

MAGASH NAIDOO

INSIGHTS ON DOCTORAL RESEARCH

FOREWORD: Michael Anthony Samuel

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“Undertaking a Doctorate is a daunting and arduous task. It involves many years of hard work and sacrifice. Dr Naidoo sets out a step-by-step, comprehensive practical book in selecting a relevant topic to research, identifying the problem statement, performing the literature review, methodology used in doing the research, the contribution, and the significance of the research. It sets out the balance that must be achieved between family, work and study. It seems, in many cases, that research comparisons are benchmarked against colonial and historical practices which drift away from the real and burning issues that plague the African continent. Africa as a continent is unique and faces serious socio-economic challenges, which include poverty, inequality and unemployment. We need more research to solve the problems of the continent. By following the critical path in this book, one will not only achieve the desired goal of attaining a Doctorate, but also contribute in a significant manner to creating a better African society.”

– Prof Dilip Garach (CEO: Garach Corporation, Adjunct Professor: Management College of South Africa, former Professor: School of Accountancy, University of KwaZulu-Natal)

“This is a very useful documentary book for Doctoral students. It certainly brought back memories of my own experience in tackling this onerous, but very fulfilling, journey. I particularly like the pragmatic advice given, ensuring value add to all professions and taking cognisance of the theoretical, practical and operational suggestions made, as well as how the research could take Southern Africa and Africa forward. Well done to the team that put this together! I am sure it will assist a number of aspirant students.”

– Dr Krish Kumar (Chief Financial Officer: eThekweni Municipality)

“Taking everything into account the manuscript and the content thereof is well written and would benefit prospective students to be prepared before pursuing their Doctoral studies. Well done on a good piece of work. I wish I had the privilege to such a piece before I commenced my PhD journey.”

– Dr Yvonne Combrinck (Nursing Manager: Mediclinic Newcastle)

“Thank you very much for letting me have a window on this work. It brought back so many feelings and memories. The lack of preparedness is extremely well articulated by Dr Magash Naidoo and the contributing authors. On behalf of everyone who has been down this road and who will be down this road, I thank Dr Naidoo. The language and tone of the work is easy to read and speaks to the reader in such a fashion that it is warmly and clearly received. The absence of a lofty academic tone is very appealing. The importance of choosing a topic that fuels your passion cannot be underestimated and neither can the relevance and value of the contribution to your current industry of employment or area of interest be underestimated. Dr Naidoo’s comments on family support are also critical. The emotional demands are extreme. Dr Naidoo’s comments on University support are fully supported. As a proponent of visualisation for professionals, incidentally the topic of my second book (in progress), constantly imagining standing on the stage in the red gown and seeing the faces of our loved ones – #priceless. The privilege of reading this work is so appreciated.”

– Dr Augusta Dorning (Head Africa Business: Lenmed)

“I was pleased to see topics that are severely absent from research guides/text books such as pointers for supervisors of working students and an entire section devoted to what examiners look for when assessing the quality of a dissertation. This will assist students beginning their Doctoral journey in that they can craft their dissertations so as to avoid the common pitfalls that would have led to a poor review by examiners. As a systems thinking expert, I enjoyed the various references to systems thinking and complexity theory within the research context as these are powerful tools when aiming to do research of a more holistic and deep nature. Introducing them in a book of this nature can hopefully serve to attract more Doctoral researchers to conduct research within the ambit of complexity theory and systems thinking philosophies. All in all it was an enjoyable, light read! This is a perfect book to be read alongside the more hard core research textbooks already in existence. Additionally, I see it being beneficial to academics who are about to teach a research module (or are already teaching such modules) in that it will help them to recognise the human and psychological aspects research students encounter as they go through the Doctoral journey and walk students through these things, instead of focusing on the common components of the research process alone.”

– Dr Nikita Singh (Graduate School of Business and Leadership: University of KwaZulu-Natal)

Critical review of this book was undertaken by
Dr Tilly Moodley and Prof Mihalis Chasomeris.

Language editing of the book was undertaken by
Mr Cliff Naidoo and Dr David Barraclough.

Dedication

The book is dedicated to those who brought democracy and freedom to Southern Africa and, as a result, were not able to pursue a tertiary education.

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1 Foreword

Michael Anthony Samuel

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Becoming a Doctor: New paths and old roads

Undertaking a Doctorate is an important milestone in the journey of one's academic life. However, many prospective Doctoral students often enter into this space thinking that a Doctorate is merely a 'grown-up Master's degree', a construction of a report with an extended number of written pages, and a broader sample range than one's previous qualifications. Doctoral candidates frequently underestimate the scope and processes of what this journey will entail and once they have begun the study find themselves out-of-depth, floundering and prone to quitting. Sometimes, it is erroneously believed that the research skills acquired during an earlier postgraduate degree will, in themselves, be adequate to assist one on the journey. Moreover, there is an unrealistic expectation that the supervisor will provide the primary lead in terms of the directions and goals of the new endeavour.

These problems stem largely from there being little comprehension about what a Doctoral degree is. This may be because many Doctoral students are the first generation in their family/community to pursue this highest form of academic qualification awarded by a university. In such instances, limited direct experience is available to Doctoral candidates about what undertaking a Doctorate actually entails. Moreover, Doctoral candidates may be unsure, initially, about the goals they wish to achieve by engaging in this pursuit. Sometimes, Doctoral candidates may be driven by a level of rage and arrogance directed at existing structures, systems and practices – and they misinterpret Doctoral studies as a means to 'setting the record straight'. Often this is driven by a strong practitioner belief in their own mental models (which may not have been subjected to adequate rigorous introspection and critique).

Another challenge facing Doctoral candidates is when they do not have the luxury of re-entering further postgraduate studies immediately after completing their Master's degrees. Undertaking a Doctorate immediately after completing a Master's degree is usually more prevalent in the natural sciences than other fields of study. Candidates who re-enter the academic world after many years after completing a Master's degree may be surprised to see how it has shifted in both disciplinary and methodological ways. This may leave the Doctoral candidate feeling insecure and like a foreigner in a field they thought they were already familiar with.

Additionally, some Doctoral studies could be closely part of a collaborative research project, while others are directed by the autonomous agenda of the students themselves. How does the Doctoral student engage with stakeholders who constitute their new world? Each field or discipline of academic endeavour has also evolved particular signature ways of managing and supporting Doctoral studies, and each has varied interpretations, roles and expectations of supervisors and the supervised. These responsibilities are sometimes explicitly declared by the host institutions, but usually are vicariously and tacitly imbibed by the Doctoral student through experience. Nevertheless, the honorific title of being called 'Doctor' usually drives the agenda of choosing to pursue Doctoral studies; if not, the glamorous features of a graduation ceremony make it seem like a desirable goal. So, what then is a Doctorate? In addition, what are Doctoral students expected to do?

The above litany of under-preparedness is usually presented by custodians who act as gatekeepers preventing admissions and selection into Doctoral studies. It is not surprising that many supervisors tend to choose Doctoral students who resemble their own supervisory characteristics, and a pattern of cloning of personalities and perspectives, if not prejudices, persists. Doctoral candidates are too often interpreted in terms of deficiencies – rather than in terms of affirmations of what possible resources and capabilities they are likely to bring into the Doctoral knowledge development arena. Rich heritage rather than corrupted baggage is what most Doctoral enthusiasts bring into the early

stages of research. It is up to the designers of Doctoral programmes to ensure that these heritages flourish rather than be flushed out.

By definition, a Doctorate is awarded to an individual who demonstrates that s/he has become an expert in the discipline and demarcated field of study s/he has explored. While the expertise is generated through shared interaction with a wide range of participants, the independent judgement and written philosophical contribution of the students themselves are the hallmark attributes of successful Doctoral graduates. This expertise is not confined simply to the localised context within which the data were produced for the study. The Doctor is able to – drawing from the experiences of having explored in-depth the field of the phenomenon s/he has studied – add value to others engaging with similar challenges and problems in a much broadened sphere of influence. Such a contribution aims to challenge the existing interpretations of the phenomenon that dominate within the existing body of knowledge, showing how new, imaginative and creative ways of reading and re-reading the world can be made. A Doctor thus shares expert knowledge, being aware of the constraints and potentialities of the practical, theoretical and operational levels of the suggestions s/he makes. The Doctor is more than simply an advocate for a particular theoretical point of view: s/he can interpret and make judgements and predictions about similar new presenting problems that the future may yield. S/he is simultaneously in the past (knowing the extant body of research studies and the histories of their contexts), in the present (the immediate operational world related to the phenomenon about which s/he professes) and in the future (able to project possible practical, epistemological, and philosophical insights about problems, possibilities and solutions). Undertaking a Doctorate prepares one for the skills of being able to harness the knowledge, values and attitudes toward the production of new knowledge.

It is likely that the knowledge one chooses at any point in time and in any one space, is likely to mutate and adapt, given the nature of the rapidly expanding nature of knowledge itself. Therefore, the Doctor is one who must have the capacity to keep abreast with the shifting terrain of the knowledge enterprise,

and must be able to read, offer synthesis and critique the extant ways of knowing. The Doctor is one who can locate the dominant knowledge terrains within their social, historical, cultural and political systems – knowing how no knowledge systems can be devoid of connectivities to time, place and space. Undertaking Doctoral studies is learning how to be comfortable with these shifts, and being able to deal also with both certainties and uncertainties. Nevertheless, ‘Doctoralness’ is also a humble recognition that individuals might only make a small dent in the current body of knowledge. ‘Doctoralness’ is about being able to make public the scope of one’s insight, and therefore communication, dissemination and written recording to broader audiences outside one’s immediate circles are critical skills.

This book – *Insights on Doctoral Research* – presents prospective Doctoral students with a set of practical ways in which to manage the process of becoming a Doctoral student, and, importantly, a Doctoral graduate. It opens up the nuances within the landscape for exploring becoming and being a Doctor. It suggests that the journey is not a set of categorical fixed identities, but embodies a continued reflexivity, creativity, rigour, imagination and curiosity, which will drive innovation. It suggests that this involves both managing the process and the products that need to be constructed along the way. It suggests that the processes of acquiring ‘Doctoralness’ are a process of becoming ‘other’.

Pragmatically, this text offers practical advice at the various stages of the journey of becoming a Doctoral student and the writer of a Doctoral thesis. The habits and routines of higher education institutions are not neutral spaces and therefore the Doctoral novice will need to learn how to negotiate being within a world charged with various competing and concurrent forces. How one mediates the public and personal spheres that intersect to make one who one is and wants to become – are part of the kind of advice offered in this book.

The journey is unlikely to be a smooth trajectory of only successes. However, this book helps the reader to make decisions about how to negotiate the

process of learning to become a researcher. This is both a practical and an epistemological project; it is also simultaneously a personal journey of commitment as well as a way of asserting one's identity as a contributor of relevant and appropriate knowledge for situated contexts. This does not mean that 'Doctoralness' is about promoting narrow essentialist dichotomies of separations between 'us' (the ascendant definers of a truth) from 'them' (the marginalised relegated). We live in an interconnected world where domains of disciplines, fields, bodies of knowledge and methodologies are linked to specific historical trajectories, but are mutating and interactively influencing complex relationships with alternative interpretations. Academic knowledge-making is not a neutral terrain, and the Doctoral candidate is being asked to engage with the finding of 'voice' – their own among the existing cacophony of possibilities. 'Doctoralness' is thus about 'finding voice'.

This is, however, not a journey of which to be afraid. Instead, it is a journey of self-discovery that rivals few other life opportunities. It is likely this journey will involve a conscious and unconscious movement away from past habituated practices, beliefs and values. This is why many regard Doctoral education studies as being highly disruptive. Yes, one will never be the same again after undertaking a Doctorate. Yes, one will lose many friends as one charts one's own interpretation of the study phenomenon. But yes, one will come to know oneself and the context in new ways. And yes, one will make many new friends – those who share common interpretations and insights via the manner in which they are convinced of the arguments. And finally, yes, it is okay to create friends, strangers and enemies as one begins to assert one's voice as a researcher: a person who analyses again and again, almost everything one encounters.

While this text is primarily directed at the Doctoral student, it is also a potentially useful book for novice supervisors. After all, both the supervised and supervisors are travellers on the same road – making new paths as they collectively walk alongside old ones.

2 Preamble

The premise of this book is that knowing some of the minutiae of the Doctoral process will help avert critical challenges during the research process and ensure that the research is more comprehensive. Following, or considering, the steps will not guarantee completion of a Doctorate; it is merely a guide of essential aspects to take into account before, during and after one's research. Specifically, this book focuses on information that will be relevant for students from the social sciences, but students from other academic disciplines might find some useful information in it for their research. Master's students and new Doctoral supervisors can also derive some benefit from this book.

The value proposition of this book is that it has been developed by three main stakeholders involved in the Doctoral process – i.e. the student, supervisor and the examiner. Furthermore, the authors of the book have differing academic backgrounds. These two elements led to the creation of a robust book that sets up the platform for the beginning of the journey. The book has been developed in a manner that results in the student (and novice supervisor) thinking, instead of working in an environment where lessons are spoonfed. The authors have a good blend of academic and practical experience in industry, which is also vital when the merging of academia and practice is becoming more prevalent and important. Most importantly, the book is free and has been developed, by the authors, to serve Southern Africa and new students, without the intention of any monetary profit.

3 Introduction

Let's move Southern Africa forward

This freely available book, a service to Southern Africa, is written as a guide for Doctoral candidates. Recently, there has been a surge of Doctoral courses that aim to generate professional development to contribute directly to the everyday world of workplace practice. Professional Doctoral graduates contribute not just abstract, theoretical knowledge, as emphasised by traditional Doctorates, but also practical value (Wellington and Sikes, 2006). This book is not tailored specifically for any one specific university. However, the book is largely based on a social science Doctoral underpinning. Nevertheless, the broad content can also be helpful to students from other academic disciplines. In instances, this book can also provide value to new supervisors.

The purpose of this book is to ensure that individuals, primarily with a social sciences or business background, who are contemplating undertaking a Doctorate or are already Doctoral candidates, consider certain aspects of the Doctoral process that do not become apparent until it is too late to put measures in place to mitigate stress, risk and negative consequences. It is the intention of the authors to shine a light on peripheral complications, so that one's focus can be purely on academic research. This should then result in providing enhanced critical research that can take Southern Africa and Africa, as a whole, forward. In essence, the authors are sharing their experiences so that Doctoral students can lean on the shoulders of each other. It is also possible for Master's students and students from outside Southern Africa to benefit from the bulk of information contained in the book. However, it is important to note that a Doctorate is not an expanded Master's research project. A Doctorate is not merely about increasing the population and sample of the research, but hones in on and gives more importance to the generation of new knowledge. An aspect to keep in mind, however, is that it might be possible to utilise one's Master's topic, broadly, to develop key research questions for one's Doctorate.

