather than merely accessing opinions (Walsham, 2006, p. 321). The respondents perceived me as trying to make a valid contribution to future doctoral success rather than taking the data away from them and writing it up solely for my own purposes.

However, I was aware of the potential disadvantages as well. Being a master's student myself, in interviewing the participants I was afraid that the doctoral students would not take me seriously and that I was not on the same academic level. After the initial consultation where I described the purpose of this study, the doctoral students did not perceive me as a 'lesser' student and were very interested in the outcome of the study. They believed my study had the potential to have an impact on the doctoral process and could be of interest to any doctoral student that wished to improve the success of doctoral students.

The interviewing process that I used was time-consuming and the possibility existed that the respondents were less than open and honest with me. There was also a danger that I would become socialised to the views of the people in the field and lose the benefit of a fresh outlook on the situation. In these kinds of studies, there is a risk that researchers lose critical distance on the value of their own contribution. If the researcher is aware of the above-mentioned challenges and the respondents are well briefed before their participation, most of the disadvantages can be counteracted, which was done in this research. The suggested reliability procedures adapted from Gibbs (2007) were followed in this study: transcripts were checked to make sure that they did not contain obvious mistakes made during transcription.

More so, I transcribed and analysed the interviews myself, since using others as interpreters and proxies can be problematic.

However, Lincoln and Guba (1985, p. 329) maintain that no amount of trustworthiness can ever convince the reader to accept the results of a study. The reader can only 'at best be persuaded' which is why I mostly make use of direct citations from the interviews to illustrate the findings in Chapter 4.

### **3.8. Conclusion**

This chapter described the methodology used for this study. The decision to make use of narratives in this study was informed by the idea that narrative texts are filled with information. Narrative analysis is not a new phenomenon and the methods used to produce narratives have remained virtually the same over the past decades. However, what has evolved is the transformative position of the researcher from an objective onlooker outside the field of research to an active participant within the field, who can grasp, understand, interpret and reflexively represent the perspectives and experiences of people (Owens, 2007, p.311). Neutrality and impartiality are impossible standards to attain as all knowing is perspectival knowing and therefore partial and open to reinterpretation. This was the case when interviewing the respondents. Their answers to the questions were influenced by their experiences. Seen from an interpretive perspective, validity becomes a moral question that must be addressed from the inception of the research endeavour to its completion (Kvale, 2002).

By using a case study design and a narrative analysis, while being aware of the advantages and disadvantages of each element used in the methodology, I was able to collect rich data from the respondents. The results of the empirical part of the study are discussed in the next chapter.

## CHAPTER 4: FINDINGS

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### 4.1. Introduction

Doctoral success cannot easily be explained by means of a straightforward definition or theory. Based on an overview of relevant literature Chapter 2 provided a conceptual framework explaining doctoral success. The data generated by successful doctoral graduates and their experiences with the doctoral process was interpreted using the conceptual framework. The data will demonstrate that doctoral success and the four previously discussed elements in the conceptual framework of ontology, identity development, transformative learning and creativity might have a direct bearing on doctoral success. After interpreting these four perspectives with data from interviews with candidates who had completed a doctorate, other segments have been added with unanticipated findings. Although these findings are not related to the initial framework they may nevertheless be important in the context of the study.

I interviewed all the participants specifically in relation to doctoral success at Stellenbosch University. My opening questions to the graduates was always why they had been interested in obtaining a doctoral degree and what they thought the purpose of such a study was. These questions tie in with the first element of the conceptual framework discussed in Chapter 2. The other perspectives – as alluded to in the framework – are subsequently discussed in this chapter using direct quotes from the participants. The chapter begins with a short biography of the participants where I give more personal information about each person and their relationship with each other. This is followed by a discussion relating to the conceptual framework discussed in Chapter 2 as well as Chapter 3, 3.5 page 69. The rest of the chapter focuses on the role of relationships as well as the role of support in the process of becoming doctorate. The aim is to interpret successful doctoral graduates' perceptions of the possible influence of intrinsic and extrinsic factors in the doctoral journey.

## 4.2. Biography of participants

### Group 1<sup>1</sup>

1A is a white female who was 28 years old at the time of the study and she did her doctoral studies in history. She came to Stellenbosch University from the University of the Witwatersrand (Wits) for her full-time doctorate because her supervisor was a specialist in the field she wanted to study.

1B was the head of the History Department at the time of the study. He had been in academics for 38 years. His research specialisations are South African social history and historiography. He generally gives a lot of attention to the proposal and from the proposal, together with the student's academic records and personal observation, he decides if a student is capable of doing doctoral study.

1C was busy with her full-time doctorate at the age of 26, writing the history of Antarctica. She shared an office with 1A during 1A's doctoral study in the History Department where they spent 12 to 14 hours a day.

### Group 2

2A is a white 31-year-old female and did her full-time doctoral studies in Afrikaans and Dutch. She finished in three and a half years. 2A needed psychological help during her master's studies and she continued therapy during her doctorate as she did not believe herself to be emotionally stable enough to stop seeing her therapist. She was still living at home with two siblings while she was working on her dissertation.

2B is a white female. At the time of the study she was an Associate Professor in the Department of Afrikaans and Dutch at the University of Stellenbosch. She coordinates and teaches translation studies as part of the postgraduate programmes in translation, but she also teaches Afrikaans linguistics. She is co-author of a learner's dictionary of Afrikaans (*Basiswoordeboek vir Afrikaans*) as well as co-editor of a volume on Afrikaans syntax

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<sup>1</sup> The figure indicates the respondent number. The letter A indicates that the response is from a candidate, a B indicates a response from a supervisor and a C indicates a response from a 'significant other'.

(*Sintaksis op die Voorgrond*). 2B prefers not to be involved in a student's personal life and expects a high level of independence from her students.

2C was 2A's best and only white female friend. At 32 she was very occupied with outside activities and worked as a retailer. She understood what B1 was trying to achieve, probably because she had started with a Bachelor's degree but failed to graduate.

### Group 3

3A is a white male in his thirties. He did a three-year doctoral study part-time essentially because he got the opportunity and because he wanted to prove something to himself. His boss was employed as an academic but later started his own company. He got married and started a family soon after graduation.

3B was leading a technological company, at the time of the study. He is a white middle-aged business engineering company specialist in innovation management in client enterprises and competitiveness of such companies. He had been involved with academic activities of the Department of Industrial Engineering since 1981 when he was appointed as a lecturer.

3C, a white female, is 3A's wife and she is younger than he is. She was working at Stellenbosch University as a technical laboratory assistant and did not have a doctoral degree. She had no desire to obtain one.

### Group 4

4A, a black male, is originally from Cameroon. He was 45 years old at the time of the study and he did his doctorate in health science (research on the pancreas and different strains of cancer). He was working at the Tygerberg campus of Stellenbosch University. His research budget was over one million rand. His study was so successful that it was introduced as a course that he now presents at the university.

4B, a white male who was into his fifties, was 4A's supervisor. He liked 4A very much as a student as 4A was very independent and very sure of what he wanted to do; he did not always bother him with trivial issues.

4C, a male in his late forties, was 4A's mentor and friend and they met at the university where 4A had previously been employed. He gave 4A valuable guidance and read his work with great interest, providing him with positive criticism.

#### Group 5

5A, is a coloured male, probably in his early forties. He completed his doctoral studies in five years (the focus: heart diseases) but wants to move overseas as he believes his salary as a doctor is poor. He has two teenage daughters.

5B is a retired white professor in her late sixties. She retired in 2006. Since then she has been employed by the University of Stellenbosch on a contract basis as Extraordinary Professor in the Division of Medical Physiology, Department of Biomedical Sciences, Faculty of Health Sciences.

5C was a young doctoral student who had the opportunity of doing a doctoral study which she accepted for financial reasons. The death of her mother during her doctoral process was still a very sensitive matter. She graduated in March 2011 after just missing the cut-off date for March 2010.

#### Group 6

6A is coloured male in his late forties. He is an extrovert. As a student in theology at the University of the Western Cape (UWC) in the 1980s, he played rugby for the UWC RFC. He is currently the Dean of Students at the University of Stellenbosch. He did his doctoral studies in theology while being involved part-time as a pastor in his community. His doctoral studies focused on how the church can turn around gangsterism on the Cape Flats. He has a son who was also studying at the university at the time.

6B, a white male, probably in his late fifties, did his doctoral studies in philosophy and then in theology. He retired from the theology faculty as a lecturer in Pastoral Care and Counselling.

6C is a coloured male in his late fifties. At the time of the study he lectured in Systematic Theology and Ethics and was the dean of the theology faculty. He was 6A's friend and lecturer.

#### 4.3. Reasons why graduates undertook doctoral studies

All graduates participating in this study were questioned about their reasons to start doctoral study and their responses were largely similar. Some participants were 'driven' to complete a doctorate successfully because they wanted to make progress as academics. Other participants started with a doctoral study because they were obligated to do so in order to better their career prospects, or to be better able to climb the promotion ladder<sup>2</sup>.

1A: '... ek het as 'n skoolkind al besluit ek wil één dag historikus word ... Vir my was dit 'n vanselfsprekendheid dat ek 'n PhD sal doen ek was nie geïntimideerd dat ek dalk nie slim genoeg gaan wees nie ... dit was my doelwit van dat ek in die universiteit ingestap het was om 'n doktorsgraad te doen. So ek het nie 'n PhD kom doen om 'n PhD te kry nie, ek het 'n PhD gedoen om historikus te word. Dit was deel van die voorvereistes vir die beroep wat ek gekies het.'

**Translation:** 'I already decided when I was a schoolchild, one day I want to become a historian ... It was obvious to me that I will do a PhD and I was not intimidated that maybe I was not clever enough ... this was my purpose, from the moment I joined university, to do a doctoral degree. Thus, I did not do a PhD to get a PhD; I did a PhD to become a historian. This was part of the pre-requirements for the profession that I chose.'

1B: 'Ek dink nie sy het gedink sy gaan nie begin met haar PhD nie. Dit was toe sy 14 was haar droom om geskiedkundige te word. So ek dink nie dit was iets wat voor haar moeilik was om te besluit nie, ek dink dit was ook nogal redelik voor die hand liggend dat sy met haar PhD sou begin'.

**Translation:** 'I don't think she never thought of not starting with her PhD. When she was 14, her dream was to become a historian. So I don't think it was difficult for her to decide, I think it was rather obvious that she would start with her PhD.'

For doctoral student 1A it was very clear from the start of her academic career that she was going to successfully do doctoral study in history. It was her childhood dream to become a historian as she always loved stories. 1A was told from a young age a doctoral study would make her a historian. Even her supervisor 1B was aware of her dream. The reason to produce a doctoral study was different for 2A. She wanted to have a doctoral degree for the

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<sup>2</sup> All excerpts are presented verbatim.

sole reason of teaching. She believed that a doctoral degree would ensure a teaching position.

2A: *'Ek wil in die akademie ingaan, ek wil graag klas gee ... veral die dissipline is redelik jonk in Suid Afrika en jy moet jousef maar so goed as moontlik kwalifiseer om êrens te kom. ... So jy moet maar, jy moet maar jou studie klaarmaak. Ek wil binne die akademiese opset bly ... klas gee of navorsing doen. ... Dit voel deel van my.'*

**Translation:** 'I want to go into academics, I would like to teach ... particularly this discipline [translation Afrikaans and Dutch] is quite new in South Africa and you have to qualify yourself well to get somewhere. ... So you have to, you have to finish your study. I want to stay in the academic set-up ... teaching or research ... It feels part of me.'

Childhood dreams or improving career prospects were not the sole reasons for undertaking doctoral studies. Some graduates commenced with a doctoral study based on personal reasons like pursuing a personal challenge or wanting to prove a point to themselves. The graduates also mentioned remuneration.

1B: *'... it's to prove something to themselves. And those are the candidates that do well and I also tend to support those more, financially and academically. Because without that kind of infrastructure, you're gonna battle to complete a PhD.'*

3A: *'... the purpose is not to get rich. It's not as much about getting a promotion. On the contrary, I think it is something that you would prove to yourself, or because you see an opportunity and you would like exploit, to prove a point to yourself.'*

3C: *'... ek kan dit doen en ek gaan dit doen en ek kan dit doen ... vir eie verryking ... sy eie persoonlike uitdaging ... hy hou van challenges. ... Maar ek dink veral is hy ook gedryf deur 'n innerlike roeping.'*

**Translation:** 'I can do it and I'm going to do it and I can do it ... for own enlightenment ... his own personal challenge ... he enjoys challenges ... But I think he was especially driven by an inner calling.'

4A: *'I was here a year in a post and I was doing the work and then I thought, ok when I read an article about heart protection, maybe I should give something back which interests me ... I believe that, it's my personal opinion, that there are only two things that you leave behind when you die and that is your children ... and your knowledge. People will remember you for that. ... Knowledge is something, the fact that you were responsible for that knowledge or the discovery of knowledge, that for me is a great thing.'*

5A: *'... I must admit, that little bit of intellectual snobbery that I want to be called a doctor one day, would be nice and then the other reasons was financial. When I finished my master's, I had a candidate loan 'cause I had to pay my own way and the bank was on my case saying either you have to prove you are still a candidate, or you have to start paying back. And medical aid was saying to me, you either have to prove you are still a candidate and you can stay on your dad's medical or you have to go off it. All these things were pressurising me and I thought: let's just register.'*

6A: *'I've been somebody who is always ambitious, looking for excellence, trying to have my own authority in whatever thing I'm doing. I discovered early in life that I would be in academic teaching. In the field to be yourself, you have to go up to the top.'*

These extracts illustrate that the reasons why the doctoral graduates commenced with their doctoral studies were diverse. 3A wanted to see if he was capable of completing a doctoral degree; 4A wanted to leave his knowledge behind; 5A wanted to be called a doctor and also needed financial support; while 6A strove for excellence. The reasons seem personal as well as career-driven. Graduates pursuing an academic career realised that if they wanted to continue working at a university, a doctoral degree was regarded as a necessity. But not all of them wanted to complete a doctoral study only to improve their career prospects. Some graduates regarded the doctoral process as a challenge and believed it would be a personal achievement if they were able to obtain a doctoral degree.

#### **4.4. Personal change**

After having discussed the reasons why doctoral candidates started with a doctoral study and the perceived purpose of such a study (also from their supervisors' point of view) the focus now shifts to an ontological perspective. In Chapter 2 I observed that doctoral completion implies a particular form of ontological change and development, which is necessary in the process of 'becoming a doctor' (Barnacle & Mewburn, 2010). This change was noticeable in the doctoral graduates that I interviewed. One of the challenges the graduates reported on was that they had difficulty integrating newly acquired knowledge into practice by themselves. Interpreting their feedback to my questions, it seems as if this integration was a challenge for them, which they thought affected their development and eventually their 'being', leading to an ontological change. I illustrate this possible ontological development (or 'becoming') by extracts taken from the interviews.

I noted in Chapter 2 that knowledge institutions do not pay sufficient attention to the forming of doctoral candidates as they tend to over-emphasise the narrow concept of the intellect. The participants were conscious that during the doctoral process they experienced change but they could not necessarily relate their change to a change in being or becoming. Such reported change might be easily confused with the concept of identity (see Chapter 2). To illustrate:

1A: *'Ek het hierdie omwenteling akademies gemaak, maar ook as mens...'*  
Translation: 'I made this academic revolution, but also as a person...'

1B: *'I think one learns a lot about oneself when writing. Well, I'm always very suspicious when writing comes too easily 'cause this means that the candidate as a person hasn't thought about it and hasn't grabbed it and hasn't engaged with it psychologically. The candidate hasn't necessarily beaten herself or himself up enough to actually get it right to show a certain kind of personal involvement, a personal touch and to find your own voice academically. ... And I think that accompanies a kind of growth although I can't, I'm not sufficiently fair to say besides what that would constitute, but I do think there is a maturation process that goes with it.'*

1A: *'Want ek was maar 24 jaar oud toe ek begin met 'n PhD so op daardie ouderdom ... skrik jy jousef boeglam want jy dink skielik maar ek is te jonk hiervoor en het ek die rypheid hiervoor? En ek dink waarvoor ek dankbaar is, is die feit dat 'n PhD gee wel vir jou rypheid. Sodat wanneer jy daardie dag 'n PhD kry, dat jy nog steeds die jong gesiggie kan hê maar die gewig van 'n PhD kan dra. ... 'n PhD moet juis vir jou 'n stimulerende ervaring wees. ... Dit is vir my stimulerend op 'n intellektuele vlak maar ook hoe die uitdaging om 'n PhD te doen ... ek dink jy kry volwassenheid daarby. ... jy moet daarmee worstel. So jy moet half voel dat jy groei in alle opsigte as intellektuele en as mens. Dit vorm die mens net soveel as wat dit die intellek vorm.'*

*Translation: 'I was only 24 years old when I started with a PhD and at that age ... you are very scared because you suddenly think you are too young and wonder if I have the maturity for this? And I think I am grateful for the fact that a PhD gives you maturity. So when you get your PhD, you still have that young face but you can carry the weight of a PhD. ... A PhD should be a stimulating experience for you. ... It is stimulating for me on an intellectual level but also the challenge to do a PhD ... In addition you gain maturity ... you have to struggle with it. So you have to feel you are growing in all aspects as intellectual and as a person. It [PhD] forms the person as much as it forms the intellect.'*

1B: *'My vrou het altyd gesê, was dit nie vir haar studie nie, sou sy 'n totaal ander persoon gewees het. Jy kry hierdie studies wat 'n impak los. Ek dink self baie meer soos 'n historikus al is ek ook 'n privaat persoon.'*

*Translation: 'My wife always told me, if it had not been for her studies, she would have been a totally different person. You get studies that have an impact. I personally think much more like a historian than as a private person.'*

*'I try to look at the long-term view of things. That comes from one's training and that becomes part of your being. I think a PhD is kind of a stepping stone, a touchstone for that will set you up in ways that you use in the future as well. It's a mile stone.'*

These extracts of the first group of participants illustrate the personal challenges the doctoral students experienced and which eventually changed them. Although 1B and 1C were aware of the means of doctoral study in general. The doctoral students were aware of the intellectual challenge as well as a personal one due to the intellectual struggle a doctoral student matures in the process. 1A's supervisor was well aware of this before 1A started her studies as he believes that a doctoral study is so intense that it becomes part of you.

As the participants immersed themselves completely in their research and studies while they worked on their doctorates, the doctoral study had an impact on their being as a person. I believe that knowledge influences one's way of thinking as it is always situated within a personal, social, historical and cultural setting. Knowledge is a way of being. As 1C

explained: *'... to reach the highest formal academic degree one can get, you must be driven'*.