It appears that Southern Africa has, for too long, been relying solely on 'Maslow', 'Freud', 'Marx', 'Newton' and the like for understanding our unique problems

and opportunities – without taking into account Southern African nuances. The reliance has been on these world-wide adopted theories as a basis for local research and on which many systems are built upon. According to Complex Adaptive Systems Theory, systems are predicated on a number of dynamics, which are constantly evolving and learning (Holland, 1992; Wollmann and Steiner, 2017). In addition, the smallest degree of divergence at ‘initiation’ will result in vastly different outcomes. Founding academic and practical research on knowledge and theoretical underpinnings that are completely relevant for the research context, therefore, becomes vital. We acknowledge that with advances in disruptive technologies, access to unprecedented communication tools, and deepening challenges that mankind faces – like climate change – the world is perhaps a fundamentally different place to the one of Doctoral supervisors, when they were reading for their Doctorates. It follows, therefore, that approaches may differ and offer an opportunity to bring Southern African academia to the fore, leading with solutions and innovation.

Draw upon the rich heritage as Southern Africans and replace the narrative that is currently founded in colonialism, which is inappropriate for Southern African.

“For Africa to move its economy toward higher-productivity sectors – not only to sustain growth, but also to reduce inequality by creating gainful employment for its citizens – it needs an adequate supply of skilled labour” (Bhorat et al., 2016, pg. 28).

We need to uplift fellow Southern Africans, but not to the detriment of anyone, all the while providing access to quality, inclusive education. As an example, one of the major findings of the Doctoral research of the lead author is that a green economy will not materialise, en-masse, while inequalities and a low Gross Domestic Product per capita persists.

Caution must be exercised not to miss the plot; Southern Africa is building in the 21st century from a different foundation compared to Europe, Asia or the Americas. Global environmental change provides an opportunity to leapfrog developed countries to adopt sustainable technologies and value systems

that are more appropriate for the 21st Century. New research agendas are being defined around the green and blue economies and the fourth industrial revolution. These can provide tangible benefits when research is implemented through inter-disciplinary and trans-disciplinary research partnerships.

“Inter-disciplinarity is not just research in two or more different disciplines, nor is it adding methodologies from other disciplines to an already discrete project; rather, it is an integrated approach to answering a question that recognizes the limitations inherent in the compartmentalized system of academic research” (Toomey et al., 2015, pg. 1).

Are the fundamental elements in place that these advanced concepts and industries are predicated and developed on found in Southern Africa? Just as vehicles are engineered, engineering social aspects of Southern Africa is just as important. Goals and plans, which are implementable and actually implemented – created by Southern Africans for Southern Africans with a Southern African approach – are urgently needed. This is due to nuances that are rooted in Southern African cultures and not other cultures. Southern African academia must be at the forefront, but must work hand-in-glove with implementers.

Many have sacrificed for Southern Africa to get to this point: Nelson Mandela, Chris Hani, Julius Nyerere, Dulcie September, Samora Machel, Ruth First, Leni Naidoo, Solomon Mahlangu – among countless others. As academics coming out of the previous generations’ sacrifices, the current sacrifices are to lay a strong tertiary academic foundation for Southern Africa. The sacrifices can include making available information and knowledge without want of financial reward, focusing on thematic areas that will have practical benefit, i.e. more aligned to a professional Doctorate than a traditional Doctorate, for Southern Africa – as opposed to the delivery of a thesis and even looking beyond our favourite theories to adopt innovations. Make research findings as widely available as possible. However, the new urban research agenda goes further than this – plan research with implementing bodies, like local government, to enhance implementation. Co-generation of research is a

much more powerful way of ensuring the implementation of findings. Make a case for better education, health and public transportation in a manner that will be implementable. Find a way of holding government office bearers to account, while rebuilding Southern African social and education systems that were destroyed.

A Doctorate is a serious undertaking that will stretch one's abilities and quite likely one will at some stage be in a morass. Having noble aspirations, like creating a better world, will help pull one through the long, dark tunnel much more effectively than, say, financial incentives. Undertake a Doctorate to deliver groundbreaking research and innovation that will better Southern African and Africa for people today and 100 years henceforth.

The information in this book not only focuses on academic matters, but also psychological aspects that Doctoral students could face – including other roles that one has to fulfill.

This book is structured into four major sections, each referring to a sequential time period of the Doctoral process:

- *Before:* Aims to provide insight to the foundations that could be considered, prior to the actual choice of the specific university, development of the initial proposal or concept note, and registration at the university;
- *Preparation:* Relates to aspects that are required from the period between registration and commencement of the actual research;
- *During:* Sheds light on the steps from commencement of the research until the submission of the thesis for examination; and
- *After:* Focuses on the period post submission of the thesis for examination, the results and final thesis submission.

Thereafter, Gerwel Proches provides input from a supervisor's perspective, and Green then shares insight from a national examiner's viewpoint – before a concluding section is presented.

4 Before

4.1 Rationale

What is the reason for undertaking a Doctorate?

At the outset of this process, it is advisable to undertake an introspective period to identify the primary and secondary reason/s for wanting to undertake a Doctorate. The purpose of this exercise will help one determine a number of aspects that will be relevant to one's journey. Three of the major aspects, among others, that this introspection can help one identify are, firstly, the specific degree/programme and, as a result of this, secondly, a number of possible universities that will be able to fulfill one's needs. The third important aspect that the introspection can lead to is the identification of the source of energy that one will draw from during the daunting process – i.e. one's inspiration or motivation for wanting to attain the title of 'Doctor'. A superficial rationale for wanting to undertake a Doctorate is likely to not be sufficient to keep one energised throughout the arduous journey. The process to complete a Doctorate is not only a lengthy and demanding journey, but it also takes a huge toll on one's psychological and physical wellbeing. A solid motivation is needed so that it will be possible to draw on reserves of emotional strength to overcome hurdles during the, at least, three-year process.

According to O'Donoghue, a very important factor for him, was finding his Doctorate research topic interesting – as a marine biologist the sardine run appeared to be a no-brainer. There were other considerations that he took into account, such as time to complete the Doctorate and how old he would be upon completion. He also questioned if the process and qualification would be worthwhile and affordable. Importantly, he also questioned his mentor's trustworthiness. Furthermore, O'Donoghue is of the belief that persistence is a much stronger driving force than intelligence.

An important motivator for Naidoo was that his research was positioned to understand a system, from a Complex Adaptive Systems Theory perspective, so that the local green economy could be improved upon and result in job

creation, and thus contribute to economic growth while ensuring that the environment is protected. This would then result in the improvement of the lives of our people, in a sustainable manner. The motivation brought him 'kicking and screaming' through the Doctorate tunnel.

4.2 Logistics

Is the university easily accessible, both physically and virtually?

While there are many online universities outside Southern Africa that offer students various programmes, care should be taken when identifying a suitable university. The various platforms that rank universities should be looked at. How does the school or faculty that one is interested in compare globally? This should include the history of the ranking of the relevant universities and its trajectory. However, sometimes less well-resourced universities might have particular stellar schools or faculties, making them a good choice.

Is the university physically accessible in terms of going to the university at short notice? Even if one is willing to travel a distance to reach the university at the beginning of the journey, will it be possible to sustain the strain of travel over at least a three-year period, especially financially? Physical access is important, as some resources need to be accessed in person. These include: older books, attending seminars, writing assistance classes and, most importantly, the ability to sit around a table with one's supervisor/s to discuss the research and overcome challenges (this can also be undertaken electronically, if one's supervisor/s is/are comfortable with tele or video conferences).

Another important aspect to consider, even if the university is physically accessible, is whether resources can be accessed electronically with minimal effort? This is critical, as Doctoral students do not necessarily need to be on campus to undertake their research and access to journal article portals is vital – i.e. can all electronic services available from the Local Area Network (LAN) at the university campuses be accessed offsite. This is not just for downloading academic-related material, but also for filling in university administrative forms, like applying for parking.

O'Donoghue believes that in the modern world, physical access is becoming less important. His partner is a student at the University of the Western Cape, but only travels to the university to register at the start of the year. O'Donoghue's Doctoral supervisor emigrated to Australia soon after he started 'down his tunnel', but communication across continents is much improved. Just as relevant is how well organised the university is, such that distant learning is not a disadvantage.

4.3 From undergraduate to Doctorate in one sitting

Weighing up the advantages and disadvantages of two major pathways

If one is currently a student, an important question is whether to continue straight from an undergraduate degree, to a Master's degree and then on to a Doctorate.

This is a serious question, the answer to which will be based on one's unique circumstances and considerations.

Some of the aspects that can be taken into account are:

- *Income*: An important aspect for many students, especially within the context of Southern Africa, is the ability to earn an income sooner rather than later. If one is in a fortunate position not to need an income, this consideration perhaps falls away.
- *Career path*: Some career paths require practical experience, such as serving Articles to become a Chartered Accountant or a Lawyer. However, if one is pursuing an academic-based profession, then practical experience is, perhaps, less important.
- *Experience vs academic qualifications*: If one opts for employment, rather than to be one's own boss, it is important to consider the implications of having a qualification that is the pinnacle of academic excellence, with no experience. There needs to be a balance between having a Doctorate and one's current level of

experience and maturity. The title of 'Doctor' should be carried in a distinguished fashion and with a high level of finesse.

- *Outlook:* Often, completing academic studies at Master's degree level and then gaining practical work experience greatly expands one's outlook on the world and possible research topics. This could greatly enhance Doctoral research, especially with regard to having a practical positive benefit for moving Southern Africa forward. Travelling can also have the same positive impact on one's outlook.

This should be read with Section 5.4, which alludes to linking your Doctorate research topic to your professional work.

4.4 Work commitments

Will work commitments hamper one's Doctoral progress, or vice versa?

If one is employed by an organisation, it is likely that contractual obligations exist to meet a certain level of performance every year or over a quarter. Pursuing a Doctorate is meant to enhance one's career, among other things. However, the demands of a work schedule over the given period required to complete a Doctorate have to be considered. The quality of work, both professionally and academically, should not deteriorate due to a divergent focus of attention, time or energy on one's studies. It is important to discuss one's intentions to pursue Doctoral studies with the relevant work supervisor/manager so that they are aware of your circumstances. The workload may be reduced, and jobs assigned to colleagues during the study period. This could, or possibly not, improve relationships and transparency, while reducing conflicts at work.

If one is self-employed, the solution to solving this challenge lies in creativity. It might be possible to assign a person to take over your tasks during the study period. Postponing certain tasks might even be an option. Perhaps this also applies if one is employed.

Section 4.6 is closely linked to this section.

4.5 Personal commitments

Will personal commitments hamper Doctoral progress?

Being married, having children and being parents, having pets, pursuing professional sporting activities and perhaps even having grandchildren – demand a number of roles to be filled concurrently. In some instances, culture plays a role in determining one’s commitments. Most of the roles demand a lot of energy and time. Energy and time that is not managed effectively during your Doctoral process will result in complications, which often materialise in a drawn out process that can substantially exceed the intended completion time, or result in non-completion.

This is of course in addition to civic duties and hobbies that one has become accustomed to over the years.

Doctoral candidates can list all their personal commitments that are anticipated over the next three years. The list will be useful when reading section 4.6.

We all have a limited amount of time on this planet. As a result, one should attempt not to defer major steps of your life. Not deferring one’s life and undertaking a Doctorate simultaneously will ultimately lead to life becoming more complex and demanding. If one can handle the added pressure and stress over a prolonged period of time, that is beneficial. However, if it is not possible to handle the additional stress, consideration needs to be given to the aspects of your life that can and cannot continue parallel to your Doctorate.

For those with families, remember there is always a family before, during and after Doctoral studies. Avoid creating a cocoon for yourself at the expense of your family. They are there to share the frustrations, sorrows, successes and joys associated with one’s Doctorate.

4.6 Priorities

Separate the work and personal essentials from non-essentials

From the preceding sections, one can create a long list of all of the priorities that have been identified. Then, based on one's authority at work, if you work, and have flexibility in one's personal life, identify priorities that can be deferred, delegated or suspended, or that have to be undertaken by oneself. It is also possible to list each item on a spectrum, i.e. not important, or very important for oneself – to assist with ranking priorities. This may allow one to get an idea of whether the necessary time and energy is available to pursue a Doctorate or not. For each of the priorities one could identify, it is important to determine: if the priority can be deferred, if the tasks can be delegated or if the task can be suspended. Respective stakeholders can then be identified, to address priorities that can be delegated.

The depth that one can go to, for listing priorities, should be to a level where all existing time consuming priorities are identified.

4.7 Buy-in

Is there buy-in from work superiors, work team, family and other personal support structures?

This is an important step and should not be missed or overlooked. After considering work and personal commitments, list the highest priorities that cannot be delegated. Other people, either at work or home, can then deal with the remaining aspects. Whatever those non-essential priorities are, be sure to identify people who can take them over for the duration of the Doctorate, or at least be willing to lend support during times when one cannot undertake certain tasks. It is advisable to get such agreement or commitments from your office in writing. In this regard, responsible officials can be delegated, in writing, to perform tasks that are prioritised in accordance with the level of importance.

There are a few duties that should not be neglected above all else – those of being a son/daughter, husband/wife, father/mother, grandfather/grandmother and grandchild.

Friends can also play an important role in you achieving what you want in life. Some friends can act as motivator and assistant, but others may be there to pull one down. Be wary of association, so that one is not distracted from what one's focus should be on.

4.8 That being said

While the above is important to consider, there will ultimately be a number of variations that can be adopted

For a Doctorate, or for situations in general, it is best to plan for the worst, but to hope for the best. Sometimes, the most effective course of action is to adopt the best of all bad available choices. Be innovative and create the best environment under one's circumstances, to enjoy the research journey.

It appears that the main challenge that could be faced, is time constraints. Time management is critically important for any Doctoral programme. One needs to make huge sacrifices in this regard and one should not take it for granted that enough time is available and then postpone sections of the programme to a later date. Situations may arise where the candidate will not be able to attend social gatherings and family functions due to the need to meeting the deadlines of the research plan. There are real practical solutions, such as: optimising time management, setting goals and planning appropriately. Decreasing hours of sleep is not ideal. Depending on one's age, the body and brain needs a certain number of hours to function optimally. For a Doctorate, it is vital to ensure that one's mind and body are provided with the required 'ingredients'.

As a result, optimisation of time may be the preferred route; one can be surprised how many hours are wasted on non-productive activities during a day and night.

5 Preparation

5.1 University facilities for Doctoral students

What academic and support facilities does the university have?

It is advisable to assess the facilities offered by the universities that one has shortlisted.

As one will come to realise, access to journal articles will remain a critical part of the Doctoral process. The bulk of the literature review will be drawn from this secondary data source. It is possible that some universities may not offer comprehensive access to all journals that will be relevant for research that is to be undertaken.