The interviewed doctoral graduates were so intensely occupied with their research that they felt it becoming part of their very being as researchers.

However, these changes in their 'being' did not happen overnight. The doctoral process entails effort that is perceived as stimulating over time. It seems to be continuous effort that not only adds intellectual value but also contributes at the personal level:

2A: *'... dit is lewensverrykend. Dit neem, dit okkupeer jou gedagtes, dit okkupeer jou roetine, dit okkupeer basies jou sosiale lewe, dit okkupeer net jou bestaan so dit word baie erg deel van jou. Hoe graag jy dit ook al éénkant wil sit, jy kan basis nie so ... Jy is deel daarvan, dit is deel van jou.'*

*Translation: '... it is life enriching. It takes, it occupies your thoughts, it occupies your routine, it basically occupies your social life, it occupies your being so it very much becomes part of you. However much you would like to put it one side, you cannot. ... You are part of it, it is part of you.'*

*'Daar was baie twyfel. Jy twyfel aan jouself ... Jy twyfel aan jou vermoë om weg te kom van ander sienings en ander persone se benaderings ensovoorts en dan begin jy te twyfel aan jou vermoë om iets oorspronklik voor die dag te bring en ek het veranderinge in myself gesien ... Maar daar was twyfel langs die één kant en aan die ander kant was dit eintlik 'n bevestiging van iets waartoe jy in staat is so jy, ek kan iets begin en ek dit klaarmaak ... 'n Rustigheid met, 'n rustigheid oor myself.'*

*Translation: 'There was a lot of doubt. You doubt yourself ... You doubt your capability to get away from other views and other people's approaches etcetera and then you start doubting your capabilities to bring about something original and I saw change in myself so on the one hand there was doubt and on the other hand it was a confirmation of something you are capable of doing, I could start and finish something ... A calmness, a calmness over myself.'*

3A: *'... with a PhD you really want to keep yourself busy with something that adds value, not only to your own life but to other people's lives also ... I think in terms of my own personal development, I became mature enough to understand that you know I should take ownership of what I'm doing and not expect things to happen. And that is part of me, part of the growth experience with a PhD.'*

3B: *'Ek sê altyd vir kandidate, moet nie 'n doktorsale studie aanpak as jy nie vir jou commit nie, as jou wese nie daarin is nie. ... dat jy 'n commitment maak sodat hierdie onderwerp amper half deel word van jou lewensontwikkeling. Jy begryp. En baie kandidate doen dit. Dit moet vir jou 'n 'n missie wees om dit te doen.'*

*Translation: 'I always tell my candidates, don't start with a doctoral study if you are not willing to commit, if you don't put your being into it. ... You have to make a commitment so that this subject becomes practically part of your life development. You understand. And a lot of candidates do this. It has to be a mission for you, it has to be your mission to do this [doctoral study].'*

4A: *'I think during the process of my PhD, my mind went to very dark places. ... It was a great experience, it was dark as I was saying, my mind went to dark places. ... You are in the car, you are in the shower, you are eating your food, you lie in your bed and you try and bring all these things together. But I made it.'*

4B: *'He developed, he also developed as a person I would say. A PhD leaves a big impact on a person's life and it will actually change them as a person. So ja, I would think that it had quite a positive effect on his development as a person.'*

5C: *'Daar was 'n mate van groei in haarself ... mens is nie meer so skrikkerig om jou voet neer te sit om te sê ek wil nou dit doen of ek wil nou dat doen jy weet. Jy wag nie meer vir iemand anders om vir jou te sê doen hierdie of dat nie. Jy kan self.'*

*Translation: 'There was a certain self-growth ... you are no longer so afraid to put your foot down, to say I want to do this or that, you know. You don't wait for someone else to tell you do this or don't do that. You can do it yourself.'*

6A: *'When you succeed [with a PhD], you feel it. ... Then in academy, for you to be yourself, you have to go to the top.'*

It was not only the doctoral graduates who became aware of their transformation during the doctoral process. Their supervisors or significant others were well aware of ontological change. It was not always directly related to a particular graduate, but they were aware of such possibilities and change.

What seemed to have happened is that graduates were actually aware of a change happening during their doctoral process. All of them reported a certain transformation taking place in relation to the doctoral challenges. The doctoral process proved to be such a challenging but stimulating experience that the doctoral graduates had to learn to cope with new stress and difficulties which could affect and alter their 'being' to the extent that they noticed this and could report on it. These changes generally do not happen suddenly but steadily during the whole doctoral process, and in the case at hand they were prominent enough for graduates to report when asked to reflect on them.

Doctoral education in itself involves a transformation (ASSAF 2010, p. 40), which is about becoming doctorate. The ontological element of the conceptual framework, discussed in Chapter 2, emerged in the interviews as an imminent change in their 'being' in its totality. This transformation or personal change within the doctoral candidate is often unrecognised by the knowledge institutions (Nixon, Beattie, Challis, & Walker, 1998), even though the doctoral graduates as well as their supervisors in this study were aware that the doctoral process has the potential to produce ontological change. The significant others also noticed changes in the graduates, but they addressed these as personal changes or a change in the identity of the doctoral graduates.

#### 4.5. Identity development: Independence and increase in self-confidence

##### 4.5.1. Identity changes

Identity is shaped by three interacting elements: one's biological characteristics; one's own unique psychological needs, interests and defences; and the cultural milieu in which one resides. It is on the latter two that I will argue that doctoral studies may have an influence on the identity development of doctoral candidates as. Research produces and reproduces not only knowledge, but social identities as well (Delamont, Atkinson, & Parry, 2000, p. 4). What became clear from the empirical data was gradual change in the identity development of the doctoral graduates. They were able to pinpoint exact changes in 'identity development' while 'ontological development' could not be clearly identified but appeared to be transformation in a more holistic sense, or a change in the totality of the person. One element of identity change which clearly emerged was an increase in self-confidence and independence. I will first discuss the data gathered from graduates and their significant others.

From the interviews with the participants it became clear that identity change, or at least elements of identity, were noticed by graduates and their significant others. Identity changes were also perceived by the interviewed supervisors. When the supervisors discussed changes in their doctoral graduates, the increase in self-confidence was clearly noticed. The factor of independence was also anticipated and illustrated.

1A: '*... maar daar is soveel aspekte van jou identiteit is so direk aan jou akademiese goed verwant dat jy sukkel om 'n onderskeid te maak. Hoekom het ek 'n PhD gedoen in geskiedenis? Ek het dit gedoen vir selfvervulling as jy so daarna kyk. Ek het geglo ek wil my werk geniet en my werk is deel van my identiteit. ... Jy moet duidelik aan die vereistes voldoen om te kan sê ek kan onafhanklik dink, ek kan onafhanklik navors, ek kan my bevindinge aan iemand oordra. ... 'n PhD moet juis vir jou 'n stimulerende ervaring wees en dat jy aan die einde daarvan met selfvertroue uitstap. ... Ek dink op die ou end wat belangrik is as jy gaan deur 'n worstelproses maar jy moet aan die einde daarvan selfvertroue hê. En jy moet selfvertroue hê in die bevindinge wat jy gemaak het, want as jy nog gaan worstel na die tyd dink ek het jy 'n probleem. ... Maar vir my die belangrikste was werklik dat wanneer ek hier uitkom moet ek vertroue hê in dit wat ek bevind het en ek moet daarby kan vasstaan. Ja, en nie geïntimideerd voel nie.'*

*Translation: '...there are so many aspects of your identity that are directly connected to your academic work that it is hard to make a distinction. Why did I do a PhD in history? I did this because out of self-fulfilment if you look at it that way. I believed I want to enjoy my work and my work is part of my identity. ... Obviously, you have to comply with those requirements so that you can say I can think independently, I can do independent research, I can convey my findings. ... A PhD has to be a stimulating experience for you and that you walk out with self-confidence. ... Eventually what I think is*

important is that you go through this struggle process but you have to walk out with self-confidence because I think if you still struggle afterwards you have a problem. ... But for me, the most important was really in the end I have to have self-confidence in what I found and I have to be able to stand by it. Yes, and not feel intimidated.'

1B: *'What the candidates get out of that [PhD study] depends on the kind of personality. It is a sense of achievement. I would think it does improve one's chances in the job market in the sense that you can prove to your prospective employers that you are actually able to reach the highest academic form or achieve the highest academic degree that you have a certain commitment and a certain conceptual understanding and dedication and just academic acumen to be able to do that. ... I think she became a much more self-assured individual, she knows her own work, she knows her thesis is good, she is not as scared to apply for jobs everywhere, she sent her cv to a number of institutions and she got that kind of self-confidence that she can crack it and make it and I know she wants to move away from Johannesburg. It gave her that kind of self-confidence. ... She became more assertive.'*

1C: *'Sy het meer self-confidence gekry.'*

*Translation: 'She gained more self-confidence.'*

2A: *'Ek dink as jy klaar is het jy dalk 'n bietjie meer vertroue in jou vermoë om nuwe groot dinge aan te pak. ... selfvertroue in jou ervaring en jou kennis dat jy weet ... Ek dink as jy klaar is het jy dalk 'n bietjie meer vertroue in jou vermoë om nuwe groot dinge aan te pak. ... So ek dink jy kweek 'n bietjie meer selfrespek aan of respek vir jou vermoë.'*

*Translation: 'I think when you have finished; you have acquired a bit more confidence in your abilities to take on big projects. ... self-confidence in your experience and your knowledge that you know ... I think when you have finished; you probably have more confidence in your ability to take on big things. So I think you generate a bit more self-respect or respect for your abilities.'*

2B: *'Vir my die belangrikste ding wat hulle moet leer is om onafhanklik navorsing te kan doen. Met ander woorde, op hulle eie moet hulle die hele ding beplan. Eintlik die totaal onafhanklikheid van 'n studieleier, dit is wat ek wil hê. Sodat as die kandidaat klaar is met 'n PhD, hy of sy kan gaan werk as 'n navorser. So, vir is my die belangrikste dat die kandidaat onafhanklikheid leer. ... Selfstandigheid, staan op eie bene. Moet nie met elke probleem kom ... probeer dit self oplos. Sy het dit gehad, die selfstandigheid wat ek soek op alle gebied in 'n D-kandidaat. ... Die onafhanklike groei het baie sterk gekom in haar. Selfstandig werk, baie selfstandig. ... Dit was ongelooflik die groei in haar.'*

*Translation: For me the most important thing they have to learn is to be able to do independent research. In other words, they have to plan the whole thing on their own. Actually a total independence from a supervisor, this is what I want. So when the candidate has finished a PhD, he or she can go work as a researcher. So for me the most important thing a candidate should learn is independence. ... Self-reliant, stands on her own two feet. Don't come with every small problem ... try to solve it yourself. She had that, that self-reliance what I want in every aspect of a doctoral candidate. ... The independent growth was very strong in her. Self-reliant work, very self-reliant. ... There was an amazing growth in her.'*

2C: *'... mens verwag hierdie veranderings om plaas te vind met die proses en één daarvan is om met groter vrymoedigheid in die professionele kader te praat oor die goed. So as jy op 'n konferensie of in 'n werkwinkel sit dan is die selfvertroue om met gesag te praat oor en verder te explore, verder te ondersoek dis 'n ding wat mens verwag moet gebeur.'*

*Translation: '... with the process [of a PhD] you expect certain changes and one of them is being able to talk within a professional framework with more frankness. So people expect that when you are in a conference or a workshop, you can talk with self-confidence and authority about your field and explore it further.'*

3A: *'I think most of all it's about the sort of learning to work independently. ... I think you learn a tremendous lot of things in terms of just balancing your life, you know discipline, setting yourself targets ...'*

3C: *'Maar ek dink die kern is dat hy met die gevoel gesit het van ek het die mikpunt altyd gestel en dit is nou verwesenlik. Hy is baie trots op wat hy bereik het. Dankbaar, trots en daai gevoel van, ek het dit gedoen. ... 'n bou aan sy assertiveness dink ek het hier plaasgevind. Selfvertroue rondom deelname aan akademiese gesprekke, ek dink dit het hom op baie vlakke sy assertiveness verder gebou.'*

*Translation: 'But I think the essence is that he had the feeling of reaching a goal and this is now accomplished. He is very proud of what he achieved. Thankful, proud and the feeling I did this. ... An advancement of his assertiveness also took place I think. Self-confidence in participating in academic discussions, I think on many levels it increased his assertiveness.'*

4A: *'Personally I think I have grown a lot in things like patience for example, especially with myself and in the end you realise that some of the questions you will never be able to answer and to me that is the most humbling experience because only then I realised how much I didn't know and what I won't know and that I think to me was the greatest lesson personally of the whole experience. ... I also found that initially when I started, I was very insecure in the beginning of my research and I came out with more self-confidence. ... I expected more self-confidence which I got. I didn't feel the same, I felt quite different. I think about things different, it is an enormous growing curve where you feel your mind has changed, your whole emotional process is different. I become impatient, I realise you know I can't expect other people to think about the things the same as I do. And previously, I wasn't that aware of that. I didn't expect that to happen.'*

4B: *'... he developed, he also developed as a person I would say because of his background, he was a very, he is a very shy and uh reserved person... I think he has more confidence and he comes across as a little bit more assured, self-assured than he has been before. So ja, I would think that it had quite a positive effect on his development as a person.'*

4C: *'... you become more confident because ja, you know the stuff better and you know the people so you are able to express yourself.'*

5A: *'I think the purpose of a PhD is to come up with an idea and to show that you can do it and to show that you are independent and confident in your... Even if you know something, you're confident enough to say that you don't know it. You don't pretend that you know how to do it. I mean, we had some experiences here were somebody just says they know what they're doing but they have no clue and then they're messing up the whole entire lab just because, I don't know if it's too arrogant or too scared to say that they didn't know. And ja, you must be confident enough to say I don't know. ... And also I think, the confidence in my research that I had enough and that I could write up and the confidence to say it to my promoters I'm not going any further because otherwise they want you to go further and further and make more experiments and make more research and I just said no that's it. I'm writing up and I'm handing in. ... if I put my mind on something I really want to do it then I will do it. And so I suppose in that way it made me look differently at myself. Like that. And it has, made me think of that in other areas of my life as well.'*

5B: *'Natuurlik sien 'n mens veranderings want so 'n persoon groei tog? Groei in vermoëns, groei in die manier waar jy na 'n navorsingsprobleem kyk, groei in die vermoë om oplossings te soek vir iets wat vasval, groei ook in die vermoë ja, om ook jou werk beter te kan adverteer en buite toe dra na baie belangrike dinge, ja.'*

*Translation: 'Of course you can see a change because surely a person changes? Growth in capabilities, growth in the way you look at a research problem, growth in the capability of looking for a solution for something you conclude, growth in capacity, yes, also to better advertise your work and put it out there for important things, yes.'*

5C: *'Sy kon ook meer onafhanklik wees en .... Ja, ook meer selfvertroue in dit wat jy doen ja. ... Groei in selfvertroue ... Sy het maar self gesê, ek wil graag dit doen, die eksperimente. Daar is nie meer iemand wat sê nou moet jy dat doen.'*

*Translation: 'She could be more independent and yes, more self-confident in that you do, yes. ... Growth in self-confidence. She told them, I would like to do this, those experiments. There wasn't someone who could tell her, now you have to do this.'*

6A: *'The PhD studies should give that confidence to the candidate. You know when you do a master's, you spent most of the time getting information from your supervisor, getting to know the technique, they spend most their time telling you what to do. But a PhD study is more of independence. You think for yourself and you tend to convince your supervisor on your thinking.'*

6B: *'n PhD is voor die ontwikkeling van nuwe kennis. So hy leer uit die doktorsgraad hoe om nuwe kennis te access, hoe om dit te verwerk en hoe om dit presenteerbaar te maak vir die akademiese gemeenskap. ... Selfvertroue. Selfvertroue omdat hulle in die proses leer om hulle resultate te interpreteer, om het te vergelyk met wat reeds in dieselfde veld gepubliseer is en indien hulle bevindings nie strook met die aanvaarde soort van sienswyse nie, dat hulle die selfvertroue het om hulle standpunte te verdedig in 'n peer review forum.'*

*Translation: 'A PhD is to discover new knowledge. He [candidate] learns from a doctoral degree how to access new knowledge, how to process it and how to make it presentable for the academic community. ... Self-confidence. Self-confidence because during the process they learn to interpret their results, to compare it with published work in the same field and in case their findings does not agree with the accepted views, that they have enough self-confidence to defend their position in a peer review forum.'*

As illustrated in the extracts from the interviews, the participants elaborated on their personal development resulting from the doctoral process. The doctoral graduates had to learn to think for themselves and instead of a supervisor telling them what to do they had to convince their supervisors of their study. This independence goes hand in hand with an increase in self-confidence. Some graduates believed that the difficulties they experienced during the doctoral process were responsible for their increase in self-confidence. They felt that if they overcame the complications they experienced, they believed more in their own capabilities. However, self-confidence was an expected change. I suspect that doctoral candidates assume a certain increase in self-confidence at the end of their doctorate because they are aware of their own insecurities at the start of doctoral study. Doctoral candidates know that at the end of the doctorate, they are supposed to understand their subject very well and should be able to express it as a result of the skills and knowledge gained during the process. Some of the interviewed graduates became so acquainted with their research that they had no problem admitting when they did not know something. For them, admitting that there are things they do not know of, was an expression of their

growth. These identity changes were also noted by their significant others who identified this as a sign of an increase in self-confidence and independence.

Supervisors anticipated changes in the identity of their doctoral students. They expect doctoral candidates to become more independent together with achieving enough self-confidence in their research so that the candidates will be able to communicate it appropriately. For them, a doctorate is not just about the investigation of a research subject at that specific time, but the process should create academics who can think for themselves and are confident enough to explore, interpret new research areas and express their ideas. It is interesting to see that the expectations of identity change run parallel to the ideas expressed by the graduates. According to the discussed extracts, the expectations of identity change were fulfilled as supervisors and graduates reported a noticeable change, in that both described a definite growth in self-confidence and an increase in independence.