The manner in which one's Doctorate is written will be a big determining factor in terms of the overall quality. A very precise academic writing style is required. As a result, the university should ideally have available writing coaches or courses that will equip one with the specific writing skills that are needed. Even if one is a first language speaker of the language the thesis is to be written in, these writing courses are invaluable – especially when proofreading the thesis toward the end of the process.

Depending on the research topic, there could be a greater weighting to older material and physical books. Care should be taken to explore the physical library collection and how often the library is stocked with new books. Furthermore, some universities can order a book, or borrow it from another library. In addition, a number of books are now available in electronic format. As a result, it is advisable to explore the depth of e-books that are available – especially if one is some distance from the university and physical library.

Secure facilities – while some students might take this for granted – must be assessed. One will probably spend some late nights on campus. Ensure that the campus has appropriate security facilities at night.

Some larger companies have library/knowledge centres where staff can access various journal article databases. Access to these databases can usually be arranged through the company librarian.

5.2 University emails

Automate campus email

If your university does not provide an individual university-specific student email, it is likely that the choice of university needs to be questioned. When one is provided with a university email account, logging in is required to view emails. However, many people are very familiar with an existing email account. A good way around logging into another email account is to set a 'forwarding' rule for all emails received by the university email account to one's primary account. It is then possible to log in for all important email responses. This way, all emails will be sent to one's frequently utilised email account, and the probability of missing emails will be decreased.

Please ask the university administrators how to activate this feature; alternatively, the solution is likely to be found on the Internet.

5.3 Record keeping

Where is it?

Precise record keeping will greatly simplify the Doctoral process and also result in a verifiable 'paper' or 'electronic' trail if situations arise where one has to justify oneself. As such, there are two important elements: soft documents and hard documents. In terms of hard documents, these refer to actual signed documents, such as an 'intention to submit' form. However, if one has an electronic signature and a proper email backup system – then this can be undertaken through an electronic or soft copy approach. Some documents cannot be avoided from being signed in hard copy format, such as 'consent forms' for participants participating in interviews or focus groups. However,

it is advisable that two things be undertaken with such documents: 1. Store the actual documents in a safe place; and 2. Scan and backup electronic data.

For electronic documents, a structured folder system will greatly simplify one's life. This is in addition to naming documents properly. Examples include: 'Consent Form_Interview A.pdf', 'Proposal_V1' or 'Consolidated Thesis_V1'.

An example of the folder structure is provided below, in Table 1, for structuring electronic folders – but this can be highly customised to one's specific academic and practical needs. It is important that documents are easily accessible and that one does not waste time searching for them. The first-level folder can be named Doctorate to make backing up all documents easier.

Table 1: Illustration of an electronic folder structure

Folder level 2	Folder level 3
Application for Doctorate	
Acceptance for Doctorate	
Data analysis	Quantitative
	Qualitative
Ethical clearance	
Focus Groups	Audio recordings
	Signed informed consent forms
	Transcribed sessions
Gatekeepers' letters	
General	
Intention to submit	
Interviews	Audio recordings
	Signed informed consent forms
	Transcribed sessions
Literature	Chapters 1 to 7 (individual folders for each chapter)
	Concept note
	Proposal
	To Read
	Will not use
MATLAB	
Meeting minutes_supervisor	
Journal Articles_written	Paper 1
	Paper 2
Proposal	Initial
	Revised with panel comments
	Submitted for ethical clearance_final
	Submitted to panel
Survey	Audio recordings
	Pilot survey
	Signed informed consent forms
	Transcribed sessions
Thesis_Chapter	Chapters 1 to 7 (individual folders for each chapter)
Thesis_consolidated	
TurnItIn	Consolidated thesis
	Individual Chapters
	Proposal

Only the second and third level folders are displayed in Table 1, further levels of folders can be customised according to one's needs.

It is highly recommended that one separates a few aspects: Literature, which can be separated into 'To read', 'Will not use', and all used literature, can be saved in the relevant chapter folder. It is also important that the literature documents are properly saved – for example, 'Gerwel Proches 2018a'. In terms of one's thesis, this will enable referenced literature per chapter to be easily found.

A golden rule is to continually backup one's work; redundancy planning is '*muchos importante*'. Having a cloud-based back up, in addition to a physical external backup hard drive, is recommended.

Individual chapters should be written as separate documents; do not try to write the entire thesis as one document from the beginning. As a result, this will necessitate separate folders for each of the chapters. This will make tracking versions easier as progress is made, e.g. 'Chapter 1_V1', 'Chapter 1_V1_Comments Supervisor', 'Chapter 1_V1.2'. Only change the first number after 'V' for major changes. The final agreed versions of each chapter could then be named 'Chapter 1_VFinal'. However, it should be kept in mind that when all chapters are aggregated, it might require changes to already agreed upon chapters. This is inevitable, as when the entire consolidated thesis is read, a holistic picture emerges. In addition, the final chapter is likely to be written some time after the completion of the initial chapters, and as a result there might be a need to update some information in chapters that were written earlier in the process. Ideally, the consolidated thesis can have a separate folder, and the individual chapters should not be re-edited – only the consolidated thesis that one is working on would bear the changes.

It is important to back up all chapters, articles and any other relevant documents on an external hard drive and/or the cloud. That is in case one's laptop or desk computer crashes or is stolen. Also, avoid carrying both the external hard drive and laptop in the same laptop bag to prevent total loss in the event of theft.

5.4 Prior to proposal development

Before the thesis, there was a proposal and before the proposal, the concept note

Many universities require a 'concept note' to consider an application for acceptance into a Doctoral programme. The length, structure and information of these types of documents can vary significantly. Please check the details with the university.

A concept note, especially in the context painted at the beginning of this document, should ideally focus on a practical or theoretical gap that will advance the academic discipline. Do not find a research gap that is going to be easy to fill for the sake of attaining a Doctorate – then the Doctorate and one's title could be considered worthless. We need a Southern African Academic Renaissance. Contribute to this! The other aspects that will have to be focused on are methodology and literature, all naturally rooted in reputable literature. The 'concept note' should be based on a real problem that one intends to address with possible and implementable solutions. It should be eye catching, innovative and bring in new thinking in the specific thematic area.

It is important to note that at times, one might confirm an academic supervisor before the formulation of this 'concept note'. If not, this document will serve as a basis for canvassing prospective supervisors. It would simplify the process of developing the direction of the Doctorate if the 'concept note' is co-developed by both the academic supervisor and the student, to mitigate unforeseen future challenges. However, it is a bit of a chicken and the egg situation, sometimes one finds a chicken and develops the egg, and sometimes one finds an egg and waits for the chicken to appear.

Often, when the formal proposal is being developed, there might be conflict between the student and supervisor on the direction of the research. The advice for students is to take the issues that supervisors are raising and address them, as long as it is contributing toward innovation in the thematic area and if one can defend a viewpoint using existing literature and/or solid

logic. Furthermore, if the topic is completely new, then the student should stand their ground. Also, be cautious of supervisors that coerce a student into 'research areas' that will benefit the supervisor more than the student or the contribution to Southern Africa.

A good strategy is to link the research topic to one's existing professional work. This will ensure that one is already familiar with the content that needs to be drawn on, and make it possible to innovate. This will also ensure that one's professional foundation is enhanced – as one will become an expert in the research area. Additionally, if the research topic is within existing professional work, one's employer is likely to assist with resources, since they have a vested interest in the outcome of the research.

According to Hoque, who was the Academic Leader at the Graduate School of Business and Leadership (GSB&L) at the University of KwaZulu-Natal, *"This is an academic institution – bring us quality academic work"*. It is advisable to maintain written academic standards to help with the acceptance of the concept note.

5.5 Peer networking

A lonely path is not lonely if the path is alongside other paths

The Doctoral process is a lonely one. Most often, in Southern Africa, there are no classes to attend and no students to interact with on a regular basis. There are, however, certain Doctoral courses that require attendance for modules. Largely though, it is oneself, a laptop and books. There is a joke, and it is a reality in some cases, that a Doctorate is like a Master of Business Administration (MBA) and is a divorce degree. That should not be the case. When one finally graduates, ideally the relationship should still be intact.

It is advisable to either tap into existing 'groups' of Doctoral students, or if one does not exist, create a group yourself. One could use the induction session of the programme for this networking and the collection of cellular numbers – as it is one of the few times that most students will be in a physical place at the same time. The advantage of selfless information sharing is that it will greatly

help all concerned. Furthermore, with the group sharing, everyone will go far and the people that are part of the group will help motivate others, keeping all on their toes.

For the 2015 Doctoral class at the University of KwaZulu-Natal GSB&L, a communication network was established by Naidoo – eventually comprising over 30 members. This group kept all participants motivated and boosted confidence through sharing information at a time when individual challenges arose. The exchange of ideas, opinions and views between Doctoral candidates also motivated the participants to push on with this lonely journey. The successful completion of Doctorates by some group members was also shared with other participants on the platform, in order to boost the motivation levels of those still busy with the process. There were students from many countries and information was willingly shared by all on this platform. Importantly, participants who graduated remained part of the group and they continuously encouraged other participants to persevere. Every step forward is a step closer to the finishing line.

5.6 Identification of potential supervisors

Second to choosing a life partner, the next most important choice is an academic supervisor

There are a number of aspects to consider when choosing an appropriate academic supervisor/s. While the most important aspect is likely to be whether the supervisor is well-versed in the area of research concerned and is considered an expert, there are many other aspects that will make the process more difficult or easier.

Often, academics are steeped in a particular line of research or specialisation. In light of contributing toward innovation in a thematic area, the chosen topic will be testing and filling the big gaps. As a result, a supervisor who is open-minded and not dogmatic will greatly enhance one's research.

One must keep in mind that each human being is unique; everyone has a different personality and way of communicating. Without going into detailed philosophical and psychological aspects – one must be able to connect with the chosen supervisor, be able to develop mutual respect, be able to develop the ability to hear each other's views, and compromise where possible. Through continuous interaction with the supervisor, both the student and supervisor understand each other more and build an academic relationship. Bear in mind there may be times when the supervisor and student are at loggerheads and the situation may lead to irreconcilable differences. One may decide to request a new supervisor or even change university. It is important to note that one is not tied to the supervisor that is initially identified or chosen. If the relationship is not productive, the student should be able to request a change of supervisor through the university. However, be aware that there will likely be university processes that need to be followed for changing a supervisor. It could be beneficial to your argument that all aspects motivating for the change of supervisor are documented.

If one is located some distance from one's supervisor, then it is important to test the supervisor's ability to utilise technology effectively. If the supervisor cannot effectively communicate via email and teleconference, instead of via physical meetings, and comment on documents via electronic means – one is possibly headed for some logistical challenges that will add unnecessary time to the completion of the Doctorate and/or additional travel to the university. It is advisable to negotiate the time during which one can contact or communicate with one's supervisor. Some supervisors are flexible, but others are not.

In certain instances, one might need two supervisors. Most universities will allow two supervisors, with one being the main and the other a co-supervisor. It is recommended that students have two supervisors – one that is acquainted with the latest academic trends and information and the other that is practically immersed in the field of study. As an example, Naidoo, who researched the green economy, had a supervisor who is an academic with a focus on Complex

Adaptive Systems and a second supervisor who is Head of a Division within a large South African bank, with an interest in academia.

At the outset of engaging a supervisor/s, it is advisable to find out whether the supervisor/s will be taking a sabbatical during the planned duration of the Doctorate. If they are, then the student needs to plan appropriately to accommodate the time when the supervisor/s will be away.

It is important that one considers the supervisor/s as an important stakeholder in the academic journey, which is why it is critically important to nurture the relationship.

A word of advice is that the supervisor/s is/are there to guide students and will not directly undertake the student's work. Do not expect to be hounded to conduct the research by the supervisor/s. It is the student's work, and therefore the student should undertake the work. There are instances where students blame the supervisor for not accomplishing certain tasks, when, in actual fact, it is the student's fault.

5.7 Deadlines

Do not miss the deadline, but it is also like a taxi – there will be another one coming soon

It is important to ensure that one plans for all university and self-imposed deadlines. One should be able to effectively utilise an electronic or physical calendar to plan for these deadlines. For example, two weeks before a deadline, add in an 'appointment': 'two weeks to submission deadline'. It is important to also set up an appointment for the day of the actual deadline. Share these deadlines with peers on relevant communication platforms that have been established.

Communication, well before-hand, is very important when one cannot meet the deadline. This shows respect for the other person and acknowledges that one is genuine in terms of not meeting the target. Keeping quiet does not

solve anything; it will worsen one's relationship with the supervisor/s and increase the student's frustration and stress.

The most important deadline is to finish the Doctorate – so stick to the academic deadline if the Doctorate is to be completed in a reasonable time. There may be restrictions placed on the minimum and maximum number of years a student may be registered as a Doctoral student. Be familiar with the specific university rules.

5.8 Proposal development

A good proposal could contribute a substantial portion of content to one's Doctorate

Consideration should be given to starting the development of one's full proposal from the final version of the concept note. This approach will ensure there is a coherent building of the Doctorate on the basis of the initial hypothesis. This will also save time, as one would have already spent a lot of time and energy on the literature review. A properly written proposal can contribute a large portion of the thesis. Usually a full proposal can be 30 to 50 pages, and as a result a lot of the structure, content and direction of the thesis will be in existence – but in a much less robust or comprehensive format.

A typical research proposal for the social sciences, includes the following sections:

- Introduction;
- Rationale of the study;
- Problem statement;
- Aims and objectives of the research;
- Literature review;
- Methodology;
- Contribution and significance;
- Time plan;

- Budget;
- Conclusion;
- References; and
- Annexures.

Each university and sometimes different colleges/faculties/departments within the same university may however have different formats and requirements for such documents. It is suggested that one speaks to the supervisor/s and administrator for direction on a specific template and the information that needs to be provided. Students are also advised to attend proposal presentation sessions of other students. This provides a lot of insight on what to expect.

The trick to writing a good proposal is that each section should relate and be relevant and supportive of the other sections.

To elaborate on this point:

- *Introduction*: Should set the scene for the document, while providing a summary of the contents of the thesis.
- *Rationale of the study*: The rationale should be linked to a 'referenced' problem. If there are further elements to the problem, it is also good to expand upon these. However, a good rationale, will *inter alia* utilise existing literature to 'fill a gap', and 'innovate'. If one is focusing on an innovation where there is no literature, this too must be referenced, i.e. XXX (2019) speaks about ABC and XXX (2019) about XYZ, but no literature was found that analysed 123.
- *Problem statement*: This must be closely linked to the rationale of the study. The problem statement should be a few overarching sentences that will capture the fundamental problem or opportunity that the research seeks to address.
- *Aim and objectives of the research*: The problem statement is then unpacked into the key aim of the research, i.e. development of a

model or implementation plan, with specific objectives that will achieve the aim. To reiterate, the rationale needs to be supported by the literature review. The rationale is translated into a practical problem or opportunity in the problem statement. The aim of the research is then created around the problem statement, which will be achieved by pursuing a number of specific objectives.

- *Literature review:* This should flow from the rationale, problem or opportunity that was discussed in the previous section. A good approach is always to briefly include the fundamentals before delving into the details of each specific thematic area. Furthermore, don't only focus on literature that supports the argument or research aims and objectives – also discuss views and research from existing literature that counter your view and then critically discuss the convergence, or lack thereof, of the various positions. Importantly, relevant and recent research needs to be referenced, and this is to ensure that the information is current. Caution needs to be exercised when utilising the work of others; plagiarism is a serious offense in the academic world. Peer-reviewed journal articles should be utilised, to ensure the accuracy and credibility of information incorporated into your Doctorate.
- *Methodology:* A lot of thought needs to be directed toward the methodology that will be used. It is critical that one considers the actual dynamics that will be encountered when collecting data – such as access and willingness of participants versus what looks good on paper. When looking into research topics where there is limited information, a sequential mixed method approach seems to work best, with qualitative data leading to the development of quantitative data collection approaches. The methodology has to be developed in line with the aims and objectives of the research and not with what the researcher is comfortable with. This is to ensure consistency of the research and that the outcomes are predicated on the correct foundations.
- *Contribution and significance:* This needs to be succinctly written, based on literature and linked to the rationale of the study. Ideally,

there should be academic and practical significance of the research.

- *Time plan:* The intended time-frame for the research should be in a table format, with annotations if necessary.
- *Budget:* A simple table will suffice. Natural examples of line items will be costs for: tools, software, travel for research or conferences, editing, and printing.
- *Conclusion:* This is essentially where one ties all the previous sections together, so that the 'golden thread' is made obvious.
- *References:* Guidance should be sought from the academic administrator on which referencing style the university uses, and this should be used.
- *Annexure One:* Gatekeepers' letters are external letters of authorisation that sanction the research, if an organisation is involved. Letters can be obtained from a company or Chamber of Commerce if it involves research that requires data from a number of companies or the Chamber of Commerce.

According to O'Donoghue, there is an alternative format for a Doctoral thesis – which is to submit a collection of peer-reviewed papers with introduction and conclusion chapters tying the papers together. This is the approach that O'Donoghue utilised for his Doctorate, and as a result, his proposal played only a small role in the Doctoral process.

5.9 Planning

Plan for an outcome with flexible pathways

Whether one is a full-time or part-time Doctoral student, the same steps and processes will need to be followed. The only difference is that as a full-time student, one is expected to complete the Doctorate in a much shorter time compared to a part-time student, who has other responsibilities. Full-time students have more time during each day compared to part-time students who have additional responsibilities.

An important point to keep in mind is that a Doctorate is an ultra marathon, and not a sprint. A lot of personal, academic and mental development emanates from this process – ensure that as much growth as possible is extracted. The Doctoral journey is just as important as the completion of the Doctorate. The Doctoral student is implored to view challenges as opportunities to grow and not to succumb to challenges.

Govender equates a Doctorate to his Comrades Marathon running experiences, where a lot of physical and mental strength was crucial for finishing the race. There are times when he felt that he had ‘hit the wall’ and wanted to bail from the race, but his inner strength and tenacity pulled him through to the finish. Similarly, the Doctoral journey will be complex, and physically and mentally straining, and it’s one’s inner strength and determination that will be crucial for finishing this journey.

In general terms, one should plan to complete the full proposal in the first year, the second year should be devoted to data collection and the third year for analysis and completing the writing of the thesis.

Table 2, is an actual plan that was used by a recent Doctoral graduate. Notice the flow and the dependency of certain aspects. An example of this dependency is the ethical clearance certificate that was needed before the start of the primary data collection. Data collection can only take place after ethical clearance has been granted for one’s research.

Another important aspect is to ensure that one is able to meet supervisor/s regularly – at least once a quarter. While some academics prefer to write the first chapter of the thesis last, a sequential approach can work just as well. This then allows the thesis to be developed in a synchronised and coherent manner that will allow the examiner to follow the research with ease. The completion and submission of the ‘intention to submit’ form is critical, so ensure that the timing is right. If one submits the document too early the intention will expire and the university will require the student to resubmit another document. If one submits too late, then the examiners will not have been appointed and this will add additional time between the submission, examination and thesis

results. While printing has been included here, some universities might not require hard copies for examination purposes. If it is required, ensure that the pages are printed and bound properly – so the examiner can easily flip through the pages and not become frustrated by pages that are bound too tight, where the pages cannot be easily turned. The frustration can negatively impact the outcome.

Table 2: Anticipated time plan for research

Year	2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4
Quarter												
Activity												
Supervisor meeting			■	■	■	■	■	■	■	■	■	■
Literature review			■	■	■				■			
Proposal	■	■	■	■								
Ethical clearance request					■							
Research					■	■	■	■	■	■	■	■
Analysis of research					■	■	■	■				
Framework development							■	■	■			
Chapter 1 (write, comments & edits)									■			
Chapter 2 (write, comments & edits)						■						
Chapter 3 (write, comments & edits)							■					
Chapter 4 (write, comments & edits)								■				
Chapter 5 (write, comments & edits)								■				
Chapter 6 (write, comments & edits)									■	■	■	■
Chapter 7 (write, comments & edits)									■	■	■	■
Intention to submit									■	■		
Full proofreading/edits										■	■	■
Final plagiarism check										■	■	■
Supervisor approval										■	■	■
Final printing											■	■
Final submission											■	■

Table 2 provides information on what was planned for, but Table 3 indicates what actually unfolded. Immediately one will notice that an additional six months were added on, largely due to the longer time period required for primary data collection. Furthermore, in Table 2, ethical clearance was to be requested and received during the first quarter of 2016. In reality, ethical clearance had to be requested an additional three times, as indicated in Table 3. This was due to changes in research methodology. In hindsight, more time should have been allocated to the analysis of the research findings and the framework development – so that more substantial outcomes could have been contributed to moving Southern Africa forward. It is also important to draw attention to the writing of chapters 4 (Methodology), 5 (Findings), 6 (Discussion), and 7 (Conclusion). They all happened within the same quarter in order to meet the deadline for submission. If the student did not make sacrifices, then s/he would have had to register for another semester. Also notice that chapters 1 (Introduction), 2 (Literature) and 3 (Literature) were reworked towards the end of the writing of the thesis. This was not included in the initial planning of the student, but would be beneficial for students to incorporate this aspect into the initial plan. The revision of chapters 1, 2 and 3 allowed better alignment of all chapters and enhanced the flow of the thesis.

Table 3: Actual time plan of the research

Year	2015				2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Activity																
Supervisor meeting																
Literature review																
Proposal																
Ethical clearance request																
Research																
Analysis of research																
Framework development																
Chapter 1 (write, comments & edits)																
Chapter 2 (write, comments & edits)																
Chapter 3 (write, comments & edits)																
Chapter 4 (write, comments & edits)																
Chapter 5 (write, comments & edits)																
Chapter 6 (write, comments & edits)																
Chapter 7 (write, comments & edits)																
Intention to submit																
Full proofreading/edits																
Final plagiarism check																
Supervisor approval																
Final printing																
Final submission																

5.10 Defending the proposal

Be humble, answer questions based on the literature and take perceived criticism as constructive criticism, for increasing the quality of the research

Defending a proposal essentially entails convincing the academic audience that you developed the proposal after identifying a gap, and that you are prepared to conduct the research whole-heartedly and to develop new knowledge in the thematic area.

In most cases, once a full proposal is completed and accepted by the supervisor/s, the student will be required to present the proposal to a panel

of academics. This panel is meant to perform a few functions. For one's benefit, forget all the other functions. Focus on this point: The panel has been established to scrutinise the research proposal and to critique it from multiple angles – to ensure that the research is properly formulated and at a Doctoral level. Questions posed by the panel should be answered from a position of academic grounding.

Countless students have responded from a position of defence, ego and anger. This is not advisable. Questions that cannot be answered from an academic or practical grounding, should be acknowledged as aspects that need to be further explored during the actual research.

It is important to consult one's supervisor/s and/or the academic administrator for specific presentation templates. However, this normally closely follows your proposal outline, but usually with a focus on rationale, contributions and methodology.

5.11 Ethical clearance

For the protection of the vulnerable and promoting principled research

Once the proposal has been accepted, and after necessary edits, one will likely need to apply for 'ethical clearance' from the university. This is especially critical for research that includes primary data collection and is largely an administrative process. However, one needs to ensure that the information on the application form for ethical clearance is completely accurate – particularly with regard to the title of the research. It should be noted that there is often a time delay from application to receiving the actual ethical clearance certificate. This needs to be planned for appropriately. It is important to note that should any major part of the research methodology change, the university will require the student to resubmit for an amended ethical clearance certificate. No primary research can begin without the ethical clearance certificate.

6 During

Now the heavy lifting begins

6.1 Momentum

A new broom sweeps well

At the beginning of the research process, all students are filled with energy, positivity and the intention of sticking to the research plan. If one can maintain the pace, that is ideal. However, in most cases the process is likely to be a stop-start one. The student will undertake a little work to meet a deadline or complete a specific aspect, then take a rest while dealing with life's challenges and other demands on their time.

It is important to understand these two broad approaches, i.e. maintenance of pace and stop-start. Use the approach that suits one's personality, specific circumstances and available resources. It is critical that one sticks to planned major deadlines, regardless of the approach one takes. If this is not followed, the Doctorate takes longer than planned for or risks not being completed if it goes on for too long.

A critical aspect of ensuring momentum is developing a support group with students being in regular communication so that everyone is motivated by one person's progress. This is likely to subtly spur most students into action, while tapping into the motivation that drove one to register for the Doctorate in the first place.

6.2 Supervisor meetings

In person or via electronic means – keep supervisors up-to-date with progress and get their input

Use these meetings for maximum benefit in terms of time-frames for deliverables.

The meetings should be linked to specific deliverables, such as proposal presentation, but should be held early enough to give you time to incorporate input from your supervisor/s before stated deadlines. It is important to note that these meetings do not have to be in person. They can take place by telephone or voice/video call. Many voice/video conferencing facilities allow more than two participants, which is important if there is more than one supervisor. If any planned meeting becomes unnecessary, one should communicate such to one's supervisor/s and mutually agree on cancelling the meeting. However, this would be based on whether progress is adequate or not. All meetings should, ideally, be minuted and the minutes circulated to supervisor/s. Ideally, all feedback from the supervisor/s should be in writing.

Most supervisors still remain available to their students when on sabbatical, albeit to a lesser extent compared to when they would have been at the university. If one's supervisor/s decide(s) to take a sabbatical after one has begun the Doctorate, one needs to be smart about re-planning previously planned time-frames. This needs to be specifically agreed with the supervisor/s – including communication protocols to be followed while they are on their sabbatical. See section 6.19 for more information on supervisor/s' sabbaticals.

6.3 Supervisor advice

Theoretically, take all the advice that the supervisor/s provide(s)

The first piece of advice here would be to be as independent as possible and find solutions before turning to one's supervisor/s.

There are two types of advice that the supervisor/s will provide: the first is during the development of the proposal and the second will be during the research journey. This is, naturally, in addition to providing encouragement during the journey.

When formulating one's proposal, there are many aspects to take into account – such as rationale, contribution, key research questions, the literature and research methodology. Often the supervisor/s will try to nudge the student to

adapt the key research question to the supervisor's lines of inquiry, thinking, and research areas. It is Naidoo's observation that very few supervisors are selfless and willing to work with what is being suggested by the student – with improvements. When one is requested to adapt key research questions, do so, but without diverting too far from the initial intention. If there is still a push-back from the supervisor/s – provide an academic and practical response on why one has specifically selected these key research questions. If there is no agreement then one should consider changing supervisors. Furthermore, choosing and sticking to a relevant research methodology is critical, especially if there is primary data collection taking place and a mixed methods strategy of inquiry being adopted. As an example, if one is focusing on research that is seeking to develop an understanding of a situation or system, then a concurrent qualitative and quantitative method should not be utilised. In such an instance, the qualitative data collection phase should be undertaken first, followed by the quantitative phase – i.e. a sequential mixed methods strategy. This would seek to test the validity and applicability of your qualitative findings with a larger sample of the population.

6.4 Grammar and punctuation

Be cautious about writing based on how one speaks; even a comma in the wrong place can change the meaning of an entire sentence

One of the most valuable skills that has to be developed during the Doctoral process (and has hopefully been somewhat developed during the Master's process) is the ability to write using the correct grammar and punctuation. This is in addition to writing in an academic manner. If one is not completely comfortable with one's writing skills, there are usually professional language editors who can be accessed through the university. One should always select a language editor with a strong relevant academic background.

For the student's own benefit, it is advisable that personal writing skills are enhanced during the Doctoral process. This will hold one in good stead when publishing papers. One also does not want others to read one's writing after

obtaining a Doctorate, and think – “*this person cannot write, how did they obtain a Doctorate?*”

A good approach to writing, however, is to just write what needs to be written. Once a section has been completed, read it. Re-read the sections after a few days and one will find a few aspects that need to be tweaked. This is even before the formal editing process begins, just before submission of the thesis.

It is critical to understand that the writing used in a Doctoral thesis is not only a linguistic activity, but more importantly it is to demonstrate academic literacy. Academic literacy relates to communicating, holistically, one’s thinking in a structured and comprehensive manner, which engages the reader at an academic level. This provides one of the main and fundamental elements required for a Doctoral thesis that will contribute substantially to the delivery of academic findings.

Academia requires very accurate communication, especially when it is written. Each word and sentence in a thesis should, ideally, play a constructive and specific role in adding value to the thesis. It is important to not get frustrated when the supervisor/s or examiner/s correct grammatical errors (they are doing you a favour).

6.5 Formatting

Formatting maketh a good-looking document that will communicate excellence to the reader, even before a word is read

Standardisation is the key word regarding the formatting of the thesis.

Information on the required formatting specifics that need to be followed should be requested from the supervisor/s or academic administrator, if not already provided. This formatting should be automated on the processing software package. The different types of text, such as *inter alia* Body/Normal, Heading 1, Heading 2, can be automated according to one’s needs.

6.6 Referencing

The bane of academic writing

There is a plethora of referencing styles, each with their own nuances. It is vital that the student identify which style is advocated or preferred by the university. As with formatting, the key to referencing is standardisation and consistency.

It is possible to automate the referencing throughout the thesis; there are various electronic tools that can be utilised. Such software organises references, formats them and the entire document into your required referencing style. This greatly reduces errors in referencing, both within the body of the text and in the 'references' section at the end of the thesis.

However, it is also possible to reference your thesis manually. This requires a lot more diligence, patience and time. Through this manual process it is possible to further enhance the quality of one's thesis. This will force the student to read the thesis with more attention than one normally would and not take for granted that the software would have sorted out the referencing – which will likely result in the identification of structural or other matters of the thesis that need to be addressed.