#### 4.5.2. Pride

During the interviews, participants appeared to be proud of their accomplishments. However, a sudden increase in academic self-confidence could lead to arrogance, and some graduates were aware of that risk:

1A: *'... ek is nie skaam hiervoor nie [om 'n PhD te ontvang], ek is trots hierop sonder dat jy arrogansie het. So dit is 'n fyn balans tussen selfvertroue en arrogansie dink ek. ... ek voel baie trots op die feit dat ek dit gedoen het, ek voel geweldig trots daarop. ... ek glo ek het baie goeie werk gelewer. Ek is baie trots op wat ek gedoen het en ek gaan dit nie wegsteek nie ... ek dink ek was 'n bietjie arrogant ná my M gewees. Ek voel nie ek is arrogant ná my D nie ... ons praat van die titel, daar kom maklik arrogansie in, jy moet selfvertroue hê, maar nie arrogant wees nie. ... Jy leer die beperkinge van jou vermoëns baie goed ken. Jy leer baie gou wat jy nie weet nie. Jy weet waaroor jou mond kan oopmaak en waaroor nie jou mond kan oopmaak nie. So, jy het baie selfvertroue in dit wat jy weet maar ek gaan nie my bek rek oor enig iemand anders se werk nie want ek weet nie daarvan nie. Dit voel vir my eintlik, ek is minder kritiserend teenoor ander mense sover dat ek weet wat dit is om ditself te doen. Ek dink op 'n manier dit voel vir my ek het 'n nicer mens geword wat ek was ná die M.'*

*Translation: '...I am not shy about this [getting a PhD]; I am proud without having the arrogance. So there is a fine balance between self-confidence and arrogance I think. ... I am very proud of the fact that I did this, I feel very proud. ... I believe I submitted a very sound thesis. ... I am very proud of what I have accomplished and I'm not going to deny it ... I think I was a bit arrogant after my master's. I believe I am not arrogant after my doctorate... It is easy to be arrogant after you received your title; you have to have self-confidence but don't be arrogant. ... You learn the limitations of your abilities very well. You learn very quickly what you don't know. You learn where you can speak out about something and where you just have to keep quiet. You have a lot of self-confidence about what you know, but I'm not going to speak out about somebody else's work because I don't know anything about it. It feels like I am less critical towards others as I know what it is do it yourself. And in a way, I feel like I became a better person than the one I was after my master's.'*

3A: *'Ek dink die moeilike ding is om nie te dink jy is nou nie 'n klein god nie want 'n PhD beteken rêrig nie veel nie, dis euh so net omdat jy 'n nuwe titel het om nou te dink jy is verskriklik slim, ek dink die challenge is om nederig te bly. Dis maar net nog 'n ding wat jy gedoen het. ... Mens moet nie dit uit verband ruk nie.'*

*Translation: 'I think the hard thing to do is not to start thinking you are a little god because a PhD does not really mean that much, it is not because you have a new title that you have to start thinking you are incredibly smart, I think the challenge is to stay humble. It is just something more that you did. ... People should not take it out of context.'*

4A: *'And the amount of knowledge that you gain during the process you have to understand it, you have to make sense of it. And to me sometimes, it was very painful because there are many things that I didn't understand. And it was a great learning curve. Personally I think I have grown a lot in things like patience for example, especially with myself and in the end you realise that some of the questions you will never be able to answer and to me that is the most humbling experience because only then I realised how much I didn't know and what I won't know and that I think to me was the greatest lesson personally of the whole experience. ... That to me was the greatest experience to realise that there are certain things that you won't be able to answer after your PhD.'*

6A: *'PhD made me to become more humble. Humble in the sense that you accept criticism, you are open to ... people can tell you what they think. ... You see, it's like a school of thoughts. Now if you are into that then you will not have a problem. Then you should be ready to any type of criticism or anything they are telling you that 'no you should do this, don't you think ...' you know. But if you don't have that humility, you are not humble enough even if your supervisor is difficult.'*

From these examples it became clear that doctoral candidates could learn humility from the whole process. They were aware of the magnitude of what they had achieved. However, they did not overestimate their achievements and therefore it seemed they were aware that their increased self-confidence should not become arrogance, something they realised could easily happen. However, different people in different contexts and disciplines change in different ways. According to O'Byrne (2011, p. 8), academic identities are not only influenced by the specific discipline, but also by the various communities to which individual academics belong. I also believe that different disciplines inculcate humility in different ways and that some disciplines encourage humility more than others. But then again, this depends on the individual.

An increase in self-confidence mentioned by the participants was in line with the expectations of their supervisors. From the interviews it became clear that this growth did not just come from the academic milieu in which participants found themselves, but also that the increase in self-confidence was a psychological need. This development is regarded as part of the purpose of doctoral study. A boost in self-confidence that doctoral graduates experience is not limited to the specific academic field within which they worked, but is also

manifested on a personal level. It is not a sudden change in their being, but is a gradual process that does not end when the participant has graduated. One specific supervisor was quite verbal when it came to the influence of a doctoral study on the identity change of one doctoral graduate. For him, a doctoral study forms a candidate's identity as the doctoral study involves such a commitment from the candidate that it alters identity and later on becomes part of the graduate's scholarly identity.

3B: *'Dit is belangrik in die geesteswetenskappe dat dit iets moet ontwikkel rondom jou eie identiteit. ... En ek dink dis hierdie ding van identifiseer. Baie kandidate identifiseer nie hulleself met hulle studie-objek nie en met hulle navorsingsprojek nie. ... Die studie het vir hom beteken, dissipline, hy moet leer gedissiplineerd wees, en dit het vir hom nugterheid gebring, om balans gekry en nie in eensydighede te verval nie of om net na één kant te kyk nie. Ek dink dit het vir hom 'n stuk volwassenheid gebring deurdat hy op 'n baie meer gebalanseerde, sy kritiese ingesteldheid na alle kante toe kon laat gly. Nie net na die één kant nie. In Suid Afrika is dit belangrik om alles op apartheid te plaas. En alles op wit mense te plaas. En as jy wetenskaplike studie doen dan moet jy 'n bietjie jou emosie en voorbeoordeling opsyskuif. Die studie het vir hom gehelp om dit te doen sodat hy op die ou end met 'n groter realisme en nugterheid na die lewe kan kyk. En dat 'n mens nie uit jou prejudice en jou perseptuele vooroordele daarna kyk nie. En ek het duidelik by hom 'n volwassenheid gesien hoe hy daaruit ontwikkel het. En 'n soort van eiesoortige identiteit kon ontwikkel het. ... Kyk, identiteit is juis nie 'n vaste ontiese gegewe nie. Maar identiteit is 'n relasionele gegewe. Met ander woorde, in die wisselwerking van verhoudings word jy getoets op grond van wie jy is en identiteit kom van die Latyn idem wat kontinuïteit, dit korreleer dit wat jy is en wat jy doen begin by mekaar inhaak. En dit bring 'n evaluering wat uit jou verhouding negatief kan wees, destruktief of konstruktief. Of neutraal.'*

*Translation: 'It is important in the social sciences that it [thesis] develops something around your own identity. ... And I think it is this thing of identification. A lot of candidates don't identify with their study object and their research object. ... This study taught him discipline, he needed to learn discipline, and it gave him rationality, to get balance and not to fall into bias or just to look at one side. I think it brought him a sense of maturity as it gave him a more balanced and critical outlook on things. And not seeing things from one side. In South Africa the trend is to blame everything on apartheid. And white people. And if you conduct a scientific study, you have to let go of your emotional prejudice. This study helped him in doing so, so that in the end he was able to look at life with more realism and common sense. And that a person doesn't just look from their prejudice and perceptual bias. I clearly saw a maturity, how he developed out of this. And how he developed his own kind of identity ... Look, identity is not an ontological. Identity is a relational premise. In other words, in the interaction you get tested on the grounds of who you are and identity comes from Latin which means continuity, it correlates it is when what you are and what you do are linked. And this brings an evaluation which can be negative, destructive, or constructive. Or neutral.'*

The reason why this specific supervisor was well aware of the influence of a doctoral study on the identity of a doctoral candidate, could be ascribed to his field of study, theology. Not all supervisors could pinpoint these changes in their graduates as being identity-related but from the examples that were put forward, these changes in graduates can be seen as being part of their identity development. The graduate mentioned in this case was a person of colour, which gave an extra dimension to the identity change within the candidate. The particular graduate had to learn more than merely an increase in self-confidence: he needed

to learn to think for himself, which gave him a more critical attitude towards his background. This graduate became more balanced and neutral when dealing with racial issues. Especially with regard to the complex history of South Africa, it was a valuable shift in identity for this graduate. As he stayed in academe, his experience may be valuable in supervising other candidates.

#### 4.5.3. Identity crisis

Social relationships tend to change for doctoral candidates. Participants were confronted with people and/or family that 'could not relate' to them any longer:

1A: ' ... they all stopped thinking that they are able to relate to you, all of a sudden, you are just not normal any longer. You are not one of them any longer ...'

Family or close friends often had difficulty in accommodating the candidates' new identity – that of being a doctoral student and a scholar. They did not fully understand this aspect of the graduates' lives, although for the graduates it was very much part of their being:

1A: 'Maar dit het my seergemaak om te sien dat families meer aandag gee aan my nuwe rol as getroude vrou as wat hulle aandag sou gee aan my rol as suksesvolle vrou. Dus daar sal vrae gevra word oor my huishou of met my gesels word oor kookboeke of resepteboeke want dit is waaroor hulle kan gesels. Maar daar word bitter min uitgevra oor my werk. ... ek verklaar dit aan myself deur te sê dat hulle nie met my kan identifiseer nie, en daar is niks wat ek daaraan kan doen nie. Ek kan dit nie verander nie. Maar ek het gevoel, dit is my PhD, dit is deel van my identiteit so hoekom kyk jy net na die uiterlik deel van my lewe.'

Translation: 'But what hurts me the most is that relatives will pay more attention to my new role as married woman instead of paying attention to my role as a successful woman. So there will be questions about my household or they will talk to me about cookery books or recipe books because that is what they can talk about. But they hardly ask any questions about my work. ... I explain this to myself by saying that they cannot identify with me and there is nothing that they can do about it. I cannot change this. But I feel, this is my PhD, this is part of my identity so why are you only looking at the exterior part of my life.'

Thus, although the doctorate became part of the graduates' new identity and was very important to them, their new identity did not always seem to be well received by family or close friends. This happened more often with the people graduates knew before they started with a doctorate. New acquaintances or friends were not aware of this newly developed element of the graduates' identity. Graduates' new identities were not always a drawback. In the academic world, doctoral graduates reported on how they were suddenly regarded as being important and different after they had they finished their doctorate:

5A: *'So I had other jobs being given to me and other responsibilities so ja, once you get your PhD I must admit, people take you more seriously. You weren't a different person than you were last month, but just because you now handed in your thesis they start looking at you and say: oh your opinion actually does count. Which is, I don't know if it's a good or a bad thing, because without it, it means your opinion doesn't? Which isn't really nice but ja, they just listen when I speak and they do things that I ask and so that's quite nice.'*

All participants were aware that the 'outside world' was reacting differently now that they had obtained a doctoral degree. This was regarded as a positive experience although it made them wonder how they had been perceived academically before the completion of their doctorate. However, it may be not ruled out that the reactions towards graduates were the result of their behaving differently towards other people.

The significance of identity formation within doctoral education, just like ontological development, tends to be overlooked (Barnacle & Mewburn, 2010). The transition from dependent to independent researcher can be hard for the doctoral candidate. Candidates have to learn that their studies have certain implications for their identity and self-esteem (Delamont, Atkinson & Parry, 2000, p.2). Even though aspects of an increase in self-confidence and independence were clear from the interviews, it is important to keep in mind that these identities are flexible which have been discussed in section 2.4.2.

#### **4.6. Transformative learning: Independent thinking and challenges**

To become a successful doctoral graduate, transformative learning seems to reinforce the candidate's necessary transition from dependent to independent candidate. This element of the makeup of the participants seemed to be closely connected to their increase in self-confidence since they, as doctoral candidates, had to start developing, thinking and being confident in order to become effective (see Chapter 2). The evidence of transformative learning was also revealed after the doctoral graduates addressed the different reasons why they had decided to embark on their doctoral studies.

#### 4.6.1. Responses

This section shows that doctoral graduates expected a transformation in their approach to learning during their studies, which ties in well with the notion of identity development which was discussed earlier. The following quotes from the interviewed graduates illustrate this:

1A: *'Ek stem saam met die uiteensetting dat 'n PhD gaan daarvoor om nuwe kennis te ontsluit. Jy moet duidelik aan die vereistes voldoen om te kan sê ek kan onafhanklik dink, ek kan onafhanklik navors, ek kan my bevindinge aan iemand oordra. ... Dit moet juis vir jou 'n stimulerende ervaring wees. ... en dat jy aan die einde daarvan met selfvertroue sal uitstap. ... Jy het meer vertroue in jou vermoëns.'*  
 Translation: 'I agree with the explanation that a PhD should be about unlocking new knowledge. Obviously you have to comply with the requirements so that you can say: I'm able to think independently, I can do independent research, I can convey my results to someone. ... This actually has to be a stimulating experience for you. ... and that in the end, you walk away with self-confidence. ... You trust your capabilities more.'

2A: *'[die doel van 'n PhD is] om op 'n nuwe of 'n vars manier daarna te kyk. ... die doel dan is om jou inligting op so'n manier te organiseer en te interpreteer dat iemand dit sal wil lees. [Wat 'n kandidaat uit die proses moet leer is] selfstandige navorsing. ... dit is in 'n sekere mate lewensverrykend.'*  
 Translation: '[the purpose of a PhD is] to look at something in a new or refreshing way. ... the purpose is to organise your information in such a way and to interpret it so that someone is willing to read it. [What a candidate should learn out of the process is] independent research. ...this is life enriching in a way.'

From these extracts it appears that graduates were well aware of a necessary change in their approach to learning. They realised it was essential to gain new knowledge and to interpret it in a novel manner. Graduates had to find their own academic voices while learning to be confident about their personal opinion. Their research had to be significant and original. Extracts from supervisors highlight the similarities between the responses from graduates and the ones from their supervisors:

3A: *'... being able to make a significant contribution. Growth within yourself is to develop this type of thinking. How to make unstructured things structured, to plan, to deal with it until you complete the task. ... when you are busy with a PhD you really want to keep yourself busy with something that adds value, not only to your own life but to other's people's lives also.'*

3B: *'... it's addressing a specific problem and getting to logical scientific answer ... So in addressing this specific problem it is about solving that with new understanding the current understanding getting to an improved solution or improved situation.'*

*[J]ou vernuwing en jou innoverende denke lê in hoe jy jou probleem formuleer. Dit is waar jy dit anderste doen as wat enig ander persoon dit gedoen het. En dit is eintlik waar die nuutheid inkom. Vir my is die meer belangrike deel die vermoë van die kandidaat ontwikkel. Om onafhanklik na 'n probleem te kan kyk. So, daar is 'n professionele verantwoordelikheid. Die tweede gedeelte is om te sê ek het genoeg selfvertroue om hierdie proses alleen te doen. ... en 'n ander belangrike ding is professionele volhoubaarheid, volharding. Verryking wil 'n mens graag hê, en dan ... iets ontwikkel*

*rondom jou eie identiteit. Jy moet jouself kan identifiseer in die sin dat jy 'n commitment maak sodat hierdie onderwerp amper deel word van jou lewens-ontwikkeling.'*

*Translation: '[Y]our innovation and your innovative thinking lies in how you formulate your problem. It is there where you do it differently from any other person who did it. And this is actually where innovation comes in. For me the more important part is the development of the candidate's capacity. To look independently at a problem. Thus there is a professional responsibility; the second part is being able to say that I have enough self-confidence to do this process by myself. ... and another important thing is professional maintenance, perseverance. You have to be able to identify in such a way that you make a commitment so that this subject almost becomes part of your life development.'*

*4A: 'Kyk, 'n PhD studie is basies studies wat nog nooit gedoen was nie so jy betree 'n onbekende vlak wat niemand nog ooit aangedurf het nie. I don't feel the same. ... it is the questions that you ask prior to the PhD you have to answer. And the amount of knowledge that you gain during the process you have to understand it, you have to make sense of it. ... [I]n the end you realise that some questions you will never be able to answer and to me that is the most humbling experience because only then I realised how much I didn't know and what I won't know and that I think to me was the greatest lesson personally of the whole experience. ... That to me was the greatest experience to realise that there are certain things that you won't be able to answer after your PhD.'*

*Translation: 'Look, a PhD study is basically research which has never been done before so you are entering unknown territory never been dared by other people.'*

*4B: 'So euh, first of all, one would like them to have to be able to survey the literature and to identify a project. Or identify a loophole or you know, wherever there is a shortage of information. So he has to be able to identify a problem. ... One would expect them to mature as a person. One would expect such a person to develop as far as his personality becomes more mature and so on. ... So ja, one would expect them to be able to become more mature also in regards with the work.'*

Supervisors were also eloquent in communicating their perceived purpose of a doctorate and their expectations from their candidates, which tied in with the idea of transformative learning. For the supervisors, it was important that their doctoral graduates did not take this doctoral journey lightly. Innovative knowledge or new approaches to a certain problem were regarded as being important so that the doctoral candidates could grow into independent academics and scholars while completing their doctoral studies.

*5A: 'You should learn to make your own decisions, good or bad. You should learn to stand up for yourself and your research. You should learn to be able to do your research on your own. And also, I think the purpose of a PhD is to come up with an idea and to show that you can do it and to show that you are independent and confident in yours.'*

*5B: 'Om onafhanklik navorsing te kan doen. Met ander woorde, om ander kant te kan uitstap en op sy of haar eie te kan voorgaan, ook met die potensiaal om ander mense weer op te lei. Genoeg selfvertroue opbou. Ja, ek dink die belangrikste ding is om selfstandig te kan dink en werk in die betrokke veld, ek dink dis die belangrikste wat jy verwag.'*

*Translation: 'Being able to do independent research. In other words, being able to come out on the other side and being able to be independent, also with the potential to educate other people. To build enough self-confidence. Yes, I think the most important thing is being able to think and work independently in the chosen field, I think that is significantly what you expect.'*

6A: *'The purpose is to be yourself. That is to be able to depend on yourself for anything you want to do. Especially into research or in academy and also to have that confidence, that self-confidence. ... You are trying now to be yourself, you are trying now to have your own philosophy. You have to do independent work. You are able to do things on your own. Your supervisor is there just to guide you. But if you are doing a PhD where the supervisor is doing much of the work than it is not a PhD. It should be something that really came from you. The thinking, the approach, the judgment, everything should be your own.'*

6B: *'Kyk, 'n meesterstudie is daar om 'n werkwyse te leer. En die PhD is die gevorderde gebruik daarvan deur die ontdekking van nuwe kennis. So, hy leer uit die doktorsgraad hoe om nuwe kennis te access, hoe om dit te verwerk en hoe om dit presentable te maak vir die akademiese gemeenskap.'*  
*Translation: 'Look, a master's is to learn a certain operation procedure. And the PhD is the more sophisticated use of that through the development of new knowledge. So he [the doctoral candidate] learns how to access new knowledge, how to process it and how to make it presentable to the academic community.'*

Doctoral education is a participative process as candidates are regarded as research participants (Harvey & Knight, 1996). The education that candidates receive at this level is not a service but an on-going process of transformation of the candidate. Mezirow (2000, p. 103) and Eisen (2001, p. 34) not only referred to the change in the knowledge and abilities of the candidate, but also to the process of coming to understand. Not only is independence an important attribute connected to a doctorate, but the development or discovery of new knowledge is regarded as equally important for transformative learning. This transformation seems critical in order to become successful. Doctoral studies involve more than just producing skilled graduates; it has to create people who can produce new knowledge. Both the supervisors and the graduates in my study believed that an original contribution to the knowledge field was important. The graduates were not only aware of their supervisors' expectations in this regard; they also saw it as a purpose in itself. This illustrates that interviewed graduates seemed well aware and well informed of the expectations surrounding a doctorate when they embarked on their studies.

#### **4.6.2. Doctoral difficulties**

The doctoral process is clearly not an easy journey. It involves many challenges that doctoral candidates have to learn to overcome. Kiley (2009, p. 293) identifies certain thresholds as a kind of rite of passage. These concepts represent a gateway to learning and understanding through which candidates have to pass, but where they may encounter real difficulties of

learning and understanding (Trafford & Leshem, 2009, p. 305). While the participants were discussing their doctoral process, they mentioned the obstacles encountered in their studies with which they struggled. Some of these were writing up the research, organising research data or isolation:

1A: *'Die skryfgedeelte. Die opskryf. Ek het gesukkel om aan die gang te kom ... ek het begin om aan die PhD te werk maar daar het nie veel gebeur nie. Ek het idees gekry, ek het besin, ek het baie besinning gedoen oor my benadering tot die onderwerp. ... Ja, ek wil byna sê die meeste geleer toe ek regtig gestrugle het. Ja dit was tye van struggle.'*

*Translation: 'The writing part. The writing down. I struggled to get started ... I started to work on the PhD but nothing major happened. I got ideas, I reflected, I did a lot of reflecting with regard to my approach to the subject ... Yes, I would almost say that I learned the most when I really struggled. Yes, these were times of struggle.'*

The supervisor of graduate 1A also noticed this struggle and mentioned:

1B: *'I think there was a time where she was, I think, kind of overwhelmed by the amount of information that she had to deal with. But she was also kind of tough. I sensed that, not a sense of panic, but a sense of unease I remember that. ... This is the first time that I think about it, she didn't deal with that all that well in terms of the writing emotionally she just thought, put it down and deal with it later. It could have been more shifted. I think that is the way that she dealt with it by not, I'm just gonna finish this, I'm just gonna write the material.'*

Some participants complained about the isolation in which the doctoral study process takes place. They had to overcome the difficulty of doing a doctoral thesis by themselves without the frequent interaction of fellow doctoral candidates:

2A: *'Dit was vir my moeilik die alleen proses ... Dit was moeilik om nie mede kandidate byvoorbeeld te hê om mee te praat en gedagtes uit te ruil en weet, dinge te bespreek nie. Dit was moeilik, maar ek het op 'n stadium aanvaar, eintlik redelik vroeg in die proses dat dis okay, ek is daarmee besig dit is my projek so ek kan eintlik doen wat ek wil. ... ek het gestrugle met die alleen ding maar omdat ek in 'n huis gebly het waar, ons is vier kinders, drie van ons was nog in die huis gewees, so daar's hierdie oënskynlike support, maar eintlik sit jy daar maar alleen met die werk omdat jy dit met niemand deel nie, dit was moeilik en die motivering was moeilik, dis maar moeilik gewees ...'*

*Translation: 'The lonely process was hard for me ... It was difficult for example not having fellow candidates to talk to and to exchange ideas you know, to discuss things. It was difficult but I accepted it at a stage, actually quite early in the process and it's all right, I am dealing with it; it's my project so I can actually do what I want ... I struggled with the matter of being alone, however I stayed in a house, we are four children, three of us are still living in the house, so there is this apparent support but in reality you sit there by yourself doing the work as you are not sharing it with someone, this was hard and the motivation was difficult, this was rather difficult ...'*

3A: *'I did not deal very well with the isolation. Somebody once remarked, when you are busy with your PhD, especially when there are factors that delay the process or when you feel the tension within yourself and having to answer the question and people asking you how it's going. Somebody mentioned: it's like having a brother in jail. You know it's there but you don't talk about it. You actually don't want people to talk about it and that feeling was it's real ...'*

5A: *'... I was mad alone. I was doing my own thing so I didn't have that support like everyone else to help me out so that was probably also the most difficult bit. But in a way the easiest because nobody else had anything to say to me like why didn't you do this, why didn't you do that and the others who were in a group everybody is saying I did this, why didn't it work that way, why did you do it. So it was easy and difficult at the same time. So ja, nothing is just simple.'*

Such threshold elements during the doctoral process were anticipated. It was part of the learning process for the doctoral graduates towards scholarly formation and they realised this. For the graduates, the most important part was that they had learned to overcome such challenges:

6A: *'... you know those challenges that come from time to time. Those challenges that you have on the work, but that is part of it. It is not a race. The ending point is not the year you are completing, but the ending point is the results you are getting. It is not a race as such ... Yes, I focused on something else and then I took it and it really helped. It really helped because from one challenge, you get to something else and in the end of the day you see that it was worth it.'*

These examples of obstacles, coming from the doctoral graduates, can be identified as threshold elements, although they were limited. It may also be that the participants who had graduated some time ago had forgotten about some of their difficulties, since difficulties might easily be forgotten in cases of success. Kiley and Wisker (2009, p.431) argue that such thresholds are transformative once they are understood. They lead to changes in perception of the subject and the possible shift in identity. When a candidate crosses a threshold, it involves a transformed way of understanding, interpreting or viewing something. It is through those difficulties that they are able to show their 'doctorateness', their readiness to become doctors.

#### **4.7. Creativity**

Creativity is important in the context of doctoral success. It is closely connected to the transformation from dependent to independent researcher as well as to the purpose of a doctoral study. Doctoral candidates need to extend the boundaries of their discipline. As the transformation of dependent to independent researcher has been previously discussed, the next examples will illustrate how the participants used creativity in their work. From these extracts it will become clear that the doctoral candidates' creative abilities presented in many different ways, from dealing with difficulties (thresholds) to the way the candidates approached their dissertations:

1B: *'She had the extraordinary ability to write very well. She has a literature ability which is not often the case with PhDs ... She wanted to spread out and explore new worlds and I think she had this creative intelligence about her which goes beyond the norm ... you just have to run that against the grain but I think she went beyond that with what she came up with. With an even fresh surfaces. Ja, she has a nose for our part of the work and getting information and just going that extra mile.'*

2B: *'Haar motivering was groot. Haar motivering, dryf, onafhanklike denke, sterk persoonlikheid, al kom sy nie so oor as jy met haar praat nie. Sy was baie kreatief gewees, hoe sy die onderwerp aangepak het, hoe sy dit opgeskryf het. Wat baie goed is in 'n D-kandidaat.'*

*Translation: 'Her motivation was huge. Her motivation, will power, independent thinking, strong personality, although it doesn't come through when you talk to her. She was very creative, how she tackled the subject, how she wrote. Which is very good in a doctoral candidate.'*

3B: *'En ek dink dit was 'n eerste wat betref die teologie om met gangsterism te werk en dat hy ook met die oog die konsep gangsterism gewerk het. Want weet jy gangsterism is 'n vraag. Hoe gaan jy dit na Afrikaans gebruik. Maar dis goed om dit te gebruik. Want hy kry skielik in Afrikaans nog 'n beter betekenis as in Engels. Want in Engels is dit general 'gangsterism'. Maar sodra jy dit na Afrikaans toe oorbring, dan weet jy dis 'n baie spesifieke verskynsel wat 'n eiesoortige karakter het wat eintlik hier in die Wes-Kaap ontstaan. ... [Hy kon die] vraagstuk van gangsterism tog op 'n manier konseptualiseer. Hy kon dit doen, hy kon konseptualiseer en hy kon op die ou end 'n argument uitmaak oor hoe dit die verstaan van kerkwees so sal raak dat as jy 'n kerk wil wees onder die gangsters dan sal die aard van hoe jy verstaan van wat is 'n kerk, jy sal dit moet herformuleer.'*

*Translation: 'And I think, it was the first time in theology to work with gangsterism and that he also worked from that point of view with the concept of gangsterism. Because you know, gangsterism is a question. How are you going to use it in Afrikaans? But it is good to use it. Because suddenly it gets a meaning in Afrikaans that differs from the English meaning. Because in English it's just general 'gangsterism'. But from the moment when you translate into Afrikaans, then you know that it is a very specific phenomenon with its own character which originated in the Western Cape. He was able to conceptualise the problem of gangsterism. He was able to do that, he could conceptualise it and finally he could shape an argument to show how the meaning of Church would affect the way you want to form a church among the gangsters so you will have to reformulate the nature of your understanding of what a church is.'*

3C: *'... één van die goed wat hy skitterend gedoen het was om sy werk deeglik teoreties te begrond. Hy kon goed teologie lees, ons gebruik die term intra-dissiplinêr om te sê hy het tog gekyk, na binne die teologiese wetenskap, nie net op praktiese teologie gefokus nie, maar ook veral sistematiese teologie, bronne gelees in publieke teologie. So dit was vir my één van die skitterpunte in die proefskrif, dat hy dit gedoen het en dan het hy ook regtig interdissiplinêr gewerk ook na ander wetenskappe gekyk, dissiplines, sosiale wetenskappe veral en hy het die ander punt wat vir my mooi was is dat hy ook gewerk het met reflekerende praktisyns. He really engaged reflective practitioners.'*

*Translation: 'One of the things he did magnificently was to thoroughly ground his work theoretically. He was good at reading theology, we use the term inter-disciplinary to say he looked outside the science of theology, not only focusing on practical theology but particularly systematic theology, reading sources in public theology. So for me that was one of the highlights in his thesis, that he did that and then he also worked towards inter-disciplinary by looking at other sciences, disciplines, social sciences especially and the other matter which was done well was that he worked towards a reflecting practical experience.'*

5C: *'Met 'n PhD moet jy self die kreatiwiteit aan die dag lê en eksperimente self lei. In ons geval, wel, in my geval, tipe werk is so's jy eksperimente beplan so jy moet maar ... Kreatiewe denke, om nou goed te laat werk.'*

*Translation: 'With a PhD you have to be creative and lead experiments. In our case, well, in my case, the type of work was to plan experiments so you have to ... Creative thinking, to make things work.'*

6B: *'Want ek moet vir jou dit sê: sy bevindings was dié kant toe terwyl die populêre denke in die pankreas ontwikkel soort van gevestigde veld, en toe hy die status quo bevraagteken, selfs die eksterne eksaminator uitgevra het daarvoor, kon hy met sukses sy standpunt verdedig op grond van die feit dat hy sekere reeks eksperimentele data kon navors. Dis die resultate wat hy gekry het, dis die interpretasie van die resultate en die feit dat hy nie direk inval met die algemene populêre siening nie, is iets wat hy kon verdedig in 'n eksterne gesprekvoering. ... En hy kon sy standpunt verdedig en die eksaminator was baie beïndruk: We never thought of it. We always believed it to be this way so we accepted our results should be like that and all of a sudden is daar 'n aanduiding dat daar 'n ander faktore ook 'n rol kan speel en nou gaan die fokus verskuif na die ondersoek van daai faktore.'*

*Translation: 'I have to tell you this, his findings were totally different from the current belief in developments concerning the pancreas was an established field, and when he questioned the status quo, even asking the external examiner, he was able to defend his position on the basis of researching certain experimental data. It is the results that he got, it is the interpretation of the results and the fact that he did not comply directly with current beliefs, it is something that he was able to defend in an external debate ... And he could defend his position and the examiner was very impressed: We never thought of it. We always believed it to be this way so we accepted our results should be like that and all of a sudden there is an indication that there are other factors that can play a role and now the focus of the research will change to those factors.'*

Creativity in a doctoral study appears to show not only in the product, but also in the process. Interpreting the comments from supervisors, it seems that they perceived their graduates excelling where they used their findings creatively. Supervisors noticed the abilities of their graduates when they were creative in approaching certain aspects of their theses. Creativity needs to be part of doctoral candidates as this assists them in making a positive transition to independent research.

The previous sections discussed and illustrated perspectives related to the conceptual framework suggested in Chapter 2. However, other elements that also emerged need to be mentioned. The role of relationships, the role of support, 'doctoral blues', expectations from supervisors and expectations from graduates are subsequently discussed and illustrated.

#### **4.8. Role of relationships**

Although working towards a doctoral degree tends to take place in isolation, there are people surrounding the candidate who also have an influence on the doctoral process. Certain relationships directly influence the doctoral process. The doctoral process largely detaches candidates from the world outside the doctorate. Graduates were therefore

capable of singling out the people who had an influence on their doctoral study processes. One distinction which was identified was between academic relationships and social relationships. The former group had a direct influence on the process and even the outcome, while the latter was not always aware what the participant was doing academically, but supported him or her in different ways. These two support groups were important for different reasons and therefore one cannot be singled out as being more important than the other. It may be fair to say that the academic relationships were necessary when the candidate was in need of academic advice, while the social relationships kept him or her 'balanced' and was necessary when the candidate wanted to step out of the doctoral study process.

#### **4.8.1. Academic relationships**

A doctoral candidate's relationship with his or her supervisor appears to be very different from the relationship at master's level. With a doctorate, the relationship between the candidate and the supervisor, as well as the support provided, remains at the level of academic involvement. This seems to be in accordance with the supervisors' desire to have an independent candidate:

*2A: Dit [verhouding met promotor] was heel akademies. Dit het heel akademies gebly. Maar die ander ding was, iets om na uit te sien, basies. Jy hou daaraan vas. Dit het ook teruggewerk op jou motivering om aan te gaan met jou werk en so.*

*Translation: 'It [relationship with supervisor] was very academic. It remained very academic. But the other thing was, it was something to look forward to. You hold on to it. It also had an influence on your motivation to continue with your work.'*

*2B: '2A het nooit haar persoonlike probleme met my gedeel nie.'*

*Translation: '2A never shared her personal problems with me.'*

*1B: 'I don't know much about her personally, I never really get involved in the candidate's personal life. I enquire politely about this or that, I don't know enough about her in that way to really understand her personal background, to say where did that drive come from if you want to probe it a bit deeper. That is something which I cannot answer.'*

*3A: 'Sometimes your supervisor has faith in you that you are able to do it. But at the same time you expect a bit more from him to push you a little bit and I know we discussed this at a postgraduate research workshop where the question was asked what the expectation was that PhD candidates have and most of the people thought that if your supervisor puts more pressure on you also sends a message that what you do is important. But when he leaves you, you can think, maybe this guy is not really in it much, interested in what I'm doing so that little push helps you to think, this man thinks, this man is busy with something ...'*

6B: *'So, gelukkig was dit nie nodig om hom te babysit of hom te pamperlang nie, hy het geweet waarheen hy gaan en hoe om daar te kom.'*

*Translation: 'Luckily it was not necessary to babysit or pamper him; he knew where he was going and how to get there.'*

A candidate's academic relationships seem to entail more than the relationship with the supervisor. Although the process is largely isolated, having a connection with a colleague can apparently be very helpful as this person can relate to what the doctoral candidate is experiencing:

1C: *'Maar ek dink emosionele ondersteuning verseker ook, net daai klankbord van iemand wat deur dieselfde proses besig is om te gaan ... ek kan op 'n akademiese vlak met haar engageer, verstaan jy, ... ek kon luister na wat sy sê en vir haar sê: ja dis 'n goeie argument of kyk hierna of kyk daarna ... want ek verstaan 'n bietjie van die proses waardeur ek gaan. Ek verstaan daai effek van jy het 'n groot deadline en jy is die heeldyd daarmee besig. Naweke, deur die dag, aande, dis nie iets dat jy hê uit jou kantoorwerk weer doen en dis verby nie. So ek dink net daai begrip om iemand te hê met daai begrip help al klaar baie. Maar dis iemand wat nie gaan kwaad raak as jy sê weereens 'n afspraak kanselleer of so nie want ek, verstaan jy wat ek bedoel, ek is ook in daai situasie ek weet soms ek kan nie net 'n deadline, het jy net daai deadline nie en dan moet jy net werk en dan kan jy nie jou vriende sien nie. En selfs as jy hulle sien dan is jy heeltemal nie deel van die gesprek nie, want jy dink aan jou werk, jy is gestres daaroor. ... Ek kon nie net ondersteuning gee in die sin van, ek sê vir haar: Ag sterkte, ek dink aan jou, ek bid vir jou. Mense sê dit vir jou, maar dit voel soos leë woorde. Hulle het nie daai bietjie begrip daarby nie so ek dink omdat ek daai begrip daarby gehad het, omdat ek daai begrip gehad het vir hoekom iemand onsteld sou raak as hulle punte in die voetnotas op die verkeerde plekke is. Dit is nie 'n begrip dat, ek bedoel, jy kan dit nie vir mense verduidelik selfs al het hulle die beste bedoelings om jou probeer te ondersteun.'*

*Translation: 'But I think emotional support as well, to be the sounding board that goes through the same process ... I could engage with her on an academic level, you know, I could listen to what she was saying and respond: Yes, that is a good argument or look at this or that ... because I understand a little of the process she is going through. I understand the effect that you have one big deadline and you are consumed by it. Weekends, during the day, evenings, it is not something that when you walk out of the office, you are done. So I think just to have that understanding, to have someone with that understanding already helps a lot. But this is someone who won't get upset if you cancel an appointment again 'cause I, you know, I am also in that situation that sometimes you just have a deadline and then you have to work and you cannot see your friends. And even if you see them, you are not entirely part of the conversation because you think about your work, you are stressed about it. ... I could support her, not only in the sense of good luck, I'm thinking of you, I'm praying for you. People tell you this but it feels like empty words. They do not have comprehend one bit and because I comprehend, I understand why someone would get upset when the fullstops in the footnotes are in the wrong place. This is not an understanding that, I mean, you cannot explain that to people even if they have the best intentions to support you.'*

3C: *'Ag nee, ek dink ons is maar kamerade en vriende en so ons inspireer mekaar so dis iets wat ons gee vir mekaar. Aanmoediging en praat oor die belangrikheid van die studie en jy weet daai ding oor jare as klasmaats het ons baie saam gewerk, gehelp en idees gegee so dis iets wat ons so ... die doktorale studie was maar deel van die pakket vriendskap van mekaar inspireer mekaar informeer euh, so dit was maar die rol.'*

*Translation: 'Well, I think we are more like mates and friends and so we inspire each other, it is something that we give each other. Encouragement and talking about the importance of the study and you know we worked together for years as classmates, helped each other, giving ideas so the doctoral study was part of the friendship package to inspire and inform each other, euh, so that was more or less the role.'*

Both graduates and supervisors reported on a strictly academic relationship between them and preferred it thus. Supervisors did not want to get involved in the personal lives of their candidates. They did not see it as their task to spoon-feed a doctoral candidate, while the interviewed graduates wanted to be challenged intellectually by their supervisors. Being challenged motivated them to work on their research. This strictly academic relationship between the supervisor and the doctoral candidate is closely linked with the expectations of the supervisors to have independent doctoral candidates, as well as the identity shift of doctoral candidates towards independence. Academic relationships were not exclusive between graduates and supervisors, these relationships also included academic colleagues who were able to relate to the graduates. These fellow academics were regarded of great importance as graduates thought 'outsiders' did not always understand them.