6.7 Writing of chapters

The best way to eat an elephant is one small piece at a time

Writing a thesis is no easy task. Depending on the university, the thesis can be over 100,000 words, spread over more than 360 pages. Editing, formatting and referencing such a document is an arduous task. One also needs to ensure that one's computer can handle the 360 to 450 page document, especially if there are high resolution images and figures, which results in much larger file sizes. It is important to note that the introductory pages (e.g. abstract, dedication), references and annexures are not included in the overall word

count. Complicated software may be required to produce results. Can one's computer handle it?

It is advisable to write each chapter as a separate document. It may be possible to write multiple chapters at the same time, but keeping the individual chapters as separate documents is critical. The supervisor/s should be able to comment on each chapter as soon as one completes it, as a standalone document. This will enable the student to psychologically deal with comments individually and this will make it seem simpler. Each version of the chapter should be saved on separate documents. When the chapter is finally agreed on by the student and the supervisor/s, the chapter can then be saved as, for example, 'Chapter 1_VFinal'.

If one plans the research process well, it will be possible to work on a chapter while the supervisor/s reviews another chapter. If the student plans the process very well, one will submit pieces of work at less busy periods, e.g. when the supervisor has less teaching, and the student will have alerted him/her of when and what will be submitted.

When one is combining the different chapters, it is important to again follow the structure of the thesis that is required by the university. It is critical that the formatting of the document flows, as just copying and pasting chapters into one consolidated document can cause some technical formatting changes. It is good to have a relook at the broad formatting of the new chapter that one has pasted – including previous chapters. Always save the document after every few minutes, during this process. In addition to saving the document, it is vitally important to backup all work, and ideally the entire laptop or desktop computer.

The consolidated thesis should be saved in a separate folder and can be named 'Consolidated Thesis_V1', from chapters 1 to 7. Depending on the chapters that one added to the document, the numbering of the file name would change relatively, with 'Consolidated_Thesis_V1.1' used for minor edits on the consolidated thesis. This should then lead to 'Consolidated Thesis_V7' – if one has seven chapters.

It is critical to bear in mind that while the supervisor/s and the student might have agreed on individual chapters, when the chapters are consolidated – an entire picture then emerges and further changes might be needed. Furthermore, newer information might have emerged that would have to replace older information – such as newer versions of annual reports. It is ideal to ensure that the information in the thesis is as updated as possible.

Also of importance: If one has written the thesis as separate documents, it is critical to ensure that all references have been moved across properly, whether one has used an automated or a manual process.

6.8 Theoretical contributions

Has one contributed to the advancement of Southern Africa?

While the student will be heavily relying on existing literature as one of the foundations of the research, especially for the literature review chapter, one is required to contribute to the existing body of knowledge with new findings. This can be in numerous forms – even if proving existing and accepted theories to be incorrect.

If one recalls the introduction to this book, the authors implore the student to focus on developing a body of knowledge and literature that will move Southern Africa forward. This could seek to reconstruct the hundreds of years in which our social, economic and cultural systems were decimated. Ideally, students should be encouraged to find links with the Sustainable Development Goals and nation/regional building.

It is possible to bring about a Southern African Academic Renaissance, which will lead to a plethora of other positive changes.

6.9 Practical contributions

What good is a piece of paper?

Earlier in this book, reference was made to choosing a research topic that revolves around one's professional work. This is if the student is working.

While it is ideal that new literature and knowledge will be developed through one's research, it also needs to be implementable. The student also needs to internalise an important point: other people are unlikely to implement another's practical theoretical solution. This is where the importance lies in linking one's research topic to one's work – both current or future. This will then provide one with an opportunity and platform to implement the practical contributions.

Again, these practical contributions should not be developed so that it is a 'nice to read' thesis for a pass, but should rather be developed with a pragmatic outlook, where implementation will have positive impacts for Southern Africa. Therefore, for the betterment of our country and continent, practical findings that are catalytic in nature are urgently needed.

6.10 Structure and flow of the thesis

The yellow brick road

It is easy for people, especially examiners, to miss the critical path, linkages and logic of the thesis, if it is not written coherently.

It is important that every sentence in the thesis serves a purpose. Furthermore, it is important to note that each school/faculty/department will have its own format for a Doctoral thesis. A generalised outline based on Naidoo's thesis is provided below. As stated before, an alternative path is to write one's thesis via a series of peer reviewed journal articles, with additional introduction and conclusion chapters to tie the articles together.

Chapter 1 should succinctly contextualise and introduce the research. This is best undertaken writing from the top-down, e.g. contextualization of climate

change within the Paris Agreement and the Sustainable Development Goals to local city-level strategy documents. Chapter 1 should also present the high level elements of the research, such as key research questions and provide, at the end of the chapter, an overview of forthcoming chapters.

Chapters 2, and sometimes 3, normally relates to the literature review, and this literature review should not deviate from the key research questions and should also be contained within the context provided in the first chapter. In certain pieces of research, there will be multiple disciplines that need to be discussed – this is best approached through a clearly defined chapter structure with a logical flow.

Chapter 4 contains the research methodology used for the research. While this might be considered as one of the more straightforward chapters, it is actually the ‘glue’ that academics and examiners look for. As a result, as much detail as possible must be provided. While this will include strategy of inquiry, data collection tools, validity, reliability and ethical considerations, depth is also vital. As an example, when one conducts interviews or focus groups: provide *inter alia* details that include date, location, duration of interviews or focus groups, and time started. This also applies to the transcription process. It is important to note here that this has been written with a social sciences foundation, and other academic disciplines may undertake research using different methodologies.

Chapter 5 is compiled based on the findings of the actual research. Here again, it is important to present the findings in a flow that is similar to how previous chapters have been laid out – i.e. if one raised X and Y, in that order, the findings should also be presented in that manner.

Chapter 6 contains the critical analysis of the findings. This is primarily based on the key research questions and aims and objectives. However, it is important to note that during the research other aspects might have arisen that were not part of the initial questions. It will enhance the quality of the research if one discusses the findings and include this in Chapter 5 as well.

The entire thesis is concluded in Chapter 7. In addition, recommendations for further research should be presented here, along with suggestions for practical implementation of the findings. Importantly, at a Doctoral level, the contribution to the academic field has to be emphasised. This will allow for easy identification of one of the main aspects, contribution to academia, of the Doctoral thesis by the supervisor/s, examiners and other readers.

It is possible, perhaps likely, to have more than seven chapters. The exact number and composition of the various chapters will depend on the specific Doctorate and the requirements of the research.

6.11 Secondary data collection

Water, water everywhere, and not a drop to drink

Make no mistake, there are mountains of information. It is vital that the student focuses on the information that is directly related to the research questions. The collection of data for some research topics will be easier, as information is easily accessible and the flow of documents can be followed easily, to give a picture of the research area. However, organised chaos is likely with newer topics.

A good starting point is to map all relevant data from a hierarchical perspective, and this should include the manner in which the data relate to each other, the direction of flow and, most importantly, it should identify apparent gaps.

Journal article platforms can be programmed to send out alerts when new and relevant papers are published. These notifications can be sent directly to one's email address.

6.12 Primary data collection

Try, and try again. The participants' insight is critical for the research

This is going to be one of the hardest and most challenging phases of the research process, if not the hardest. It will also be one of the most rewarding, when one has the benefit of hindsight after completing the Doctorate.

It may be difficult to gain access to people, whether it is to complete a survey or an interview. That is why it is critical, when formulating the research proposal, that one focuses on people who are accessible to the student. Understandably, there will be specific pieces of research where a large population and sample are needed.

The key for the completion of primary data collection is persistence. Consistently send reminder emails. Phone calls and physical visits might be needed. A lack of response will be experienced even when one knows some of the people in the sample personally. Imagine the challenges one may experience when approaching complete strangers. It is important to include the proposed approach in the ethical clearance request.

It also makes a substantial difference to befriend those close to the more important and busier people that one may seek time from. As a result, accessing those individuals becomes easier.

Focus groups are not easy to assemble. Trying to coordinate the diaries of five or more people so that they can be in a room for an hour requires real finesse and patience. In instances, industry bodies will agree to assist, but their members may not be too cooperative. There are a few situations that make convening a focus group easier. Building personal relationships is critical to getting people into a room, especially relationships with influential and powerful people. One needs to be aware of conferences, workshops and similar events that are taking place in the relevant research field. Use this as a base and contact the organisers to assist, by including one's focus group as a side event, or take the opportunity to network with relevant people and host the focus group immediately after the official completion of the final session. Also note that transcribing focus group data requires attentiveness, and therefore, it is best that focus groups are video recorded if participants agree to this. This is in addition to voice recording (video recording makes it easier to transcribe individual input). It should be noted that it is best to immediately delete the video recording after transcription processes are completed, but then retain the audio recording. Interviews are straightforward to transcribe

as there is only one participant. In advance of all transcription processes one should develop a coding system so that the identity of participants remains anonymous, e.g. Interview Respondent A or Focus Group 1 Respondent A.

6.13 Adapting the research plan

The qualification remains the same – just the path to it may need to be adjusted

Due to the nature of research, especially at Doctoral level, there will frequently be a need to adapt elements of the research. Often, it is the methodology that will need to be tweaked to incorporate unforeseen complications. In other instances, it might be reframing the key research questions. Please read this with Section 6.14.

It should be expected that changes to the research will likely occur, and possibly more than once. When planning the timetable or developing the research plan, incorporate some additional time for such unforeseen circumstances. An element that speaks to adapting one's research plan should not appear in one's research plan. This additional time can be incorporated by allocating an additional period of time to other aspects of the research plan. The reason that this is suggested, is so that one will have the available time for confirmation of changes from the supervisor/s and to apply for ethical clearance again.

6.14 Resubmissions for ethical clearance

Approval of changes to the initial proposal is required

Depending on the changes to one's research, one might need to resubmit a request for a new/revised ethical clearance certificate.

There are a few points and processes during the Doctoral process that should be strictly followed. Requesting revised ethical clearance approval is one of them. Even if the supervisor/s indicate(s) that revision of the initial

ethical clearance certificate is not needed, the student is strongly advised to triangulate the information with the Research Office or other suitable sources.

It should also be kept in mind that there could be a delay from the time of submission to the time of approval. These academic processes take time, and, as per section 6.13, additional time should be built into the research plan for at least one revised ethical clearance approval.

6.15 Intention to submit

Almost done – please prepare for the examination of the thesis

The ‘intention to submit’ document indicates to the university that they need to start preparing for the examination of the student’s thesis. The date of submission of this document needs to be accurately linked with the progress of the research. Usually, the university will ask for this document three to six months before the student intends to submit the thesis for examination. It is important to note that the ‘intention to submit’ document will expire after a period of time and should not be submitted too early. On the other hand, the ‘intention to submit’ document should not be submitted too close to the submission of the thesis for examination, as the university has to undertake various processes. The most important aspect is for the university to find examiners who are willing to exam the thesis. If the ‘intention to submit’ is submitted too close to the submission of the thesis for examination, then one’s thesis could just lie on a desk until appropriate examiners are found. It is suggested that the ‘intention to submit’ document should be submitted, at a minimum, three months prior to the submission of the thesis.

6.16 Proofreading and editing

The detail and accuracy matters

Throughout every step and process followed during the Doctoral research, the presentation and academic quality of one’s research is expected to be exceptional.

It is recommended that one diligently reads the guidance document from the university on formatting – if one is provided.

While some universities will allow a language editor to be used, it is strongly advised that the student also proofreads and edits the thesis beforehand. It should be kept in mind that proofreading and editing can take a lot of time, and an appropriate time period should be allocated in the research plan, based on the following:

Proofreading and formatting should be undertaken at two levels:

- The first time the thesis should be proofread and edited is when individual chapters are written. This does not refer to the 'Finalised' version, but the first version that one sends to the supervisor/s. It is recommended that each version is proofread and edited.
- The second time one should edit the thesis is when all the chapters are written and one has a version of a 'consolidated thesis'. This relates to the first 'consolidated thesis' sent to the supervisor/s. Every version should also follow a similar process of proofreading.

While one must consistently follow the formatting required by the university, each sentence must be read and thought about in terms of relevance, grammar, punctuation and flow in the thesis in terms of addressing the key research questions. If a sentence is poorly constructed, rewrite it so that it fits in with the paragraph, section and chapter. Should the sentence be superfluous, delete it. Avoid tautology at all costs, unless one is trying to emphasise a specific point – but do so in a manner that will rely on secondary literature or provide apt examples.

Additional aspects to keep in mind are that during this process one will be spending excessive amounts of time in front of the computer and this can strain one's eyes. It is advisable to use a large screen (even a TV connected to the computer) for proofreading, and/or printed documents. In addition, hours can pass when one becomes engrossed in the process, which will result in limited body movement. It is good to seek proper medical advice on eyesight and body movement requirements based on individual situations.

The other important consideration to take into account is that one needs a really quiet place where one can undertake the editing process – complete focus and concentration is required. Most importantly, don't forget to save the document, and backup saved versions frequently. It will be beneficial to have a backup for one's backup – i.e. a second backup.

The absolute last version of the thesis that will be used for examination will have to be in PDF format. It is strongly recommended that one re-reads or at least peruses this PDF to ensure that all text, figures, images, tables and graphs are appropriately formatted and that nothing has changed from your editable version.

It is also advisable to engage a professional proofreader/editor to deal with grammar and spelling mistakes. In most cases these editors provide a certificate to certify that the document has been edited professionally. Of course, there are costs associated with this.

6.17 Plagiarism

The ultimate ethical infringement

In the academic world, the worst possible offence is plagiarism. To avoid this transgression, whether intentionally or unintentionally, ensure that one consistently follows the referencing rules – particularly when quoting secondary sources verbatim.

Often one will be required to submit the proposal, sometimes individual chapters, and definitely the consolidated final thesis, through a platform that calculates the percentage of the thesis that uses the work of others. The university could require that the similarity index not be more than a certain stipulated percentage.

This specific report might be needed when the thesis is submitted for examination. It should be noted that some platforms could take up to 24 hours to completely process the document. As a result, one should plan accordingly.

6.18 Soft copy and hard copy submission

Save the trees

More universities are moving away from requesting the submission of hard copies of students' theses. However, direction must be sought from the specific university. The student might be required to submit the thesis to the university twice, the first for examination and then after examination as the final thesis that incorporates the corrections. This would serve as the final version that will be made available to the public and archived in the university's library.

Generally, the thesis will be required as a standalone document. Ensure that the document is saved with an appropriate name. This could be the title of the thesis or something along the lines of 'Thesis_{Examination or Final}_{add name and/or student number}'.

In addition, one might be requested to submit the full plagiarism report as a separate document.