#### 4.8.2. Social relationships

Not many doctoral graduates reported on their social relationships outside the academic world. This finding ties in with the previous discussion noting that a doctoral study is so time-consuming that the candidate does not have time for relationships outside academic work. The finding also reinforces the previously mentioned notion of isolation. Social relationships were maintained, but preferably with other doctoral candidates or graduates who could give the proper support:

2A: '*...daar ander issues is in die huis byvoorbeeld en wat, jy weet, wat my aandag verg, dit is dan wanneer dit moeilik raak. Om weer terug te gaan en weer te fokus. Want ek en my ma is redelik naby mekaar en sy, sy eis jou aandag. En dit was moeilik. Dit was moeilik om te kan sê nee maar ek moet nou werk.*'

*Translation: '... when there were other issues at home, for example which occupied my attention, it is then when things got difficult. To return to the work and focus. Because my mom and I are quite close to each other and she demands attention. And that was hard. It was difficult to say no because I have to work now.'*

6A: '*Because when you are doing something and you have a friend that is not really interested they will say: You with your books or you with your laboratory, they'll try for you to believe what you are doing is not even important. But if you have that friend that really is interested, ah what have you done today, even when it is not their field, they want to know, then it will really help you. You have to choose your friends. You come to a point where you have to choose your friends. You don't let your friends choose you.'*

The lack of social relationships can be explained due to the time constraints of doctoral candidates – they prefer spending time with people who know what they are going through. Although social relationships are important, they can also make the doctoral process harder as outsiders have little idea what is going on with the candidate and the influence a doctoral study has on the candidate. People who are not involved in academics are often unable to identify with graduates as they only have a limited notion of what a doctoral candidate is working towards and what he or she is going through.

#### **4.9. Role of support**

It is difficult to make a clear distinction between the role of relationships and role of support. Most of the time, however, it seems that people in their relationships play an important part in support for the candidate. Again, a distinction can be drawn between academic and social support as in the case of relationships. Both these types of support seem to be important, but they do not always manifest equally during the doctoral process.

##### **4.9.1. Academic support**

Academic support seems to be one of the most significant support bases for doctoral candidates. The major part of this type of support obviously comes from the supervisor and even though this support is maintained at a strictly academic level, it appears to be of extreme importance to the candidate. From the interviews it was apparent that the candidate often preferred to keep this relationship outside the social context. Some respondents preferred to have only limited contact with their supervisors:

2A: *‘Vir my was dit voldoende [om my supervisor net een keer ‘n maand te sien]. Ek sou dit nie noodwendig anders wou hê nie. Sy is baie besig. Met kursusse en sulke goed, so dit was dink ek die maklikste... as om mekaar ook nog in ‘n meer sosiale konteks te sien dit sou waarskynlik ongemaklik wees en dis nie nodig nie.’*

*Translation: ‘It was sufficient for me [to see my supervisor only once a month]. I didn’t necessarily want it to be different. She is very busy. With courses and stuff like that, so it was the easiest ... to see each other in a more social context would make things uncomfortable and that is unnecessary.’*

4A: *‘My promoters didn’t really help that much unless I asked for it and I didn’t asked for it very often. I am very independent. Or stubborn you can call it. But it was more my peers who just were there for moral support and intellectual support if you asked them and you don’t feel so stupid to ask your peers a question than your promoter oh why didn’t you know that.’*

Graduate 4A's supervisor agreed when she elaborated on what she expects from a doctoral candidate:

2B: '*... maar ek dink nie die rol van die supervisor is om hulle hand vas te hou of om hulle te spoonfeed nie. Dis vir my die verskil tussen 'n M en 'n D kandidaat is in die begeleiding. ... Maar ek sê ook vir hulle altyd, ek is nie 'n opgeleide sielkundige nie. Ek kan doodgewoon luister, maar ek kan nie raad gee op daai gebied nie. ... Dit is nie waarvoor ek hier is nie.*'

*Translation:* 'But I don't think the role of the supervisor is to hold their hand or to spoonfeed them. That is the difference between a master's and a doctorate, the supervision ... But I always tell them, I am not a trained psychologist. I can only listen but I cannot advise in that area. That is not why I am here.'

Positive affirmation is another key feature when it comes to academic support. The role of the supervisor is to guide the candidate. Guidance is not only provided by criticising the candidate's work and focusing on negative aspects of the delivered work; it also involves showing the candidate appreciation and approval and giving constructive comments. When I asked participant 2A how she overcame her initial fear of feeling inadequate for a doctoral study she said the following:

2A: '*Positiewe reaksie ja, dis seker maar die groot ding. Positiewe reaksie het 'n groot effek ... ek het nooit dele van dit wat ek geskryf het nooit vir iemand anderste gegee om te lees nie behalwe vir my supervisor. Omdat ek bang was iemand verstaan dit nie of dink dis crap.*'

*Translation:* 'Positive response, yes, I guess that is the important thing. Positive response has a big effect. ... I never shared parts of what I wrote with someone to read except for my supervisor. Because I was afraid they would not understand or think it's crap.'

One participant (1A) had an experience with a very critical supervisor for her master's study and therefore could relate well with the constructive influence of positive criticism:

1A: '*Maar ek dink wat vir my besonder goed was met die promotor..., en dit vergelyk ek konstant met hoe my MA was, die persoon wat my gelei het vir my MA het 'n baie kritiese styl gehad dus het ek by hom gekom met goed wat ek geskryf het en dan het ons daar gesit en dit uitmekaar getrek. En ek moes verander en oorskryf en dit was bekritisiseer met hierdie punt en ek moet hierna kyk en daarna kyk en dit het soms baie erg geword. Met tye het hy gesê ek moet iets verander, dan verander ek dit en dan sê hy: dis nie reg nie dit moet iets anderste wees, maar dan het hy dit gesê maar dan het hy weer van plan verander ... En die promotor [PhD] het my soveel gepraise ek moes bitter min oordoen. Ek is omtrent, tydens 'n vergadering, 90% van die tyd vertel oor hoe goed my werk is en 10% het vinnig genoem ek moet dalk hierna kyk of daarna kyk. Ek het soveel, ek wil half sê, positive affirmation die heeltyd gekry dat, dit, ek het uitgesien daarna om my werk te gaan wys, ek het gevoel, dis 'n kind wat 'n prentjie teken en nou vir die grootmens gaan wys om hande te klap. So sy styl was, dit was 'n uiters motiverende styl gewees wat ook vir my 'n groot impak gehad het was die hoeveelheid vryheid wat die promotor vir my gegee het.*'

*Translation:* 'But I think what was very good with my supervisor..., and I constantly compare it with my master's, the person that guided me during my master's had a very critical style so when I came to him with what I wrote, we sat and pulled it to pieces. I had to change and rewrite and this was criticised with this aspect and I have to look at this and that and it got bad sometimes. With times he told me I had to change something, and when I changed it, he mentioned: it is not right, it has to be different,

but he told me to change it but he already changed his mind ... And this supervisor [PhD] gave me so much praise that I had to make almost no changes. In a meeting 90% of the time I got told how good my work was and 10% he quickly mentioned where I have to look again. I always received, I almost want to say positive affirmation, that I was excited to show him my work, I felt like a child that draws a picture and shows it to adults so that they can clap their hands. So his style was utmost motivational and what also had a huge impact on me was the amount of freedom my supervisor gave me.'

Several graduates touched on another aspect of academic support that they highly appreciated: freedom. Academic freedom seemed important for doctoral graduates. They felt that this is where the difference lay between a master's and a doctoral study:

1A: *'Want, weereens, die MA-studieleier was eintlik uiters rigid: dit moet so en so en so wees. Die promotor weer het gesê wel hy dink dis goed dat ek eksperimenteer en dis goed dat ek voel ek word gechallenge. As ek iets wou probeer, kon ek dit doen, en die vryheid wat ek gegee is, saam met die praise wat ek heelyd kry het dit vir my geweldig selfvertroue gegee. En my baie baie trots op my werk gemaak. Terselfdertyd was my promotor nie 'n baie hands-on tipe promotor nie. Hy het jou werk gelees, hy het vir jou baie vinnig terugvoering gegee wat wonderlik is, maar hy het nie oor jou skouer geloer terwyl jy werk nie, so, jy het ook gevoel wat jy het gelewer is uit en uit jou eie. Want met MA was my werk so uitmekaar getrek dat ek later nie meer kon sien waar begin ek en eindig hy nie. Dit was, it was very blurry.'*

*Translation:* 'Because, as I mentioned before, the master's supervisor was actually very rigid: it must be just so. This supervisor [PhD] told me that he thought it was good that I experimented and it is good that I felt as if I was being challenged. If I wanted to try something, I could, and the freedom that I got together with the praise that I received all the time gave me a lot of self-confidence. It made me very proud of my work. At the same time, my supervisor was not a very hands-on type of supervisor. He read your work, he came back to you very quickly which is great but he did not look over your shoulder while you were working so you felt that the work you produced was your own. Because with my master's, my work was so pulled to pieces that I did not know where I had started and he had finished. It was very blurry.'

2A: *'Maar in terme van vryheid, omdat ek nie deel was van 'n program nie waarin jy seker goed moet doen nie, het ek baie vryheid gehad. Ek kon basies doen wat ek wou. Ek kon ondersoek wat ek wou, op 'n manier wat ek goed gedink het, so in daai opsig was dit baie positief.'*

*Translation:* 'But in terms of freedom, as I was not part of a programme where you have to comply with certain things, I had a lot of freedom. I could basically do what I wanted. I could research what I wanted in a way that I thought was right and it was very positive in that respect.'

3A: *'Ek het ook baie vryheid gehad om hierso half deel van my tyd te gebruik om navorsing te doen oor goeters wat vir my nice was. ... my primêre studieleier 3C, hy het vir my baie vryheid gegee ook, en ek hou daarvan, ek hou van vryheid.'*

*Translation:* 'I also had a lot of freedom to use part of my time to do research about stuff that I enjoyed ... My primary supervisor, 3C, gave me a lot of freedom, and I like it, I like freedom.'

6A: *'I think I will give it to my supervisor. Because you need that support up to the end. Because he is the first person that you convince. And once you convince him, you need to support him. Then if you don't have that support, especially when you go to defend ... Because your supervisor is more experienced than you, then you can try and convince me in something and because of his seniority, you are just trying to say it better than yourself. Then once you have his support, then you don't have a problem because when you are trying to explain yourself, he comes in and he can even explain to you better and say OK, this is what you want to say, but you should say it this way. Then I think the supervisor is a very important person. There are many people playing their own role, but if I have to classify who is the most important, I would say my supervisor, because he supported me until the end.'*

From these four responses, I could see that academic freedom is supported by the supervisor's vision of academic independence and, importantly, that graduates appreciate this freedom. The participants indicated that freedom was what made the difference between their master's study and the doctoral study. They felt, because of this approach of their supervisors, that the work they produced was their own (which also increased the graduates' self-confidence).

#### 4.9.2. Social support

In relation to academic relationships, social support also appeared to be more difficult as the 'outside world' is not aware what is happening or what influence working towards a doctoral degree has on doctoral candidates. Doctoral candidates sometimes have to finish their doctoral study without receiving social support. The participants in my study indicated that although the people closest, to them, such as parents or partners, did not always have an idea of what went on during the process, they tried their best to be supportive:

1C: *'... toe sy rênig op ... daai peilvak was van sy moet net skryf, het ek haar baie min gesien. Maar ek het byvoorbeeld vir haar 'n keer hoender gebring ... Sy sou my kon bel en sê hoor hier, groot asseblief, kan jy die boek vir my biblioteek toe vat of hierdie vir my bring of dit vir my doen so baie praktiese tipe. ... bietjie van die domestic duties afvat soos wat ek noem van die hoendersop jy weet ... daai week hoef sy nie aandete te maak het nie wat baie tyd vat.'*

*Translation: '... when she came to the point that she had to write, I saw little of her. But I brought her chicken ... She could call me and ask me to bring a book to the library or to do this or that so a lot of practical things ... I took over a few of the domestic duties, for example the chicken soup that I mentioned. That week she did not have to make supper which takes a lot of time.'*

1A: *'Beide my ouers het dit reeds voor die tyd geweet en ek het voordat ek universiteit toe gegaan het reeds die ondersteuning gehad om voltyds te studeer totdat ek 'n PhD het. Dus was daar nooit druk op my om te begin werk of enige iets van daardie aard ... My pa ... hy het ook finansiële gesteun wat natuurlik belangrik is ... ek het my man wat my baie sterk ondersteun, en ook opofferinge maak het sodat ek die PhD kon doen, dus kry ek baie ondersteuning van hom af en dit is iemand wie se ondersteuning ek wil hê. Die ander persoon is my ma wat ook vir my baie sterk ondersteun het en dus is sy net so trots daarop. So ek sou sê die mense wat die belangrikste in my lewe is, is die mense wat my steun. En dit beteken dat ek by tye seergemaak voel oor hoe ek hanteer word deur ander, maar dit is iets wat ek nie aanspreek nie, ek ignoreer dit.'*

*Translation: 'Both my parents knew beforehand [that I was going to do a PhD] so I got the support even before I went to university to do a full-time PhD. So there was no pressure on me to start work or anything like that ... My dad ... he supported me financially which of course is important ... I have my husband who supports me tremendously, who also made sacrifices so that I was able to do the PhD, so I got a lot of support from him and that is from the person that I would like to receive support from. The other person is my mom who also strongly supported me and therefore she is just as proud of it as I am. I would say that the people that are important in my life are the people that support me. This means that sometimes I feel hurt about the way that I am treated by other people but that is something that I do not address, I ignore it.'*

3A: *'So, ons het nie baie gepraat oor presies wat ek elke week gedoen het nie, dis dalk 'n bietjie boring vir iemand wat nie belangstel nie ... My ouers, omdat hulle nie universiteitsopleiding het nie dink ek nie hulle het begrip vir wat dit behels om 'n PhD te doen nie, min mense het, so hulle het dan so nou en dan gevra hoe gaan, maar dit was ook meer distant support. My skoonouers, in teendeel, het omtrent elke week vir my gevra hoe gaan dit en euh hulle het meer insig omdat my skoonma self in die akademie gestaan het, het sy, was sy baie supportive ...'*

*Translation: 'So we did not talk much about exactly what I did that week, it's maybe a bit boring for someone who isn't interested. My parents, because they do not have a university education, they do not understand what it entails to do a PhD, few people have, they asked now and again how things were getting along but it was more distant support. My parents-in-law, on the contrary, asked mealmost every week how I was getting on, euh, they have more insight because my mother-in-law was an academic and she ... she was very supportive.'*

4C: *'I suppose all PhDs stick around together with that moaning about your supervisor and moaning about the work and ja, so that sort of thing so confident. I didn't help him with his research at all so it's moral support. We just chat about non- work-related stuff. You get so stuck in work that you sometimes can't see the wood through the trees so 4A and I never spoke about work. It was always about going hiking or something completely different and I think that is important. You need a break from it and all of a sudden you start thinking about stuff that you never thought of before about your work.'*

5C: *'Ek het haar emosioneel ondersteun deur maar gereeld te gesels en so aan ... nou nie regtig oor die werk gepraat nie en dit is nodig. Dit is nogal baie intens om 'n PhD te doen. Sy het 'n bietjie stresvlakke bou op en jy moet van tyd tot tyd 'n bietjie afskakel, 'n bietjie ontspan en iets anderste om oor te gesels.'*

*Translation: 'I supported her emotionally by talking to her on a regular basis ... not really talking about work, that's not necessary. It is rather intense to do a PhD. When her stress levels were high, than you had to wind down from time to time, relax a bit and talk about something else.'*

Someone who has not been through the experience of a doctoral study, might find difficult to (academically) support a person who is going through this process. In view of the lack of experience it would probably be difficult to relate properly with the person doing the study, for instance in giving the candidate support. However, if a candidate has a friend or relative who understands what he or she is going through s/he would support the candidate. Therefore they seem to be the people who are most acknowledged during their process. One of the significant others noted:

3C: *'Ek dink ek het hom daarom ondersteun ook al moes ek self 'n tesis opskryf en gedink het, dalk self ééndag wil ek ook 'n PhD en dan sal ek support van sy kant af verwag, so ek hoop daarom ek het hom mooi ondersteun, en ek hom daarom dalk nie van A tot Z ag van bladsye één tot 313 elke woord deurgelees nie maar daarom gekyk ook is dit verstaanbaar vir mens wat nou nie 'n programmering of 'n ingenieursagtergrond het nie. 'n Mens moet daarom die basics kan verstaan as jy daardeur lees en simpel goedjies soos spelfoute of tikfoutjies waaroor 'n mens 20 keer kyk en nie raaksien nie. So, daarom so 'n bietjie editing hulp ... ek dink ek het te erg gemoan so wanneer maak jy klaar of wanneer hou jy nou op of wat ook al ... daarom aangemoedig en nie afgekraak van hoekom wil jy dit nou doen of wat ook al nie, want mens weet ook mos ... ééndag dan is daar kinders en dan gaan dit moeiliker wees ja so euh ek het nooit gesê dit was nou 'n dom idee om dit te doen nie so ek was trots op hom dat hy klaar gekry het so.'*

*Translation:* 'I think I supported him even though I had to write up a thesis and I thought maybe one day I want to do a PhD and then I would expect support from his side so I hope I supported him well. I did not read through from A to Z, from page 1 to 313 but I checked if it was understandable for readers without a programming or engineering degree. People should be able to understand the basic when you read through it and spelling errors or typing errors that you overlook 20 times so, a bit of help with the editing ... I don't think I moaned too much asking when he would be finished, I encouraged him and did not run him down by saying why do you want to do this or whatever because you think oneday there will be children and it will be a lot more difficult so euh, I never said it was a stupid idea to do this so I was very proud that he finished it.'

This type of support can be linked to social relationships. The lack of social support that doctoral candidates experience comes from a lack of empathy as those people who do not support them do not know and understand what the candidate is going through. However, graduates seemed to be aware that these people could not identify with their daily activities and therefore they concentrated on different things when socialising with people outside academe. Social support seemed crucial for the graduates as these relationships are vital to keep candidates from feeling isolated.

#### **4.10. 'Doctoral blues'**

The doctoral graduates mentioned that although they felt proud of their academic accomplishments and experienced growth as well as noticeable increases in their personal and academic self-confidence, they were aware of reality and their true position. When they had completed their degrees, they seemed to experience their situation as something of an anti-climax:

*1A: 'En jy kry hierdie doktorsgraad en dit is wow en ewe skielik kom jy agter wel, die kompetisie daarbuite is straf. Daar's ander mense met doktorsgrade, daar's ander mense wat reggekry het om groter publikasierekorde op te bou as ek tydens die doktorsgraad.'*

*Translation:* 'And you get this doctoral degree and it feels like 'wow' and suddenly you realise that the outside competition is strong. There are other people who have doctoral degrees; there are other people who were able to compose larger publication lists while you were doing the degree.'

*3A: 'Ek dink as jy begin is jou verwagtinge dalk te groot, jy wil dalk hierdie wêreld veranderende oplossings bied en eintlik is 'n PhD net 'n beginpunt van 'n verdere lewensproses... So, op die ou-end as jy klaar is, wonder jy nou maar gaan dit ooit vir iemand van waarde wees? En so jy het die groot verwagtinge in die begin en in die einde is jy so half 'n bietjie teleurgesteld... So ek dink mens moet verwag om so effens dissapointed te wees in die einde, want omdat jou expectations in die begin so groot is.'*

*Translation:* 'I think, your expectations are maybe too big when you start, maybe you want to offer this world changing solution and actually is a PhD only a starting point of a further life process ... So eventually, when you are finished, you wonder if it [thesis] will ever be of worth to someone. You have these big expectations in the beginning and in the end you are a bit disappointed ... So I think

people should probably expect to be disappointed in the end because their expectations are so big in the beginning.'

5A: *'I felt like, what now? I did feel that. When? March last year. I definitely did, sitting around fiddling with my thumb, ok, but I can't remember that well. So yes, that is definitely true. Then you just get other work to do and I just kept on working at the department. ... I didn't really want to go to my graduation. I think it was a bigger deal for everybody else than it was for me. I'm not one for all the ceremony and being in the spotlight and all that but my dad said to me: you will go. And everybody else said you will go. So I went and it was a big deal for all of them and I just went cheers. So I don't know if there is something wrong with me for doing that or if because everybody else said, you have to go you have to. And it was just another day for me so. That's how I felt. But also, the other thing is, that, for me because I'm really obnoxious, the best part for me, the best part of getting my PhD is when they changed my email to Dr.'*

1A: *'En nou is die vraag hoe bestuur jy jou loopbaan vorentoe? En daar voel ek totaal en al clueless. So jy voel goed oor jouself in sekere opsigte, maar ander opsigte, is dit net so goed jy begin weer van voor af. Nou is jy klaar gestudeer en is jy weer in 'n nuwe omgewing en dan moet jy hierdie ene uit figure. En hy het weer ander reëls waarvolgens hy speel ... maar ek voel ook ek is nou heel onder op die food chain in die nuwe wêreld waar ek myself bevind. So my volgende storie is meer van: goed, nou het ek hom [graad], wat maak ons nou vorentoe? Die ander ding wat 'n mens ook het, is jy het daai intensiteit terwyl jy besig is met die doktorsgraad, en wanneer jy klaar is met hom en jy word vir 'n ruk in die gewone lewe gedompel en jy moet weer begin aan die gang kom, jy het 'n vrees in jou dat jy nie weer iets so groot sal kan regkry nie.'*

*Translation: 'And now the question is, how do you move your career forward? I feel totally clueless in that area. So you feel good about yourself in certain aspects, but in other respects, you are basically starting from scratch. Now you are finished studying and you are in a new environment that you have to figure out. And this one has other rules of engagement ... but it feels, in this new world were I find myself, I am at the bottom of the food chain. So the next question is more: ok, now I have it [degree], what I am to do now? The other thing that you experience is, you have that intensity when you are working with a doctoral degree, and when you are finished with it and with a jerk you are brought back to normal life, and you have to start following your way, you fear you will never be able to complete something that big.'*

It seemed as if the graduates did not function in 'real life' when they were busy with their doctoral studies as the intensity of the process and the work was so severe that these studies sometimes isolated and excluded the candidates. They also appeared to be unaware of the magnitude of their accomplishments. The people around them realised what they had achieved, but for the graduates it was more of a process coming to an end as they worked on it every day. Once they had completed their studies, the graduates apparently lost their enthusiasm and were not sure what to do next. It took some time for them to get used to idea of a completed doctorate and move on with their lives. One of the graduates noted:

4A: *'...now with a PhD there's no permanent positions opening up in the department, there's no jobs for you so ya, it does feel a bit like getting spat out if you don't find your own money to stay here then it's sorry goodbye. And there is many candidates that also, they have to go elsewhere to either study*

*or to find something somewhere else because they can't, they don't get supported by the university. It's not just this department, it's all over.'*

From the above mentioned extracts it seems as if the graduates might not only feel lost because of a long process coming to an end; this particular graduate felt let down by her institution as she sensed that the university did not support doctoral graduates appropriately. Although there were no open positions for her to apply for, the university did not offer any alternatives.

This feeling clearly depends on the expectations doctoral candidates have regarding the achievement of a doctorate. This will be discussed in the following section where I discuss the graduates' expectations when they have successfully completed their doctoral studies.

#### **4.11. Expectations of doctoral graduates**

Doctoral candidates appear to have certain expectations towards their doctoral studies and the obtained degree even before they started their studies. I ended every interview with the question whether their expectations for their studies had been fulfilled. The reactions were quite diverse:

*1A: 'Nee, ek dink nie ek weet wat ek verwag het nie. Ek dink ek het ek het ingestap ek het gedink ek gaan hier uitstap en ek gaan slim wees met 'n doktorsgraad en ek gaan dit alles kan doen. Maar ek dink nie ek het, ek dink ek het nooit gedink wat se ervaring dit sou wees. Ek dink nie ek sou myself so voor die tyd kon indink met die rustigheid wat ek nou voel daarna nie. Ek dink daar is 'n sekere rypheid wat bygekome het en ek dink nie ek het geweet dit gaan kom nie. So wat ek verwag het om te leer en wat ek wel geleer het ek dink ek het 'n akademiese kwalifikasie verwag ek dink ek het, ja, ek het daarmee oop deure van akademie en selfvertroue verwag. Ek het nie geweet daar gaan 'n rypheid wees nie en dit is wat vir my die grootste ding is wat bygekome het. Ja, ek weet nie, op 'n manier is dit vir jou moeilik om te visualiseer en vir jouself in te dink presies wat dit gaan wees as jy hom het. Ek dink nie jy kan jouself dit indink voor die tyd nie ... Waar dit vir my akademies was dit meer 'n revolusie gewees as gevolg van die heroriëntasie en ook as gevolg van die heroriëntasie is ek ongelooflik trots op die werk. Ek glo ek het baie goeie werk gelewer. Met die M het ek nog hier en daar sekere onsekerheid gehad; met die D voel ek luister, sit dit op die tafel, dis goeie werk. So, dit het ek nie verwag nie.'*

*Translation: 'No, I don't think I knew what to expect. I think when I started, I was going to walk out as a smart person with a doctoral degree and I would be able to do anything. But I don't think I had, I think I never expected it to be such an experience. I don't think I would have predicted the calmness I would feel afterwards. I think there is a certain maturity that emerged and I don't think I knew this was going to happen. So what I expected to learn and what I learned I think I expected an academic qualification, I think I expected open doors in academics and self-confidence. I didn't know there was going to be maturity and to me that was the biggest thing. Yes, I don't know, in a way it is difficult to visualise precisely how it's going to be when you have the degree. I don't think you can imagine that ... For me it was it was a revolution as a result of the reorientation and consequently I am very proud of the work. I believe I produced very good work. With my master's I had my insecurities but with my doctoral study I feel like, listen, put it on the table, it is sound work. I did not expect that.'*

3A: *'Yes and no. I think as I already said earlier on, I would have liked to do maybe something more but what helped me also to understand, was my friend and colleague 3C who said to me at one stage: Listen ,your PhD is not the end of the road, it's just an achievement on the road. And that helped me to understand although afterwards, I moved out of theology but the intention was the post-doctoral studies to continue with things that you touched on and I think that is, it's really helpful if somebody says that to you.'*

4A: *'Oh yes, academically it was very satisfying. It was a great experience; it was dark as I was saying my mind went to dark places. Especially when you try and relate different conditions and bringing all those conditions to one focal point that was, yeah, sometimes. Academically yes, I feel very comfortable academically. Financially no. I'm still trying, I work for the medical distribution so I've tried to get my PhD to get some sort of promotion, to justify my PhD but I'm still in the process and I'm also looking at overseas markets in pharmaceutical industries which is a very, very, very rich industry and the amount of money is enormous. In South Africa there is not much to research about ... I just graduated this year through whatever reason but euhm, we had, it was a struggle to try and stay in the department because unless you are studying, the university wants you to study. Obviously because they are getting money from you and as soon as you stop studying, if you don't continue studying, where they are getting more money from you, well then there is no position for you. Euh, the technical researchers, the assistants, the salaries that they give you are, it's just pocket money, it's not actually, you can't live on it.'*

5A: *'Your expectations of the beginning and your expectations of the end are very different. And your expectations and other people's expectations 'cause I thought doing a PhD, oh my word, it's so difficult. But it just happened. You come to work every day, you do your experiments, you write. It's not that difficult. It's hard work, but everything is hard work. Work is hard work. So they were fulfilled in the long run but and other people's expectations but they see a thesis this big and say wow and yes, it's a lot of hard work but it's a day by day process. You just don't write it all up in like one day so it just happens and yes I think my expectations at the end were fulfilled, at the beginning what I thought it was going to be no. 'Cause I thought it would be this very difficult process and in the end ... It's like when you see somebody now and you see them in six months and they've lost weight you go oh you got so skinny but if you see them every day, you don't see it.'*

6A: *'Yeah, but you see the PhD is about coming out with something new. As long as I did that, even more than my expectation. To me, as I told you, the last thing, my hypothesis was I had to establish these lineages that I never did before. You see, that was the initial work. And I did that clearly, I could establish that this is happening this way, and nobody did it. But on top of that, I created a module that this is happening this way but because of this thing, this expression, people used to think about this module and believe that because of this new lineages that I had. This is the module, you know, I had something that I did not think about initially. And that is why they have now accepted. Then to me personally, I think that I went even over my expectations. Because I did something more than I expected. More than my expectations that I would just do these lineages. In my hypothesis I did not say I would create a module. At the end of the day I ended up creating a module.'*

The graduates clearly felt that their previously held anticipation with regard to a doctoral study exceeded their expectations. They did expect to learn new skills and expand their knowledge field, which was as essential aspect of a doctoral study. However, the doctoral graduates had learned from the doctoral experience in more holistic ways, which they found surprising as this was unforeseen.

#### 4.12. Expectations concerning completion

After having illustrated the difficulty perceived by doctoral graduates to continue their lives after they finished their studies, followed by their perceived expectations towards the degree, I continue by illustrating their supervisors' expectations of their graduates. I noticed another similarity among supervisors and significant others. Not one of the supervisors had any doubt that their candidate was going to finish the doctoral study successfully. However, caution may be needed here as it is easy to make such claims about graduates who finished their doctoral studies. Still this aspect is interesting as the implication is that supervisors may have judged the potential of their candidates correctly. Supervisors' careful selection of their doctoral candidates could possibly explain their confidence in the candidates' ability to complete their studies. The supervisors could, however, not determine the exact time frame within which the candidate was going to finish. Significant others also had confidence that the candidates would complete their studies:

1B: *'I knew from the start [that she was going to finish]. I knew that this was a self starter. She knew already a lot of the topic when she arrived here; she was very perspicacious for a young person.'*

1C: *'Nee, ek het nooit getwyfel daaroor nie. Want sy is so single, singlely minded focused gewees. Sy het haar onderwerp, sy is regtig passievol oor haar onderwerp ...'*

*Translation: 'No, I never doubted that. Because she was so single minded, so focused. She had her topic; she is really passionate about her subject.'*

2B: *'Weet jy, daar was eintlik by my nooit twyfel dat sy dit gaan klaarmaak nie, dit het vir my altyd gegaan oor die tyd. Sy het vir haar gestel binne drie jaar en dit het nou drie en 'n half jaar geduur, dit het vir my meer gegaan hoe lank gaan sy vat om dit klaar te maak. Dit was regtig nooit by my twyfel dat sy dit gaan klaarmaak nie omdat sy 'n goeie M-kandidaat was. En met die proposal skryf, daai tipe ding, jy kan duidelik agterkom of die kandidaat dit gaan klaarmaak of nie ... Ek het altyd geweet sy gaan klaarmaak. Dit was by my 'n kwessie van tyd, jy weet. Gaan sy haar drie jaar haal of gaan sy langer vat.'*

*Translation: 'You know, I never doubted that she was going to finish or not, it was about time for me. She set herself three years and eventually it took three and a half years, for me it was more about how long she is going to take to finish. I really had no doubt she was going to finish because she was a good master's candidate. And with the writing of the proposal, that type of thing, you can clearly see if the candidate is going to finish or not ... And I always knew she was going to finish. It was more a question of time you know. Will she make it in three years or will she take longer.'*

3B: *'Ja [ek het geweet hy gaan klaarmaak] omdat ek hom te goed ken.'*

*Translation: 'Yes [I knew he was going to finish] because I know him too well.'*

3C: *'Ek het nooit daaraan getwyfel nie. Ek sou vies gewees het as hy dit nie sou gedoen het nie. Want hy het die vermoë.'*

*Translation: 'I never doubted it. I would be angry if he wouldn't have. Because he has the capabilities.'*

4C: *'Most people that start here finish it. And you know that they are going to, you just don't know the time that they are going to finish it in. And you have your exceptions like people that leave. But that is more master candidates ... I suppose you get some personalities that just don't try or just want to get out of here and they're only doing PhD for, because there is nothing else to do but ja, he wasn't that personality. He's the strong silent type, he goes along and does the work so no, I don't have any doubt.'*

5C: *'Ek het geweet sy sal dit klaarmaak. ... Ja, euh, sy werk hard en sy stel rêrig belang in wat sy gedoen het, in die PhD-werk. Ja. Ek het geweet sy sal. Van in die begin dat sy met die PhD begin het, het ek geweet sy sal klaarmaak. Die feit dat sy haar M klaargemaak het is klaar 'n goeie ding en dan weet jy waarskynlik jy 'n PhD kan doen en die hoeveelheid tyd wat jy spandeer, so die kans dat jy gaan opgee is klein. Dit is maar hoe sy is.'*

*Translation: 'I knew she was going to finish ... Yes, uh, she works hard and she was really interested in what she was doing, in the PhD. Yes. I knew she would. From the moment she started with the PhD, I knew she was going to finish. The fact that she finished her master's is already a good thing because then you know you can finish a PhD and the amount of time you need so the chance of giving up is limited. It is just the way she is.'*

6B: *'[Ek het geweet hy sal suksesvol wees] omdat ek hom geken het van die kwaliteit van werk wat hy gedoen het in sy meesters. Hy het sy meesters ook hier gedoen. So ons het twee jaar gehad waar ons omtrent dag vir dag saam gewerk het. En hy het op daai stadium al getoon dat hy, sê maar, uit die boks uit kan dink.'*

*Translation: '[I knew he was going to be successful] because I knew him from the quality work he produced in his master's. He did his master's here as well. So we had two years in which we worked together almost every day. And he showed at that stage that he could think outside the box.'*

From these extracts it is clear that although many external factors contribute to the completion of a doctoral study, supervisors and significant others had no doubt about the success rate of the graduates. Both parties were firm believers in the capabilities of the graduates although the supervisors did look at previous work of their graduates and used this information as a criterion to form an opinion regarding the possible completion of a doctoral study.

#### **4.13. Conclusion**

In this chapter I reported the findings related to qualitative data generated from six triangulated accounts of doctoral experiences. What emerged from the findings was that the theoretical perspectives generated in the earlier literature review and ensuing conceptual framework were largely confirmed. Doctoral graduates, their supervisors and their significant others indicated nodes of becoming more scholarly in their work and thinking. They also indicated that they underwent particular identity changes at different

levels; provided evidence of transformative learning and illustrated creative abilities in completing their studies and their dissertations.

What also arose from the data was not only some confirmation of these four perspectives, but other aspects as well which seemingly play an important part in doctoral success. Aspects of importance for graduates that were revealed during the interviews were: a positive perception of the purpose of a doctoral study, the positive role of relationships and support, constructive handling of 'doctoral blues' and positive personal expectations towards completion of a study.

It is important to re-emphasise that these findings will not apply to all doctoral graduates. Generalisation was, however, not the aim of this study. The findings may, however, contribute towards a framework for doctoral success. Also, the accounts of a spectrum of actors in doctoral studies may provide an additional dimension to doctoral processes. Doctoral studies are thus not merely about new knowledge acquired or the academic qualification achieved but indeed seem to be an extensive and long one – nothing short of a life-changing experience.

In the last chapter I synthesise my findings from literature and the empirical section of this study. I also provide a number of conclusions based on these findings and point to some implications of the study.

## CHAPTER 5: CONCLUDING THE STUDY

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### 5.1. Introduction

This final chapter represents a synthesis of this thesis by drawing a number of conclusions based on the results of the study and by relating my perspectives from literature to the empirical results. In the first part of the chapter I summarise how I designed and carried out the research within the boundaries set for the study. I also point out how my findings relate to the research question and how the new insights I generated connect with and support the initial ideas reflected in the conceptual framework. I also reflect on my research and provide ideas regarding further possible research.