It is important to determine if the soft copy documents have to be delivered on a flash drive or via email. If one is submitting on a device, ensure that one obtains proof of receipt by the university. The same will apply to an email.

The student might be required to create an electronic signature, if it is not already in existence. This is in addition to the supervisor's signature/s, should soft copy documentation be required.

If the university requires hard copies of the thesis for examination and final archiving, ensure that the printing, quality of paper and binding are of a high standard.

Often, there are frequently used printing companies that are familiar with the university's specific printing requirements, and in some instances the university might offer the facility. The examination hard copy will likely need to be printed on one side of a single sheet. Ensure that pages that were orientated to 'landscape' are printed appropriately. It is also important to ensure that

pages with *inter alia* colour figures, tables, and diagrams, are actually printed in colour. One will most likely be required to submit a plastic ring bound document. It is strongly advised that one chooses the correct size of plastic ring binding. The university will advise one about printing requirements for the final thesis. It should be noted that printing is expensive and needs to be planned for in the research budget. For example, a recent thesis printed on one side of each single page for examination, totaling 360 pages and with four copies, cost R3,000. This included the plastic ring binding.

6.19 Supervisor sabbaticals

Now you see me, now you don't

It is important to plan for supervisor sabbaticals, where applicable. Sometimes, the sabbatical period will be known while the student is developing the full research proposal. If the student is only made aware of the sabbatical after beginning the research, the student needs to determine a few things and have a discussion with the supervisor/s. These discussions should centre around aspects such as communication, primarily, and response times to student emails. If physical documents have to be signed, appropriate arrangements need to be made.

If the supervisor is accommodating, the student probably will not have to change the research plan and schedule. If the supervisor is not accommodating, it will likely be better for the student to rearrange the research schedule, and to align aspects of the research that do not need input from the supervisor/s during the period they will be away. However, the details of the research need to be taken into account before this is done.

Another solution to the above challenge, and to many other aspects of research, is to have two supervisors.

6.20 Psychological aspects

This path is less travelled – where are the other travellers?

The loneliness of the Doctoral process has already been discussed in Section 5.5. Over and above pointing that out, the psychological aspects need to be highlighted so that one knows what to expect.

If the student is not a patient person, this process will teach patience. The minimum period required to complete a Doctorate is going to help one develop patience, especially when one is waiting for administrative processes to be undertaken or awaiting feedback from the supervisor/s. It is important to bear in mind that every experience can either frustrate one or help one grow in areas that need improvement. Stamina is another desired characteristic – as the process is long. Due to the iterative nature of most research, the ability to soldier through and consistently overcome challenges and leverage opportunities will need to be further developed.

Being egotistical would be one of the major reasons for not reaching out for help. Reaching out for help, whether to a supervisor/s or peers is critical. Not finding solutions timeously can have a negative impact and be demotivating.

The process has to be harnessed to develop characteristics that have become synonymous with Doctoral graduates. These include diplomacy, the ability to critically analyse a situation, patience, sophistication, and excellent verbal and written skills.

There is a very dark psychological side to undertaking the Doctoral process. Levecque et al. (2017) undertook research that compared Doctoral students with three other reference groups and found that Doctoral students have a 32% higher probability of developing negative psychological conditions – such as depression and anxiety. This is supported by Hunter and Devine (2016), who also indicated that a good relationship between a Doctoral student and a supervisor can greatly reduce student anxiety and emotional strain.

“Emotional exhaustion is significantly lower among doctoral students who receive high levels of support from their faculty/school, have high quality supervisory relationships, and who work with more experienced doctoral advisors” (Levecque et al., 2017, pg. 55).

It is advised that potential Doctoral students undertake additional reading from other material on the psychological demands of the Doctoral process.

6.21 Find a happy place

Happy place, happy research

While everyone, invariably, has different preferences, it is advisable to find a conducive space in which to work. Often there will be multiple places that will get one’s energy flowing and enable one to fully concentrate on tasks that need to be completed. Important aspects to take into account are: comfort from an ergonomic perspective; WiFi connectivity or speed of wireless connections; distance from work or home; nature of the people that will also frequent that place; the possibility of disruptions; noise levels; and access to fresh air. Sometimes this could be one’s home. If that is the case, then one has likely found the most convenient place. However, there will be times when one’s home will host family and friends and one might need to ‘escape’. The university campus might be an obvious choice, especially the LAN.

The ‘Coffee House’ effect can also be harnessed and is a real counter-intuitive solution for focusing on one’s work. This effect essentially theorises that it is possible to be more productive in busy public spaces, even though there may be an audience.

7 After

7.1 Examination period

The long wait

While some universities inform candidates that the examination period for a Doctorate is six to eight weeks, the reality is very different. From the experience of recent Doctoral graduates, the examination process has taken four to seven months. Frequent requests for feedback become necessary. The student will be within their rights to approach relevant authorities at the university should the examination of the thesis not be completed within a reasonable time. The university should, ideally, then contact the national and international examiners for feedback. However, be cautious – applying too much pressure on examiners through the university may have a detrimental effect.

7.2 Easing back into normal life

Congratulations, the reality one knew is now no more, so adapt again

If one has approached the Doctoral process with one's full potential, once the thesis has been submitted for examination, there will likely be three major aspects to deal with and formulate responses to: excess available time, mental stimulation, and possibly 'withdrawal' symptoms.

One can easily spend more than 40 hours per week on a Doctorate. Once the student submits the thesis for examination, s/he is left with a lot of free time. This is a very personal and individual aspect that students need to think about and formulate appropriate responses to.

Most importantly, people, especially family that have been supportive during the Doctoral process must be rewarded for their support – regardless of the outcome. Care should be taken not to overlook this aspect. Arrange activities that one's family enjoys, like holidays and family get-togethers. Give back! This is critical. Beneficiaries must include close friends and mentors who played a supportive role during the completion of the Doctorate.

7.3 Journal articles

Keeping up-to-date, just in case

It is advisable to continue reading new journal articles to stay abreast of the latest research, just in case one needs to enhance the thesis for examination purposes. One does not need to read all new articles, perhaps some that are of interest, but at least be aware of what is happening in the sector that has been researched. This will offer mental stimulation after submission and help ease one back into normal life. The number of articles that one pays attention to will gradually decrease over time. If one has set up a journal article platform to send alerts – it is advisable to just keep monitoring those emails.

7.4 Results

The moment of reckoning

Depending on the university, there may be three examiners – two national and one international. In addition, there will be a coordinating examiner based within the university, who will take the results from each of the three examiners into account. As a result, the student should receive at least four examination reports. One will likely be guided by the coordinating examiner's report.

There are four possible outcomes:

- *Straight pass*: This is where the thesis is accepted without any changes. However, all three examiners need to indicate such.
- *Pass with minor changes*: The thesis is accepted or passed by the examiners, but minor changes are required. The minor changes will then be accepted by the supervisor/s and academic head and most likely, the thesis does not need to go back to the examiners.
- *Major changes*: Firstly, getting this result should be viewed as a positive, as the examiners will point out the weaknesses of the thesis. One will then be required to address those aspects that need to be

enhanced, and, after this, the thesis will go back for examination. Adequately addressing the concerns of examiners should result in the thesis being passed. This is why the result should not be viewed as negative. The student will need to have close interaction with the supervisor/s to understand these weaknesses, and to be able to dissect and formulate a strategy to address the shortcomings in question. One should seek advice from additional experts, if permitted by the supervisor/s and university. With this outcome, one will essentially have to repeat a number of steps with greater intensity, depth and diligence.

- *Straight fail:* The thesis is not accepted. Even with major changes, it will not be at a Doctoral level. However, as the supervisor/s and academic head would have first vetted the thesis to ensure the appropriateness for examination, this outcome may be unlikely. If one receives this result, one should enquire with the university and look at the comments from examiners objectively. In addition, the student should consider engaging a counselor/psychologist to work through the possible stress that will accompany this result.

In many instances, students' theses have been held back from examination by the supervisor/s or the academic head. This is potentially frustrating for the student who may believe that the thesis is ready for examination. The student should remember that the supervisor/s and academic head are the experts in this field and should immediately know if a thesis is of a Doctoral standard or not. The opinion of the student in respect of the standard of the thesis thus becomes irrelevant. It is advisable for the student to work on the aspects raised by the supervisor/s or academic head to improve the quality of the thesis, prior to submission for examination. This will hopefully help avoid the 'major changes' or 'straight fail' result.

7.5 Final thesis

The end, almost

Once the edit requirements from the examiners have been attended to, and the supervisor/s and academic head have signed off on the updated thesis, it is vital that one proofreads the entire thesis again. The final version will be archived in the university library indefinitely, and it is best to ensure accuracy for posterity. This should also include looking for any formatting glitches. Ensure that the final thesis is saved with an appropriate name, e.g. 'Thesis_{name}_VFinal' and this should include an editable and non-editable version. The non-editable version will be required by the university. It is important to check with the university on their specific requirements, as some universities now only require a non-editable electronic version of a thesis. Hard cover printed versions of the thesis may be required.

7.6 Additional and supporting documents

Almost at the end

Some universities will require additional documents. One should check with the administrator. Possible documentation will include publication of a journal article, an abstract and citation of the thesis. An abstract, in this context, is a succinct description of the salient aspects of the research and thesis, usually no more than one page. A citation is a short paragraph about the research that is read out at the graduation ceremony. It is best to submit this via email, so it is traceable.

7.7 Graduation and use of the title

The End

The protocol is that one can only use the title of 'Dr' after graduation. It is a momentous occasion. One has earned it – so enjoy it! Once the student has graduated, the questions that one should ask of oneself are twofold: "How can

I help others with my new qualification, for the betterment of Southern Africa and Africa”?; and “How can I use the qualification for the betterment of myself and my family’s life”?

Be a role model for one’s family, friends and community at large. Remember also to give feedback of the findings to the people, community and organisations that assisted in the research. This will go a long way to build trust, to encourage, motivate and develop in different ways. Who knows? A new project might be developed from the research findings and result in implementation.

8 Supervisor's perspective

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This chapter is written from the perspective of an academic in a Business School in South Africa. A core component of this duty relates to the privilege of being a supervisor to postgraduate, and working Masters and Doctoral students. The Business School context tends to be far more complex than most other academic departments, is characterised by the amalgamation of diverse fields, and therefore has elements that tap into the multi-/inter-/trans-disciplinary space.

This chapter is aimed at students and supervisors alike, as well as academic leaders and programme coordinators, in order to gain a greater understanding of the research journey that postgraduate, working students may face, as well as the potential challenges and suggestions that could be drawn on to ensure a more productive and pleasant research journey. While primarily focused on the Business School context, the chapter could, however, be of relevance for other postgraduate, working students who are immersed in the multi-/inter-/trans-disciplinary space.

Students in a Business School tend to be more mature than typical undergraduate students, and hence are considered adult learners (Andrews and Harris, 2009; Cuncliffe *et al.*, 2002; Knowles, 1980, 1990). They are mostly part-time students, are often employed, and may also have a family life (Lengnick-Hall and Sanders, 1997; Frick *et al.*, 2016). Students in a Business School may have various study options – ranging from Postgraduate Diplomas to Master's and Doctoral programmes. These students generally are sourced from diverse educational backgrounds, with many working in management positions in the public and private sectors in South Africa.

Students in a Business School are not undergraduate students (Fox, 1997; Cuncliffe *et al.*, 2002), neither are they typical full-time postgraduate students who may have progressed in the same field or discipline at the same university over three to five years. The students are generally quite ambitious, are self-driven and bring their work and lived experiences to the class (Lengnick-Hall and Sanders, 1997; Knowles, 1980, 1990; Kolb and Kolb, 2005; Frick *et al.*, 2016). Time is, however, of the essence, as they have to manage various aspects of their lives.

It is through a process of reflective practice that certain observations have been made of the journey that postgraduate students make as they proceed with their research. It is important to, however, note that the context discussed here may be different in other Business Schools. Although not generalisable, this analysis may serve to alert students and supervisors alike to the various possible challenges and emotions that may arise during the journey.

The following three stages have generally been observed:

- Grasping the very process of conducting research;
- Commencing the actual research; and
- Immersion in the research ... in the thick of it.

8.1 Grasping the very process of conducting research

The first stage usually revolves around grasping the very process of conducting research. Students need to have a holistic perspective of the typical steps involved in the research proposal and precisely what each stage entails, which is generally as follows:

- Preparing a research proposal;
- Defending the research proposal;
- Obtaining ethical clearance;
- Conducting fieldwork;
- Data collection (e.g. interviews, questionnaires, focus groups);

- Data analysis;
- Write-up; and
- Examination.

Various emotions will be present. The student is quite often excited about studying again and engaging in something that offers intellectual stimulation and challenge. For many, this could signify a new lease on life and an opportunity to invest in themselves. Various factors could also provide the necessary impetus – such as a promotion, increase in salary, new job, or self-esteem. Students may be excited to work with the supervisor/s, but could also be afraid of the task that lies ahead, especially if they have not studied in a while.

Reality will soon set in and the initial excitement could shift to uncertainty. For some, the transition into a different field, discipline, university or even city or country, could be overwhelming. This is particularly the case at Doctoral level, which requires greater critical thinking. Remember that students in a Business School come from diverse disciplines, which may have entailed studying years back or simply having had a very different approach to research.

Conducting research in the field of business could be challenging for those originating from other disciplines (e.g. education, engineering, science, theology) that may be less familiar with the theoretical concepts relating to Business and Management Studies. Students can often be heard complaining about how many years ago they had last studied or how they are battling with the theory – “*but I worked with formulae or numbers*”. The working postgraduate is, however, able to draw on their practical, real-world organisational experience to make the theory more practical. Networking with other students helps and should be encouraged.

Some students may struggle with the mind-set change required to make the transition from coursework to independent, self-managed research. This change essentially demands immense discipline – there are limited group interactions as found in a lecture or normal classes, and there are also no

assignments, tests or exam dates to keep the student on edge. The need to drive the research and be proactive may present itself as a challenge to some students.

Some may also experience difficulties in working with a supervisor who suddenly becomes like a new boss or manager. The process of submitting a chapter or draft, which then entails nervously awaiting feedback and implementing it, requires courage and resilience, as it is often not easy to receive criticism of one's work. There may be some resentment that builds up, but students need to see the value of the supervisor/s providing critical feedback to improve the quality of their work. This is where personality clashes may arise and where the initial excitement about working with the supervisor/s may be tested. It is important that students keep the momentum and push themselves to new limits, as they allow themselves to be challenged. Postgraduate students need to be willing to make the transition from being in control and being an expert in their workspace – to being a learner.