### 5.2. Dealing with the research question

In my introductory chapter, I pointed out that only limited research has been done in South Africa with regard to elements contributing to doctoral success. My study generated different perspectives on the problem of doctoral success by intending to answer the main research question, namely 'Which changes are experienced by successful doctoral students at Stellenbosch University?' I believe my study has illustrated that finishing a doctoral degree is a transformative process which involves interrelated aspects which cause a transformation to take place within the doctoral candidate. The study therefore enabled me to suggest how factors that contributed to a successful doctoral completion may be related and point towards some institutional measures that may enhance future doctoral success.

I conducted this study over a period of three years in order to have a better understanding of what constitutes a framework that potentially characterises doctoral success at Stellenbosch University. This framework represents the real changes as experienced by successful doctoral candidates

In Chapter 2 I identified a number of important factors (Chapter 2, par. 2.3-2.6) implicating doctoral success (Chapter 2, par. 2.2) from an analysis of relevant literature. The literature overview illustrated that doctoral candidates go through periods of transformation when involved in their studies. Such transformation include the four interrelated aspects namely ontological change, identity development, transformative learning and creativity which

constitutes a meaningful conceptual framework (Chapter 2, par. 2.7). It is also necessary to acknowledge a relationship between knowing and being. Knowing is connected to becoming. 'Being' is not stagnant but, due to interaction with the experiences that a person is going through, it is constantly changing. Doctoral candidates work towards, or develop, identities as an academic during their doctoral studies although each one already has an existing identity. An identity is also influenced by cultural contributions in a conscious and unconscious process. Recognising academic identity development can assist doctoral candidates in the job market after they have completed their degrees. One of the major changes resides in the move from being a dependent scholar towards being an independent scholar. Transformative learning is a clear contributor in making this transition. Completing a doctoral study involves a transformation of becoming a responsible scholar. However, creativity is an essential element in this process as doctoral candidates have to extend the knowledge boundaries of their disciplines. Successful doctoral candidates need to be creative as they have to illustrate their independence by making original contributions to their fields of study.

In the study I also became convinced that supervisors and significant others can assist in the exploration of systems aiding doctoral transformation, thus enabling progress towards successful completion. It is against such background that I have suggested a conceptual framework which aims to explain, doctoral study success at Stellenbosch University. I suggest that this framework may serve as an aid to doctoral candidates, as well as to Stellenbosch University as an institution, to enhance candidates' doctoral studies. Assisting the doctoral candidates in such areas, facilitate their success and even reduce their time to completion.

The findings reported in Chapter 4 reflected an application of my conceptual framework to interpret the data generated from selected successful doctoral graduates at Stellenbosch University. Based on this analysis, it appeared that graduates, at the end of their doctoral processes, clearly noticed changes in their development as human beings and think differently about knowledge and about the world in general (Chapter 4, par. 4.3-4.4). They also experienced changes in identity (Chapter 4, par. 4.5.1) which sometimes led to an identity crisis (Chapter 4, par. 4.5.3) and moved from a dependent research candidate to an

independent graduate or scholar (Chapter 4, par. 4.6). What appeared prominent is a perceived increase in graduates' ability to be creative and contribute to science and knowledge. The latter finding, however, was not true for all graduates for different reasons as I have pointed out (Chapter 4, par. 4.6.1).

### **5.3. The extent of the study with its limitations**

By restricting my study to the concept of doctoral success and Stellenbosch University, I was able to integrate theory and practice by first exploring relevant literature explaining doctoral success followed by testing my theoretical perspectives when I interviewed doctoral graduates.

From the literature on doctoral success it became apparent that limited research had been done to explore the concept of doctoral success in South Africa. My discussion of doctoral success in the South African context is thus of importance, due to changing expectations in the labour market. It is therefore clear that more research is necessary on factors contributing to doctoral success.

By limiting my research to the concept of doctoral success, I was able to study and concentrate on the post-hoc doctoral processes as experienced by doctoral graduates. Focusing on doctoral graduates and doctoral success meant that I did not have to expand my study to include doctoral participants who were unable to finish their studies or to investigate unsuccessful doctoral processes from candidates who did not complete their studies. I was able to focus on and demarcate the theoretical side of my research, as well as my selection of participants for the empirical part of the study, to include successful doctoral graduates only.

My research illustrated that four interrelated aspects are involved in the transformation from merely a 'doctoral candidate' to a 'successful doctoral candidate'. Studying the aspects affecting the concept of doctoral success by means of a literature review, I identified four interrelated aspects: ontology, identity, transformative learning and creativity. I restricted

the theoretical side of my study to these four interrelated aspects as I identified these four specific aspects out of the available literature and developed my conceptual framework accordingly. The findings of my study confirmed the aspects influencing doctoral success that I identified from the literature and included in my conceptual framework. Later in this chapter I elaborate on how these aspects may be interrelated.

In terms of the empirical side of my study I was limited to selected doctoral graduates at Stellenbosch University. The decision to keep the research limited to Stellenbosch University was not only for the sake of convenience, it was done in order to demarcate the study as the study would have become too expanded and complicated if it were conducted at different universities because of contextual differences. Institutional contexts are too dissimilar to conduct and approach such at the master's level.

Limiting the study to one institution made the process of involving doctoral graduates much easier as they were more accessible. Being part of the local candidate community and being aware of the university context also made it easier for me to approach the participants for interviews.

It is important to note that my study was not designed to generalise a successful doctoral process to all doctoral candidates. I singled out the four interrelated aspects from available literature which had an influence on doctoral success, designed a conceptual framework accordingly and tested this in terms of doctoral graduates at Stellenbosch University. I acknowledge that other aspects can have an influence on doctoral success although they are not discussed or raised in this study.

#### **5.4. Summary of the findings**

After having briefly discussed the chapters in relation to the research question and substantiating the extent as well as the limitations of the study, I continue the conclusion by briefly summarising the findings of the research. In this section I first discuss the findings upon which I based my conceptual framework. This is followed by the empirical findings and findings which were unexpected but interesting and sometimes surprising. The research was subsequently critiqued and implications for further research are indicated.

#### **5.4.1. Perspectives generated from the literature review**

There are many challenges involving doctoral success and a number of factors influence such success. It is against such a background that I approached this subject cautiously and identified four aspects, namely ontological change, identity development, transformative learning and creativity.

Ontology accepts the existence of a person as a 'being'. When doctoral candidates are involved in doctoral studies, they are involved in study for a number of years. Such an all-consuming and lengthy experience unavoidably influences a person in different ways. The candidate ultimately changes during that process whereby the doctoral candidate not only learns what is to become a doctor, but he or she also learns what it is to be one. Evidently a person starting the process is quite different from the person who completes the degree successfully.

Doctoral candidates start their doctoral process with an existing professional identity (Chapter 2, par. 2.4). During the course of their studies, doctoral candidates work towards developing identities as academics. However, this identity development is different for each doctoral candidate as identity formation is influenced not only by the specific discipline in which the doctoral candidate is involved, but also by various professional and academic communities as well as other outside stimuli affecting the doctoral candidate. Therefore, different candidates form different academic identities. The identity formation aspect of doctoral candidates is often overlooked. A doctoral candidate who finishes his or her studies successfully, has not only become an expert in a particular discipline, but has also undergone a certain transformation of identity in terms of becoming either an independent scholar or a researcher. Doctoral candidates 'transform' during their doctoral study processes.

Transformative learning (Chapter 2, par. 2.5) seems to be necessary in order to make the transition from a dependent scholar to an independent one. It is essential for a successful doctoral graduate to be able to increasingly do research independently. This involves knowing how to think about knowledge while becoming a confident partner in the academic

community. Doctoral candidates apparently need to transform into responsible scholars if they aspire to be part of productive scholarly communities.

As a widely agreed criterion for doctoral success, doctoral candidates need to extend the knowledge boundaries of their disciplines. They illustrate their transformation from a dependent scholar to a responsible one by creatively making their own original contributions (Chapter 2, par. 2.6).

Although these aspects cannot be generalised as different doctoral candidates are influenced differently by each aspect, it is clear that a certain transformation takes place during the doctoral process when a doctoral candidate progresses towards becoming a doctoral graduate. Academic institutions should acknowledge this transformation in order to facilitate the research training of their doctoral candidates more effectively.

#### **5.4.2. Perspectives from the empirical part of the study**

In my research I sought to determine whether doctoral graduates did indeed notice these aspects influencing their doctoral processes. I also attempted to find out how these aspects emerged. After analysing the data gathered from the empirical part of my study, I am convinced that the findings from my empirical inquiry largely supported my conceptual framework. It seems clear that an interconnection of ontological change, identity development, transformative learning and creativity played a significant role in the successful doctoral journeys that were reported. During the interviews and working with the data I was surprised to discover how well the graduates recalled their doctoral experiences and how these aspects surfaced. This reinforced my initial belief (and my conceptual framework) that the concept of doctoral success is layered with these four interconnected aspects.

In the subsection that follows I discuss the unexpected outcomes from the empirical part of which were also interesting and need to be mentioned in context.

#### 5.4.2.1. *Unexpected findings*

Although I tried to keep the constructs I had identified for developing my conceptual framework in view when analysing the interview data, other aspects kept on reappearing from interviews with the participants in such a way that it was impossible to ignore them. These include the role of relationships, experiencing some element of disillusionment after successfully completing a study, as well as experiencing fulfilment. Although I could identify these aspects from revising I did not find them relevant enough to change my conceptual framework. I am of the opinion that these aspects may not be directly related to the personal or professional development of the doctoral candidates. I have included them in my empirical findings as I found these aspects interesting enough to be mentioned.

Cultivating, changing and affirming relationships appear to play an important part in doctoral success. In reporting my findings I made a distinction between academic and social relationships (Chapter 4, par. 4.8.1 and 4.8.2) and support (Chapter 4, par. 4.9.1 and 4.9.2). Academic support related mainly to supervisors and although these relationships were of a strictly academic nature, they were of major importance to the graduates (Chapter 4, par. 4.9.1). Positive affirmation and being given academic freedom were regarded as some of the most constructive attributes of such support. Social relationships between graduates and significant others were constrained due to aspects such as limited time to invest in such relationships while studying. Social 'others' often did not understand the doctoral process and what the graduate was going through. They therefore seemed unable to relate appropriately to the graduates' needs and expectations with regard to their studies (Chapter 4, par. 4.8.2). This was anticipated and understood by graduates who still appreciated the little social support they received as this meant a break from their otherwise isolated study processes.

Even with all the people surrounding and supporting the graduates, they experienced a degree of depression when finishing their degree (Chapter 4, par. 4.10). This may point to the fact that a doctoral study is an all-consuming activity which preoccupies doctoral candidates for a considerable period of time – so much so that they lose track with the world outside the doctoral study process to some extent. Graduates reported a sense of feeling

lost, not knowing what to do next, when they were confronted with the 'real' world again after completing their degree. Their supervisors and significant others were well aware of the magnitude of the accomplishment, but for the doctoral graduates themselves it was a process on which they worked continuously and which eventually ended. Some of the graduates commented that they felt they had been let down by their department as there was nothing left to do and there was no support coming from the university after the completion of their studies (Chapter 4, par. 4.10). This points to a need among graduates to receive 'after care' in some instances, particularly if they had been employed by a department as postgraduate assistants or research assistants.

When I asked doctoral graduates about their comparative views on their expectations of a doctoral study (Chapter 4, par. 4.11) at the beginning and end of their studies, it was interesting to note that they all found that the doctoral process had fulfilled their expectations with regard to contributions in their knowledge field. However, they did not expect it to be such an all-consuming and altering experience. Also with regard to doctoral completion (Chapter 4, par. 4.12), the supervisors and significant others never expected that the graduates would not complete the doctoral studies successfully. The supervisors' confidence with regard to their candidates can be ascribed to their experience of selecting doctoral participants.

Studying the concept of doctoral success reinforced my opinion that it is a complex concept. After reading the literature I discussed in my literature review (Chapter 2), after conducting the interviews (Chapter 4) I regard this intricate concept as multi-faceted. I therefore included four aspects: ontology, identity development, transformative learning and creativity into a conceptual framework after I studied the available literature concerning doctoral success. Although many other aspects were mentioned in the literature, I singled these four out, as the more I read about the topic of doctoral success and related subjects, the more I kept distinguishing these four aspects from the rest.

It is insufficient to explain doctoral success only through one aspect, for example of identity development or creativity. This study illustrated that the concept of doctoral success is far

more multi-layered than that. By combining these four identified aspects, my study was able to address doctoral success as multi-dimensional and emphasise its complex nature. However, only reading and putting these aspects together was not enough to convince me of the relevance of these aspects and their involvement with doctoral success.

However, not all aspects emerged as strongly or to the same degree with every graduate. For example, some of the graduates indicated clearer growth in their identity development than in their creativity. I expected this result as not all doctoral graduates go through the same experiences or are affected in the same way or degree by the aspects of the conceptual framework. I believe that every doctoral process is different as the contexts of the doctoral candidates differ. As mentioned before, I did not design the conceptual framework to be able to generalise doctoral success to all doctoral candidates.

With regard to unexpected elements I found, when working with the gathered data, that it was not necessary to alter the conceptual framework to include them as these unanticipated findings and their related aspects did not appear in the case of all the graduates; they were merely mentioned and singled out because they could be of interest in further research. The aspects related to the framework I designed are also related to the personal development of doctoral candidates and not associated with aspects outside their person.

### **5.5. Evaluation of the research**

When a study has been completed it is possible to look back onto what has been done and found. I will therefore first critique the theoretical side of the study, and then provide a more detailed assessment of the empirical part of the study. I close this section by reflecting back on my study.

It can be argued that many factors, other than the ones that I identified when developing the conceptual framework, may play a part in doctoral success. However, as I mentioned in the course of this chapter, it was not my intention to generalise or to develop a framework which will guarantee doctoral success for every doctoral candidate at every university. I merely identified four aspects which emerged from the existing literature and could aid in

the formulation of a conceptual framework. I related these aspects to my investigation of doctoral success at Stellenbosch University. I do not claim that these four aspects affect each and every candidate in the same manner or to the same degree, nor do I claim that these aspects will guarantee successful doctoral study. A doctoral process is personal and individual to every candidate. It is also fluid in that every doctoral candidate is influenced differently regarding his or her study as it depends on the particular candidate and his or her circumstances. The conceptual framework was designed as a facilitating and illustrative tool which can assist in interpreting the findings regarding doctoral success.

Most of the research participants went through the doctoral study process some time ago. It was therefore possible that some of their memories about their doctoral experiences might not have been accurate. Often people tend to forget negative (parts of) experiences and accentuate the positive aspects. I tried to limit this phenomenon by only selecting participants who had recently graduated. Although I kept the time frame between their graduation and my interviews as short as possible, by the time I wrote my thesis, considerable time had passed between the doctoral graduates' graduation and the completion of my study.

Concerning the empirical part of the study, it can be argued that only a limited number of participants from a limited number of disciplines at the same university were interviewed. However, by means of triangulation I was able to analyse the recollections of the doctoral graduates with regard to the doctoral process better and evidently more accurately (Chapter 3, par. 3.7.5). These measures enabled me to check for the accuracy of graduates' accounts or their doctoral experiences and limited the probability of participants providing me with answers they thought I wanted to hear. My position as a master's candidate was also different from that of the doctoral participants included in the study as my disciplinary and departmental affiliations were different.

Earlier in this thesis (Chapter 3, par. 3.5) I discussed the thin line between self-indulgence and interesting insights in reflective accounts. The data gathered from the interviews was always regarded as priority.

Being closely involved in my study as researcher and student presented a few possible disadvantages. There was the possibility that the participants would be less open and honest with me as the researcher when they perceived a vested interest (Chapter 3, par. 3.7). I could have lost a fresh outlook on the situation or a critical distance on the value of my own contribution due to my own involvement as a student myself.

## **5.6. Implications of my research**

After having discussed possible critique on my study, in this section I now point out the possible implications of my research. I have divided this section into two subsections: implications for doctoral success at Stellenbosch University and implications for further research that can be undertaken to shed more light on problems I identified, but did not investigate.

### **5.6.1. Implications for doctoral success at Stellenbosch University**

As I mentioned before, research towards doctoral success is starting to become of greater interest not only for the knowledge institutions, so that they can prevent attrition and support the candidates more, but also for a country's economic benefit as more properly trained doctoral graduates are necessary in the current job market.

Stellenbosch University and other institutions could possibly benefit by supporting their doctoral candidates in the four aspects I identified and used in the framework. By creating a support group for doctoral candidates such as presenting the doctoral students with a creative writing and research workshops could be beneficial. Doctoral candidates could also be assisted by qualified study counsellors who are aware of the changes these students go through. These candidates would feel better supported if their supervisors are aware of the personal changes they go through. However, as the workload of supervisors is high and many supervisors do not want to compromise a working relationship, one could suggest that

another staff member may assist doctoral candidates outside the formal knowledge field. For instance, doctoral candidates could greatly benefit from the support of post-doctoral students. If post-doctoral students could be made available to assist these students by advising them and being a sort of refuge, doctoral candidates could have a person they can trust and talk to when they feel overwhelmed.

It is not only knowledge institutions and supervisors that can support doctoral students, their significant others can also support them in their transformation. The significant others can be helpful in the transition of the doctoral students. If they are informed of the possible changes the students go through, the significant others could possibly assist them more effectively and notice when the doctoral students are struggling. If they could be better informed they could be more helpful and supportive. Many of the doctoral students I interviewed complained about a lack of support in that area. Significant others can be a great source of support as they are the people standing closest to the doctoral student. These significant others could possibly inform other friends and family of the process the doctoral students are going through as relatives do not always understand and are therefore often perceived as being non-supportive. An informal information evening where doctoral students who are busy in the process or have already completed the study account their experiences could possibly contribute towards addressing this challenge. The distribution of information flyers might also be helpful in this regard.

If I had the time and the resources, I would have included more doctoral candidates from the university to enable me to include a wider diversity of participants. Universities should anticipate this transformation in order to provide transformative learning by facilitating change in the doctoral candidate and change in acquiring knowledge.

Another possible extension of this related research area would be if the researcher could follow the doctoral candidate from the beginning of the doctoral study through to graduation. Conducting the study entirely as reflection in action would probably have provided more detailed insights into the study processes of the graduates. As I suggested

previously, I believe some data is lost simply through passage of time and the excitement involved in obtaining the doctoral degree.