Postgraduate students have to contend with balancing the various aspects of their lives and hence they require high levels of motivation and self-discipline. The student therefore has to literally plan how to find time to source academic readings, read and engage in sense-making, conceptualise, write-up, collect and analyse data – all with a quality perspective! It is here where the student has to deal with the realisation that sacrifice is inevitable. There is major disruption and life is not normal. Support (from home and work) and inner strength become critical. Constant focus on the original driving forces and end result will pull students through the difficult days. It is equally important to have faith and draw strength from a higher power.

Some students may encounter a challenge with the formal language of academia. Many a student has said "*why do they write like this?*" or "*it's not fun reading these journal articles and they are so long*". The student may speak English as a second-language and English is usually the language used in academic articles. Even those who are from an English-speaking background can battle with the heavy academic language – try making sense of 'epistemology',

'ontology', 'phenomenology', and other terms the first time round. Academic writing could be challenging for those who have not read extensively and become familiar with journal articles. It is at this stage that the student has to be fully convinced of the reasons behind pursuing postgraduate studies, and must demonstrate just how willing and serious they are to the supervisor/s. This is where the 'independence' part of being a researcher has to develop.

8.2 Commencing the actual research

The second stage arises when the student starts to engage the actual research. Students would have probably by now come to terms with having to conduct research, but could encounter a challenge in selecting a topic and developing a sound research proposal. Some may end up with too broad a scope and will need guidance in narrowing down and ensuring that the research is feasible. Supervisors will need to assist with topic identification and crafting – while at the same time considering the work context of the student. Working students, in particular, could end up frustrated with the endless directions that an initial discussion could lead to. It is however critical that the student demonstrate interest in the research area to enable sustained motivation and commitment.

Others may battle with the concept of conducting meaningful research, as opposed to merely rushing to put together an assignment or work report – especially if the research is merely perceived as leading to an extrinsic reward. Some students may be reluctant to make the effort to source academic literature and may instead want to rely only on their real-world experience and observations. This is where students must understand the power and value of conducting scientific research that will have impact – particularly in their own professional practice (Fox et al., 2008). Working students should be encouraged to draw on the advantages of being able to conduct research in their work setting. This is where change becomes possible.

Postgraduate students, in particular, need to spend time engaging previous research – there is simply no way around the need to 'read and read'. Students need to grasp the importance of engaging literature and writing critically. Those

Doctoral and Master's students who are required to present to an academic audience face an additional challenge. They need to be able to present, argue their case, be able to defend the proposed research, and weather seasoned academics who could easily identify weaknesses in the research – both from a content and methodological perspective. It can be a gruelling process, but it is important that the student views the process as constructive and learns from the experience – as it is a developmental process. Students are bound to walk away with a major sense of accomplishment once the proposal has been successfully defended.

Some students may, however, find themselves unintentionally spending less time on their research once they have passed the proposal approval stage, and the supervisor/s need(s) to ensure that the student does not lose the energy they have built up. Requesting timelines, progress reports and meeting regularly could assist in this respect.

Students often grapple with understanding and following the ethical clearance process, which includes gaining approval from gatekeepers in the organisation. The process of completing the ethical clearance forms, preparing informed consent forms, and constructing research instruments – all of which are scrutinised by the supervisor, departmental head of research and a panel in a Research Office at a university, could be considered additional and unexpected pain for the student. And this so soon after having been through the proposal defence. Supervisors should explain and emphasise relevant terminology, for example gatekeepers, informed consent – and remind students of the need to conduct proper ethical research which has impact and relevance, and which can be considered trustworthy and credible (Frick et al., 2016).

Requesting a gatekeeper letter from an employer may not be such an easy task. Students thus have to be very careful when selecting a topic and the study context. There may be politics in the workplace, which the supervisor may be unaware of. The student being on the inside, however, would need to carefully assess the situation and the shadow system, to determine whether the intended research will be approved and whether the target sample would

be willing to participate in the research. The student may even be faced with professional jealousy from colleagues or managers who could feel potentially threatened by an aspiring Doctoral or Master's candidate. It may thus be of value for the student to spend time assessing the organisational context, prior to putting in effort with preparing the research proposal.

8.3 Immersion in the research – in the thick of it

The third stage arises when there is immersion in the research – when the student is actually in the thick of it. This is when the student is actively reviewing literature, collecting and analysing data, and writing up. Students have learnt to constantly and actively source literature and would have hopefully learnt to reference accurately (academic jargon which seemed so foreign at first should now be second nature). The journal articles seem less mundane and an understanding of what the supervisor means by 'critical writing', 'academic writing', 'consistency' and 'recent and relevant literature' suddenly starts to make sense.

This phase usually entails a certain level of excitement and joy, perhaps when the student is able to see the research come together and perhaps when they are starting to envision graduation. The student is able to draw on various skills to successfully complete the thesis – *inter alia* planning, organisation, communication, time management, analysis, and critical thinking. The write-up and assembling of the thesis could be challenging, but is exciting to see. Students need to be reminded not to rush to submit but rather to ensure a quality product that will be well received by the examiners. Students are advised to get others to review their work and provide a critical perspective.

This is when a sense of researcher identity and pride develops. It is then that the student finally develops into a researcher, capable of grasping the 'big picture'. This is also where the supervisor/s is/are able to see how different it is to work with part-time working students versus typical full-time students (who have come through the system). The end point will draw nigh when

the student submits for examination – which brings with it more anxiety, but hopefully also big rewards at the end. It deserves celebration.

The following section presents a few recommendations to facilitate the research process and could be used by other supervisors who are supervising postgraduate working students.

These recommendations include the need to:

- Attend supervision courses or training, and even consider being mentored by more senior colleagues, with the aim of gaining the necessary knowledge and content regarding postgraduate supervision. You will, however, probably still learn best as you gain experience in supervision – learning on the job!
- Be familiar with the university policies and processes pertaining to postgraduate supervision.
- Understand the context and student, and adapt your supervision approach accordingly.
- Be aware of the massive investment required to develop students into researchers – particularly if they are part-time, working students. Have patience and be prepared to guide students in their research journey. Be realistic and expect that some students may perhaps take longer than anticipated or may even unfortunately never complete the thesis due to various factors.
- Develop a customised style of supervision. Supervision entails a fine balance of knowing when to lead and when to manage (Daft, 2018; Northouse, 2016; Shriberg and Shriberg, 2011). Supervisors must be task-centred (the end goal is a tangible product in essence, i.e. a thesis or dissertation), but how one manages or leads the person (the student) who must produce the product is of paramount importance. One will also have to assess the student (e.g. readiness levels, maturity, knowledge, and future trajectory).

- Understand that it is very likely that the amount of leadership vs management will depend on where in the journey the student is. A managerial approach will typically tend to be focused on results (e.g. deadlines for submissions of chapters and drafts), the product, and less on people, and may involve a formal and impersonal approach which emphasises rules and obedience to authority (Daft, 2018; Northouse, 2016; Shriberg and Shriberg, 2011). Leadership, on the other hand, would look at developing others and be future-focused, allow for engagement and participation, and employ a more personal and humane approach that does not only draw on a formal position to get others to achieve outcomes (Daft, 2018; Northouse, 2016; Shriberg and Shriberg, 2011).
- Recognise that the supervision journey will be impacted by how much authority and power one uses – whether this is derived from a formal position (as an academic or supervisor) or whether it is drawn from softer aspects of power, such as personal characteristics or knowledge (Daft, 2018; Northouse, 2016; Shriberg and Shriberg, 2011). Individual traits and characteristics can play a role – how approachable is the supervisor, is the supervisor able to listen, how much input is the student allowed to make, how the supervisor motivates the student, and how the supervisor feels about focusing on developing the student and allowing opportunities for growth.
- Understand that the supervisor has to frequently assume multiple roles – teacher, mentor, counsellor, manager, and leader. It is also important to grasp the various life stages of the student, such as their background, challenges, and ambitions.
- Provide additional research methodology classes for one's own students. Do not merely rely on what was covered in a Research Methodology class. This may have been a while ago or was perhaps not really absorbed at the time. Research tends to become real when the researcher conducts research – it may otherwise remain purely abstract. It is advisable to bring in former (graduated) students to

share perspectives, in order to motivate students. Colleagues can also be brought in to assist with developing the research skills of students. It is important to consider the relevance of the Doctoral degree in being able to contribute to a knowledge-based economy (Ramjugernath *et al.*, 2018). Equally important is the quality of the work. The Doctoral student needs to become an independent thinker, and should also have developed communication and problem-solving skills, as well as other 'soft skills' (Ramjugernath *et al.*, 2018). Ramjugernath *et al.* (2018) further highlight that the Doctoral curriculum should be carefully considered, especially to decide on the purpose. Supervision arrangements to enhance the learning experience could include teams of supervisors, as well as bringing in industry experts to serve as co-supervisors. It is important that there be adequate institutional support and infrastructure for Doctoral students (Ramjugernath *et al.*, 2018).

- Help the student grasp the complexity of research and develop time management skills. How the student deals with pressure and anxiety derived from balancing work, home and studies, will have an impact on the research and on the student. This relates to reflection, as well as reflexivity (Fox *et al.*, 2008). Most postgraduate, working students will be able to attest to how the Doctoral journey tends to result in disruption to the various aspects of the student's life, including relationships with family, spouse, friends, colleagues, and relatives. This often entails a shift in one's very being and the development of a new identity. It is likely that the student may be faced with an array of diverse emotions during the Doctoral journey, including fear, uncertainty, loneliness, and frustration. Completion of the Doctoral degree may also not necessarily translate into a simple 'stepping back into life' or feeling of 'normality'. In fact, upon completion, some students describe having experienced withdrawal symptoms and a strange feeling of not knowing what to do with their time. Immersion into the other aspects of life could also seem strange as students may find themselves asking "*where do I fit in?*". The workplace could

also be difficult to navigate as students may realise that they need a new challenge or may simply feel frustrated at not being recognised for their new qualification or not being granted opportunities to put to good use that which they learnt during the Doctoral journey.

- During the Doctoral journey, the student will probably experience change in the various dimensions, including personal and professional aspects, all of which relate to individual worldviews, paradigms, values and beliefs pertaining to self and others. Intertwined with this, is the student's need for authentic immersion into the research – with the demands accompanying the grueling exploration required to grasp the depth and breadth of the research, field, methodology, academic writing, and demands of becoming a true scholar. Critical qualities from the perspective of the student relate to an awareness of one's self, the ability to adapt to change, being resilient, humble, open-minded, and being able to listen and learn, as well as to have high levels of emotional intelligence; these are all essential to ensure emotional and mental wellbeing. Emotional intelligence refers to the ability to *“perceive, identify, understand, and successfully manage emotions in self and others”* (Daft, 2018, pg. 146). The student will require soft skills to navigate the complexities – and not only content knowledge or technical skills.
- It is important to understand that supervision entails developing a constructive working relationship between the supervisor and student. This becomes even more critical when there is more than one supervisor.

This chapter has presented reflections and experiences of having supervised postgraduate working students in a Business School in South Africa. An awareness of the stages of the research journey and possible challenges that could be faced, may benefit both students and supervisors, and ultimately lead to a more productive and pleasant research journey. Individuals from other disciplines or fields may also benefit.

9 National examiner's perspective

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The purpose of this chapter is to provide useful insight into the process of examination undertaken by a national examiner, as well as articulating what the examiner tends to look for when examining a Doctoral thesis. From the outset, the examination lens that will be adopted by the examiner when evaluating a Doctoral thesis relates to creating new knowledge. In the awarding of the Doctoral degree a candidate needs to illustrate how and why they should be admitted to the community of scholars in a specific domain. This chapter will be broken down into the following areas: 'Doctorateness', Quality of the Doctorate, Comprehensiveness, Critical Thought, and, finally, some Personal Reflections.

9.1 'Doctorateness'

It would be myopic to believe that a Doctorate is just another Master's degree with many more pages, or a document that has a much more detailed literature review. The concept of 'Doctorateness' is much more than that. As a Doctoral candidate it is critically important to possess characteristics of self-discipline and dexterity. One must be committed to the course and remain focused until the final destination is reached. According to Trafford and Leshem (2012), 'Doctorateness' is achieved when a candidate displays exceptional levels of proficiency in the following four areas: 1. Technology of the thesis; 2. Theoretical perspectives; 3. Practice of research; and 4. Demonstrating 'Doctorateness'. From an examiner's perspective, 'Doctorateness' should demonstrate originality by means of utilising the work of other scholars. This could be achieved through methodological innovations, extending the work of others or by identifying new and emerging issues worthy of extensive investigation. Equally important is applying conventional research instruments in distinctive areas of investigation.

During the examination of a Doctoral thesis there are few questions that the examiner attempts to answer:

- Is there evidence of an independent and acceptable level of academic scholarship contributing to the body of knowledge?
- Is there evidence of comprehensive understanding and sound acquaintance of research?
- Is there evidence of a critical voice that depicts thought and analysis, which permeates the thesis?

To sum up, in terms of 'Doctorateness', there should be evidence in the thesis that depicts that a candidate is thinking and writing like a researcher.

9.2 Quality of the Doctorate

As an examiner, one is mindful of the many hours, sacrifice and the different versions that eventually resulted in the final document, and also are excited to read and learn about a novel development in a particular area. There should be no doubt that the quality of the thesis, the compilation of which normally takes place over an extended period coupled with the support of suitably qualified and able supervisors, is worthy of a Doctorate. When reading the abstract and the first two chapters the examiner swiftly determines if the Doctoral candidate's writing style, formulation of an academic argument, interrogation of contemporary literature, and expressing a cogent viewpoint, add to the body of knowledge and are worthy of a Doctoral degree. There should be a coherent link starting from a sound research question strongly supported by a problem statement, to the development of a succinct aim and research objectives. This is followed by a well-structured literature review. Of critical importance in this area are the following:

- The thesis should be free of typographical and grammatical errors;
- There should be proper and consistent use of current citations. In this way one is showing the examiner that one is abreast with the latest dialogue and developments in the area of research; and

- Although volume is important at the level of a Doctorate, it is equally important to show the breadth and depth of the literature review; and it is essential to stand on the shoulders of giants in the area of research – but also to provide a critical analysis of the literature, identify the gaps in the literature, and articulate how the study attempts to close those gaps.

Subsequent to the literature review is the selection and description of a research methodology to be implemented in the study. Based on the area of enquiry, the researcher will determine the appropriate methodology. Of importance in this chapter is the apt selection of a methodology. The candidate needs to convince the examiner of the application of a sound methodology which strengthens the credibility of the research. While it is important to illustrate prowess in the area, it is prudent to show the reason for the selection of such a methodology. As an examiner, one tends to look for pilot testing, and validity and reliability tests. If the candidate has opted for a quantitative paradigm or if a qualitative approach has been adopted – what measures have been implemented to safeguard the integrity of the results? When choosing a mixed method approach, state the reasons why the selection of such an approach is necessary, and then have an explanation of whether the quantitative or qualitative aspects will be implemented first, or concurrently, and then justify reasons for such.