#### **5.6.2. Implications for further research**

If resources and time were not limited, I would suggest including different universities and disciplines in order to create a more holistic picture of doctoral success. It would make a valuable contribution if other institutions inside and outside South Africa could conduct such research. Comparing the findings of different universities in different continents is bound to bring some interesting points to light with regard to doctoral success.

The outcome of this type of study would be different if the research were done differently. Researching doctoral success through focusing on doctoral candidates who did not complete their doctoral studies might highlight other areas of doctoral success which have now been unexplored due to the emphasis on positive experiences.

However, I must stress that it is not possible to generalise concepts of doctoral success with further research. This study illustrated that many different aspects are responsible for doctoral success and all of them have an impact on the doctoral candidate in many different ways and forms. This is not to say that identified aspects are worthless but they should be regarded as aiding tools and guidelines in order to assist the doctoral candidate in a more efficient way.

#### **5.7. Concluding remarks**

Much of the literature on doctoral success seems to be addressing epistemological issues related to doctoral studies. Universities and researchers tend to overlook the effect of the entire doctoral experience on the doctoral candidate. Instead they are inclined to over-emphasise the value added to cognitive structures and their development as well as ways in which doctoral studies may contribute to knowledge outcomes. As mentioned in the introductory chapter, Batchelor (2006) identified three elements related to the candidate's voice: an epistemological element, or one for knowing; a practical one, or one for doing; and

an ontological element, or one for being and becoming. Although this study acknowledges the first two elements, it is in the last respect that this study has tried to make a contribution. The being of candidates and their becoming researchers are often less valued and under-researched in higher education. This is in spite of the fact that these dimensions of the doctoral education are vital in transforming candidates into creative and innovative researchers. An important part of what universities try to achieve is to accompany doctoral candidates on their journey towards becoming well-rounded human beings who will see and do things differently in future because of their doctoral qualification.

This study has clearly shown that no single factor can guarantee doctoral success (at Stellenbosch University). There are multiple interrelated factors at play which candidates, their supervisors and their significant others need to be aware of. The conceptual framework developed in this study may assist in justifying and situating possible postgraduate support strategies which may be of value to an institution such as Stellenbosch University and similar research-oriented institutions.

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## **Addendum A: Interview questions**

### **Questions for doctoral graduates**

- Why did you start a PhD?

Prompt: what was the decisive factor? (E.g. personal development?)

- What do you think the purpose of a PhD study should be?

Prompt: And was this happening in your case?

- What contributed to your doctoral completion?

Prompt: Did that grow/change during your studies and in what way?

- How did your doctoral studies make you think differently about yourself?

Prompt: In what way? How specifically? When?

- In which stage/phase did you learn most from your study?

Prompt: What did you learn and did it contribute to your successful completion?

Plus: Was there something unforeseen or challenging?

- Who played an important role during your doctoral study? And what role was that specifically? Supervisor? Close friend?

Prompt: Was this person decisive for your success? And why?

- Closing question: Did you learn from the doctoral process what you expected to learn?

Prompt: If not, what were the barriers?

### **Questions for supervisor**

- What do you expect a candidate involved in a doctoral study should learn?

Prompt: What do you personally think a PhD study is about or should be about?

- Why do you think Candidate X was successful in the completion of the studies?

Prompt: What made the candidate successful?

- From your observations, did Candidate X change during his or her PhD studies? And in what way?

Prompt: What made it possible, what contributed to it?

- In what aspect of the study did you find Candidate X most successful? And why?

- When did you realise Candidate X was going to complete the PhD study successfully?

Prompt: Was there any time you doubted the success of the candidate?

- What role did you play in Candidate X's study success? And how?

Prompt: How did you fulfil that role and were you always able to perform it?

### **Questions for significant other**

- Why do you think X started with PhD studies?

Prompt: Personal motivation?

- What do you think was X's greatest (accomplished) success during the studies?

Prompt: How did he or she achieve it?

- Did you observe any changes during his or her study?

Prompt: In what way? When did you notice these changes? Why do you think these changes occur?

- What role did you think you have played in contributing to the success of X's doctoral studies?

Prompt: What support?

- Did you expect X to succeed? Why?

Prompt: When did you have your doubts?

- At what stage of his or her studies did you become convinced he or she was going to succeed in the study?

Prompt: Why?

To illustrate the triangulation of the questions, table B shows how overlapping the questions were (grey areas) so that the answer could be confirmed by more than one person.

## Addendum B: Table illustrating the triangulation of the questions

Questions	GRADUATE	SUPERVISOR	SIGNIFICANT OTHER
Why did you start a PhD?			
What do you the purpose of a PhD study should be?			
What contributed to your doctoral completion?			
How did your doctoral studies make you think differently about yourself?			
In which stage/phase did you learn most from your study?			
Was there something unforeseen or challenging?			
Who played an important role during your doctoral study?			
Did you learn from the doctoral process what you expected to learn?			
<i>What do you expect a candidate involved in a doctoral study should learn?</i>			
<i>Why do you think Candidate X was successful in the completion of the studies?</i>			
<i>From your observations, did Candidate X change during his/her PhD studies?</i>			
<i>In what aspect of the study did you find Candidate X most successful?</i>			
<i>When did you realise Candidate X was going to complete the PhD study successfully?</i>			
<i>What role did you play in candidate X's study success?</i>			
Why do you think X started with PhD studies?			
What do you think was X's greatest (accomplished) success during the studies?			
Did you observe any changes during his/her study?			
What role did you think you have played in contributing to the success of X's doctoral studies?			
Did you expect X to succeed?			
At what stage of his/her studies did you become convinced he/she was going to succeed in the study?			

## Addendum C: Ethical clearance

### ETHICAL CLEARANCE

---

Researcher:	Ms S VandenBergh
Research project:	AN ONTOLOGICAL FRAMEWORK FOR EXPLAINING SUCCESS IN DOCTORAL STUDIES AT STELLENBOSCH UNIVERSITY
Nature of research project:	Doctoral thesis in the Department of Curriculum Studies, Faculty of Education, University of Stellenbosch
Reference number:	329 / 2010
Supervisor:	Prof E Bitzer and Dr L Frick
Date:	03 May 2010

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This research proposal and associated documentation of Ms S VandenBergh was tabled and considered at a meeting of the Ethics Committee (as prescribed by Council on 20 March 2009 and laid down in the SU policy framework) on 03 May 2010; the purpose being to ascertain whether there are any ethical risks associated with the proposed research project of which the researcher has to be aware of or, alternatively, whether the ethical risks are of such a nature that the research cannot continue.

### DISCUSSION

The Ethics Committee received the following documentation as part of the submission for ethical clearance:

- A signed application for ethical clearance [signed only by the supervisor]
- A consent to participate form
- A copy of the research proposal
- A copy of the CV of the researcher

The aim of this research project is to establish an ontological framework for PhD candidates at Stellenbosch University, mainly directed at understanding the challenges faced by such candidates and thereby contributing to the support of doctoral candidates.

### FINDING

The proposed research in essence complies with the requirement of the University of Stellenbosch with regard to informed consent, voluntary participation and confidentiality of personal information. However, the researcher should note the following:

1. The researcher will need to sign the application to the University of Stellenbosch for ethical clearance of her research.
2. The researcher indicated that she will approach the office of Prof. J Botha to obtain permission to conduct research with doctoral candidates within this university. The researcher will need to provide the Ethics Committee with a letter of approval from Prof. J Botha.
3. According to the application form (7.1) the researcher indicates that she will use personal records as a research procedure. It is however not clear what this entails and if permission needs to be obtained for this. This should be clarified in a note to the Ethics Committee.

## RECOMMENDATION

It is recommended, in view of the application together with information at the disposal of the Ethics Committee that the proposed research project continues provided that:

1. The researcher remains within the procedures and protocols indicated in the proposal, particularly in terms of any undertakings made and guarantees given.
2. The researcher notes that her research may have to be submitted again for ethical clearance if there is substantial departure from the existing proposal.
3. The researcher remains within the parameters of any applicable national legislation, institutional guidelines and scientific standards relevant to the specific field of research.
4. The researcher will provide the Ethical Committee with a signed copy of the application. This should be submitted to Ms Maléne Fouché (mfouche@sun.ac.za), Research Development Division, Stellenbosch University.
5. The researcher will provide the Ethical Committee with a letter of approval from Prof. J Botha.
6. The researcher will provide a clear explanation of what “personal records” entail and if permission is granted for this procedure.

On behalf of the Ethics Committee

3 May 2010

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Johan Hattingh, Callie Theron, Elmarie Terblanche, Ian van der Waag, Ray de Villiers,  
Christo Thesnaar

## **Addendum D: Informed consent for participants**

### **STELLENBOSCH UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH**

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An ontological framework for explaining doctoral success at Stellenbosch University

You are asked to participate in a research study conducted by Stefanie Vandenberg (doctoral candidate) from the Department of Curriculum Studies at Stellenbosch University. The results will be indicated in the PhD thesis of Stefanie Vandenberg. You were selected as a possible participant in this study because you met the requirements for the study, namely a PhD graduate of March 2010.

#### **1. PURPOSE OF THE STUDY**

The aim of this research project is to establish an ontological framework for PhD candidates at Stellenbosch University, mainly directed at understanding the challenges faced by such candidates and thereby contributing to the support of doctoral candidates.

#### **2. PROCEDURES**

If you volunteer to participate in this study, you would be asked to do the following things: Answer questions involving your personal experience and change during your doctoral studies. The interviews will be scheduled and will have a time limit.

#### **3. POTENTIAL RISKS AND DISCOMFORTS**

There will be no physical risks involved in this study and if there is any discomfort concerning a specific question, you will have the right not to answer that specific question.

#### **4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

There is no benefit involved to the participants, however, the University of Stellenbosch will have a clearer insight into the possible ontological changes in their PhD candidates and this might assist in improved support for future PhD candidates.

#### **5. PAYMENT FOR PARTICIPATION**

No payment will apply. Your participation will be completely voluntary.

#### **6. CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of guaranteed anonymity. The interviews will be digitally stored and transcribed. They will be only accessible to Stefanie Vandenberg.

The participant has the right to review the interview if find necessary.

Interviews will be erased after completion of the study.

For future publications, the participants will remain anonymous.

#### **7. PARTICIPATION AND WITHDRAWAL**

You can choose whether to be part of this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

## 8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact my supervisor, Prof. E.M. Bitzer: [emb2@sun.ac.za](mailto:emb2@sun.ac.za), my co-supervisor, Dr L. Frick: [blf@sun.ac.za](mailto:blf@sun.ac.za) or myself Stefanie Vandenberg: [svandenberg@sun.ac.za](mailto:svandenberg@sun.ac.za).

## 9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

The information above was described to [*me/the subject/the participant*] by Stefanie Vandenberg in Afrikaans/English and [*I am/the subject is/the participant is*] in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject*] was given the opportunity to ask questions and these questions were answered to [*my/his/her*] satisfaction.

I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study. ] I have been given a copy of this form.

\_\_\_\_\_  
**Name of Subject/Participant**

\_\_\_\_\_  
**Name of Legal Representative (if applicable)**

\_\_\_\_\_  
**Signature of Subject/Participant or Legal Representative**

\_\_\_\_\_  
**Date**

**SIGNATURE OF INVESTIGATOR**

I declare that I explained the information given in this document to \_\_\_\_\_ [*name of the subject/participant*] and/or [his/her] representative \_\_\_\_\_ [*name of the representative*]. [*He/she*] was encouraged and given ample time to ask me any questions. This conversation was conducted in Afrikaans/English and no translator was used.

\_\_\_\_\_  
**Signature of Investigator**

\_\_\_\_\_  
**Date**

## **Addendum E: Use of personal records of potential participants**

### PERSONAL RECORDS OF POTENTIAL PARTICIPANTS

(1) Potential participants will be chosen from March 2010 Doctoral graduates from all the different faculties at Stellenbosch University.

(2) With 'personal records' I imply the availability of personal information of these March graduates of all faculties. This will be helpful for my purposefully selection of possible participants. This will include the following:

- Personal information of the potential participant such as:
  - o Name
  - o Contact details
  - o Sex
  - o Age
  - o Race
  - o Position
  - o Where participant lives
  - o Where participant comes from
- Information with regard to the completed studies of the potential participant
  - o Study field
  - o Name and particulars of supervisor

(3) I want to emphasise that these particulars will not be used in any way other than to make a purposeful selection of six participants in the research project. After the selection has been made, the information of all other potential participants will be destroyed.

## Addendum F: Ethical clearance approval



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY  
jou kennisvennoot • your knowledge partner

23 June 2010

Tel.: 021 - 808-9183  
Enquiries: Sidney Engelbrecht  
Email: [sidney@sun.ac.za](mailto:sidney@sun.ac.za)

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Ms S van den Bergh  
Department of Curriculum Studies  
University of Stellenbosch  
**STELLENBOSCH**  
7602

Ms S van den Bergh

### APPLICATION FOR ETHICAL CLEARANCE

With regards to your application, I would like to inform you that the project, *An ontological framework for explaining success in doctoral studies at Stellenbosch University*, has been approved on condition that:

1. The researcher/s remain within the procedures and protocols indicated in the proposal;
2. The researcher/s stay within the boundaries of applicable national legislation, institutional guidelines, and applicable standards of scientific rigor that are followed within this field of study and that
3. Any substantive changes to this research project should be brought to the attention of the Ethics Committee with a view to obtain ethical clearance for it.

We wish you success with your research activities.

Best regards



*Sidney Engelbrecht*

**MR SF ENGELBRECHT**

**Secretary: Research Ethics Committee: Human Research (Non-Health)**

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Afdeling Navorsingontwikkeling • Division of Research Development  
Privaat Sak/Private Bag XI • Matieland 7602 • Suid-Afrika/South Africa  
Tel: +27 21 808 4985 • Faks/Fax: +27 21 808 4537



## Addendum G: Example of page from transcribed interview

Lindie

S: Sê vir my Lindie, hoekom het jy begin met 'n PhD?

L: Om mee te begin, ek het als 'n skoolkind al besluit ek wil één dag historikus word. En toe het ek uitgevind wat moet mens doen om historikus te word. Dus se hulle jy moet 'n PhD doen. So als 'n skoolkind het ek al besluit ek gaan 'n PhD doen. En dit was vir die groot mense nogal vreemd en toe ek 'n voorgraadse candidate was was dit vir my vreemd, veral was dit vir ander vreemd en vir my was dit 'n vanselfsprekendheid. Vir my was dit 'n vanselfsprekendheid dat ek 'n PhD sal doen en ek was nie, ek was nie geïntimideerd dat ek dalk nie slim genoeg gaan wees nie. Ek het op 'n manier geweet dat dit doenbaar is. Ek denk ek het, iemand het aan my verduidelik jy doen eers 'n BA, dan doen jy 'n meesters en dan doen jy 'n doktersgraad en dit het vir my gewoonweg omtrent na die trappe op 'n leer geklim. En dit was my doelwit van dat ek in die universiteit ingestap het was om 'n doktersgraad te doen. Beide my ouers het dit reeds voor die tyd geweet en ek het voor dat ek universiteit toe gegaan het reeds die ondersteuning gehad om voltyds te studeer tot dat ek 'n PhD het. Dus was daar nooit druk op my om te begin werk of enige iets van daardie aard. Dit was 'n doelwit wat vir my en voor my familie duidelik was.

S: Jy se dit was van kleins af. Hoe jonk was jy?

L: Ek was 14 byna 15 jaar oud toe ek besluit het ek wil historikus word. En ek denk teen die tyd dat ek uitgevind het dat ek 'n PhD daarvoor moet doen was ek so seker 16 of 17.

S: En jy het nooit gesê jy het gedenk jy gaan nou nie slim genoeg voor wees nie of dit van in die begin gedenk dit is haalbaar?

L: Ja. Ek het altyd gedenk dit is haalbaar. Ek het op 'n manier my moeder was, is die tipe persoon wat nie, my vader is die tipe persoon wat deur grade en titels geïntimideer word, my moeder nie. So sy het juis die irritasie gehad oor mense wat geïntimideer voel oor grade en titels. En dus het ek vanuit haar perspektief gesien dat iemand met 'n doktersgraad is eintlik ook 'n normale mens. En toe het my ma my, ek was matriek gewees so, ek was byna 18, toe het sy my, dit was destyds RAU, die Rand Afrikaanse Universiteit, het sy die universiteit gekontak om by hulle uit te vind hoe werk studies in geskiedenis. En die dekaan verwys haar toe na Prof. Grietjie Verhoef by die departement historiese studies en my ma neem my nou na hierdie professor, hierdie matriek kind, nog vol puieties, stap toe in die professor se kantoor in en vra toe vir haar oor wat moet gebeur om nou historikus te word. En die professor was duidelik uiters verbaas. Sy het nie geweet wat maak 'n mens met 'n matriek kind wat in jou kantoor sit en se ek wil één dag 'n doktersgraad doen nie. En sy het nog mooi met ons gepraat oor as jy 'n as jy van plan verander is dit ook nie die einde van die wêreld nie. En ek onthou dat ek na haar gesit, gekyk en gedink het: maar jy kan dit dan doen, as jy dit kan doen dan kan ek dit mos ook doen. So ja, dit was euh, ek het besluit ek het altyd goed gedoen in geskiedenis so dit het nie vir my so gegaan oor 'n PhD nie, dit het my meer gegaan oor 'n PhD in geskiedenis omdat ek geweet het ek is goed met geskiedenis en dus gedenk ek sal dit doen. Ek het dom gevoel met ander skoolvakke so's wiskunde was ek baie dom, rekeningkunde het ek ook gesukkel maar omdat ek geweet het dat ek net geskiedenis gaan doen en net sal doen waarmee ek goed is dan sal ek dit mos kan doen.

S: Jy het besluit om geskiedkundige te word, is dit reg om te se, omdat jy net goed was in geskiedenis?

L: Nee, ek het as klein kind reeds, ek was baie lief vir stories, en ek het, ek sal nooit vergeet nie, ek was ag jaar oud toe ek my eerste geskiedenisles hoor en die juffrou het vir ons op die mat vir haar in die klaskamer gehad en met groot oë vir ons die verhaal van die slag van die bloedrivier vertel en ek onthou op één stadium het sy met so 'n diep stem gesê hoe die bevel gaan uit na die Voortrekkers: julle skiet nie voor dat julle die wit van hulle oë sien nie. En ek het dit in my geestesbeeld ook gehad, hierdie donker nag met hierdie donker Zulu's wat naderkom en jy sien net hierdie stukkie oogwit en dan skiet jy.