The chapter/s on the findings and discussion allow the Doctoral candidate to express their views. This is where the voice of the candidate needs to be expounded. What makes a good chapter is if there is a strong link between the research question, objectives, literature and the findings. It is wise to utilise literature to support or argue the findings. However, in so doing, one is constantly reminding the examiner how the study is contributing to the body of knowledge. If the purpose of the study was to develop a framework or model – it needs to be highlighted as the focal point of the research. Can one show what the distinguishing factor of the research is? Remember, the Doctoral candidate is a trainee with a strong inclination to be deemed an expert in the field of research.

The conclusions chapter must illustrate how 'the loop has been closed'. An examiner wants to see how the initial research question has been addressed and the research objectives achieved. Remember not to introduce any new literature or findings in this chapter – but rather identify areas for possible future research.

9.3 Comprehensiveness

Often one will come across literature in a Doctoral study that speaks about the breadth and depth of the research. As you are embarking on becoming an expert within a particular field it is important to ensure that all areas in that field have been covered. As a consequence, the candidate must ensure that all leading and seminal information in the discipline has been interrogated. A major shortcoming in a Doctoral study is when there is evidence of a deficiency in the review of the literature. The research methodology used must be of a standard that exemplifies being thorough and meticulous. It is extremely disappointing when there is a plethora of errors which include among others:

- Plagiarism;
- Arbitrary statements which are not connected to the argument;
- Lack of coherence;
- A poorly articulated research question without a clearly delineated area of enquiry;
- Poor referencing; and
- Poor presentation and a lack of thorough language editing.

Comprehensiveness speaks to the entire Doctoral process. Has one ensured that all appendices have been included? Is the Doctoral candidate required to produce a Similarity Index report? Check thoroughly for completeness in each document submitted for examination.

9.4 Critical thought

At the level of a Doctorate, it is expected that a candidate demonstrates a reasonable degree of critical analysis. Unlike other qualifications, a Doctorate needs to demonstrate an engagement of higher-order thinking supported by being well written and offering convincing articulation of thoughts. It should identify and state the gaps in the current literature and use key words that support critical thought – e.g. although, contrary, unlike, and notwithstanding.

9.5 Personal reflections

When I am required to examine a Doctorate I tend to follow a particular process or unwritten checklist. Although the time allocated is normally six to eight weeks, I allow for three weeks of concentrated reading, and one week to write up the report. I begin by scanning through the document and start by reading the acknowledgements. This normally gives me an indication of the time dedicated to the work and the various stakeholders involved in the final output. This is followed by carefully reading the abstract to identify the main reason for the research. The writing style of the abstract also indicates the type of literary work conducted in the study. I then break down the examination process as follows:

- I dedicate time to read each chapter without being interrupted to ensure that I complete a milestone. In Chapter one, I check to see upfront if there is a sound introduction with the use of the contemporary literature. While I accept there may be some old citations, it is important to use the latest citations in the introduction to reinforce the position of an investigation of a current topic. The nature of the problem should be clearly delineated confirming the need for an investigation at the level of a Doctorate. I then check how this has been transformed to the main aim and research objectives of the study. Discussing the chapter outlines of the thesis is also important, as well as what tense has been used in the writing.

- The literature review chapter/s should make for interesting reading and I check if the candidate expresses a critical voice. There should be sound use of previous scholarly work as well as an identification of the gaps in the literature and how the study attempts to close those gaps. The consistent presentation of citations is critical at the level of a Doctorate. During this stage I tend to look for the use of authoritative scholars in the field that have been properly cited. The need for an error free and grammatically correct document cannot be over-emphasised.
- When examining the research methodology chapter, I check to see if a sound and convincing research process has been applied. If there is any weakness in this area, then it casts doubt on the credibility of the findings. I tend to make notes or corrections on the actual page, and write my comments on the opposite page which is normally blank.
- The chapters on the findings or results can be interesting – depending on the type of the research. Be careful if the study is quantitative by design and there are just tables and graphs without sound explanation for the use of such. I thoroughly check the details to ensure there are no errors in the tables and graphs. Likewise, if the study is qualitative in nature, be cautious that the findings are not superficial or lack creativity and/or deep analysis.
- A similar process will be followed for the remaining chapters – depending on the number of chapters in the thesis. The final chapter should end on a high note and should remind the examiner of the reason why the study was undertaken and how the research objectives were achieved. I check for proper use of citations and also carefully examine the reference list. This is one area that is non-negotiable and as a Doctoral candidate one should spend a considerable amount of time getting this perfect.

As a Doctoral student, I encourage students to get other people to read one's work and to identify weaknesses or gaps in the document. I normally say to my

students, “*don’t fall in love with your work to the extent you want to protect it by all costs*”. Allow for critique, as this prepares one to develop a sound document.

One must not discount secondary factors that are worth noting and which may influence the examination process. These include:

- The experience and reputation of the supervisor/s;
- The reputation and ranking of the university where the Doctorate was undertaken; and
- Publications derived from the research.

In summary, every effort should be undertaken by the candidate to produce a credible piece of scholarly work, which results in the determination of one being called an expert within a particular discipline. Remember, my position as a national examiner is to find what is in the study that permits the candidate’s entry into a community of practice as a Doctorate holder.

10 Conclusion

It's never the End

The various situations that we find ourselves in have arisen due to collective actions. Thousands of people have sacrificed so much for the attainment of democracy in Southern Africa. Many of those people were not afforded the opportunity to study – let alone attain a Doctorate. The current generation should not waste this opportunity and not take things for granted.

Due to the legacy of Southern Africa, there is a persistently high level of inequality and various other socio-economic challenges that plague the region. It is the Doctoral candidates' responsibility to contribute to the literature, which will lay the foundation for decreasing the level of inequality in Southern Africa and Africa, not through making the middle class and rich poor, but by empowering all those who have become disenfranchised. The most dangerous person is one who has nothing to lose. How many individuals in Southern Africa and Africa find themselves in this particular position? The numbers of such individuals appear to be growing. Prosperity cannot flourish in such an environment. A country predicated on a false sense of prosperity, bereft of hope, where a few benefit tremendously while the vast majority battle to survive – is headed for turmoil. Many things are not working; many more things continue to fail. The onus lies with those who have the ability to bring about systemic change – to lay the foundation for prosperity. The founding fathers of contemporary Southern Africa brought rights and freedom to the people. It appears that many have forgotten the responsibility that accompanies such rights and expression of freedom.

Doctoral candidates should use the research process for the benefit of Southern Africa and Africa – especially for testing the applicability of existing knowledge and theories within the current contexts and for determining what improvements are required. One might not be able to change the entire system and observe one's contribution, but one will be making a small contribution, which, when aggregated with the contributions of others, will bring about wide-scale systemic change.

A final piece of advice; after graduation, be cautious not to be lured into a false sense of security with one's new qualification and make immediate and drastic changes. Such career-changing decisions should be made from a position of rational thought processes, and not ego.

This book, which brings no financial benefit to the authors, is a small contribution to bring about positive systemic change to Southern Africa.

Be diligent in the Doctoral process. Choose a topic which will uplift the country. Find an implementable solution that is within one's control. Uplift the country and region, one step at a time. Good luck.

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12 Author profiles

Prof Michael Anthony Samuel

Michael A. Samuel is a Professor in the School of Education at the University of KwaZulu-Natal. He holds a Doctorate in Education from the University of Durban-Westville which focused on a Force Field Model of teacher development. He has served as a curriculum designer of innovative Masters and collaborative Doctoral cohort programmes both locally and internationally. He has also been a member of the Ministerial Committee on Teacher Education, assisting the development of national teacher education policy in South Africa. He has served as Dean of the Faculty of Education at the University of KwaZulu-Natal. His research interest focuses on teacher professional development, higher education, life history and narrative inquiry, and Small Island Developing States (SIDS). His book, *Life history research: Epistemology, methodology and representation* has inspired several studies of professional development in education and the health sciences. *Continuity, complexity and change: Teacher education in Mauritius*, explores the challenges and possibilities facing a small island in negotiating its presence in the global and international discourse of comparative higher education and teacher education. His new book *Disrupting higher education curriculum: Undoing cognitive damage* explores options for the imaginative redirection of higher education curriculum design. He is the recipient of the Turquoise Harmony Institute's National Ubuntu Award for Contribution to Education. His current interests focus on designing and supporting postgraduate studies.

Dr Sean O'Donoghue

Sean O'Donoghue has a Doctorate in marine pelagic ecology obtained from the University of KwaZulu-Natal in 2010. In March 2011, Sean joined eThekweni Municipality where he manages the Climate Change Adaptation Branch. A key focus of the Branch is Community Ecosystem Based Adaptation, providing work opportunities for Durban's indigent populations. He manages a number of research, inter-city and community partnership projects, and is working closely with the C40 Cities Climate Leadership Group, particularly the Cities

Finance Facility, who are helping to develop a business case for the city to self-fund its community stream management programme, Sihlanzimvelo. O'Donoghue is an Intergovernmental Panel on Climate Change lead author for the Special Report on Oceans and the Cryosphere in a Changing Climate.

Prof Paul E. Green

Paul Edmund Green is currently Dean of the Faculty of Business and Management Sciences at the Cape Peninsula University of Technology. He has previously occupied various positions at the Durban University of Technology. He holds a PhD from the University of KwaZulu-Natal with specialisation in Systems Thinking and is also registered with the South African Institute of Professional Accountants. His research focuses on developing applicable frameworks for Universities of Technology (UOTs) on the evaluation of service quality using a Systems Approach; Service System Interactions at tertiary institutions; and the application of an Analytic Hierarchy Process for the evaluation of Service. His current research involves the systemic analysis of service provisioning of government institutions using complexity theory. His scientific research outputs are published in Department of Higher Education and Training (DHET) accredited journals; accredited international and national conference proceedings; and in book chapters. He has supervised numerous postgraduate students at Masters, Doctoral and Post-Doctoral degree level.

Dr Irenie Chakoma

Irenie Chakoma is an Animal Scientist with over 25 years of experience in forage production and marketing research in Zimbabwe. She trained in Agriculture, specialising on forage production and business administration. She received her Doctorate degree from the University of KwaZulu-Natal in 2018. She is currently employed as a Research Associate at the International Livestock Research Institute (ILRI), based in Harare. This is besides having worked for the Ministry of Agriculture (Zimbabwe) within the Department of Research, in the Agribusiness Unit of the banking sector, and in humanitarian/development organisations. Some areas of focus are on developing innovative, adaptable and sustainable forage-based technologies for livestock improvement in rural

areas. She has interacted with various local and international research, and profit and not-for-profit organisations in areas of agriculture and business development in countries including Malawi, Mozambique, South Africa and Zimbabwe. She has extensive experience with pasture research, value chains, engaging with smallholder farmers and linking them to markets. She has authored and co-authored several publications on forage and livestock technologies and value chains.

Dr Sagaren Govender

Sagaren Govender has been with the KwaZulu-Natal Department of Health: Orthopaedic Services since 1985, where he has held numerous positions. He is currently the Assistant Director for the Sub-Directorate – Health Technology Services. He has successfully completed the following qualifications: National Diploma: Public Management and Administration (1995): TSA/Unisa; National Higher Diploma: Public Management and Administration (1997): TSA/Unisa; Advanced Management Development Programme (2011): Public Administration Leadership and Management Academy (PALAMA) in association with the University of the Free State; Postgraduate Diploma: Leadership and Management (2013): University of KwaZulu-Natal; Master's degree in Commerce: Leadership Studies (2014): University of KwaZulu-Natal; and a Doctorate in Leadership Studies (2017): University of KwaZulu-Natal. He has recently published a journal article in an international Journal of Multidisciplinary Healthcare entitled 'Examining leadership as a strategy to enhance health care service delivery in regional hospitals in South Africa'. He is working on another journal article which will draw on a systems thinking lens to examine the role of leadership in healthcare service delivery. He has also presented papers at various conferences, both nationally and internationally. Dr Govender is currently an External Examiner for Master's students at the GSB&L at the University of KwaZulu-Natal.

Mr Ike Phaswana

Ike Phaswana is a Doctoral candidate at the University of KwaZulu-Natal. His qualifications include: BComEd (University of the North); BComHons (Unisa) and MBA (University of Natal). He is currently the Head of Credit Governance: Africa Regions for a major South African bank with subsidiaries in Africa and internationally. He is passionate about Africa and is inspired by the 'Ubuntu' concept and the seminal quote by the Roman Philosopher, Pliny the Elder (23-79 AD) who said: "*Ex Africa semper aliquid novi*" (Out of Africa there is always something new). He is a proud supporter of HeForShe, a United Nations Women Solidarity Movement for Gender equality; and the Nelson Mandela and Ahmed Kathrada Foundations. In 2001 he was selected to represent South Africa in the 'Best and Brightest African Training Programme' held in the United States of America (USA). The month-long accelerated banking training was based at the then second largest bank in the world, JP Morgan Bank (formerly Chase Manhattan Bank) in New York and at the Mellon Bank in Philadelphia.

Mr Cliff Naidoo

Cliff Naidoo is a businessman who has been involved in the transportation, retail, wholesale and publication industries. In all the sectors where he held interests, his businesses were always developed to be leaders within the relevant industry. One of his primary focuses is spirituality, having in-depth experience in the thematic area over 25 years. He has also lectured various classes. Currently, he has developed and is rolling out the Wealth Education Development Programme (WEDP). This Programme aims to assist the youth and general population develop a better understanding of finance (financial literacy), develop life skills, and become contributors in shaping stable and progressive communities. He is the Founder, Publisher and Editor of *TheMag News*, which focuses on individual development and he has created the blueprint for the establishment of the Inner West Business Support (IWBS), in Durban: South Africa, of which he is also a co-initiator.

Prof Muhammad Hoque

Muhammad Hoque is an Associate Professor in the GSB&L at the University of KwaZulu-Natal and previously served as the Academic Leader for Higher Degrees and Research in the same School. Upon completion of his Master's degree in statistics at the University of KwaZulu-Natal, South Africa, Prof Hoque joined the faculty of Mathematical Statistics at the University of KwaZulu-Natal where he taught statistics to undergraduate students. He later moved to the Mangosuthu University of Technology in 2005 where he taught statistics to engineering and management students. Before joining the GSB&L at the University of KwaZulu-Natal, he taught Biostatistics to postgraduate students at the University of Limpopo (Medunsa Campus) and supervised postgraduate students. Currently he is teaching Business Statistics to Master of Business Administration students and is supervising postgraduate students. Prof Hoque received his PhD in Medical Science from the University of Antwerp, Belgium. He is the recipient of many research awards. Prof Hoque received the "Best Overall Upcoming Researcher" Research Excellence Award from the University of Limpopo.

Prof Abdulla Kader

Abdulla Kader is currently a Senior Manager within the Leadership and Development Unit at a large South African bank. His primary responsibility is to partner with business and ensure that staff are competent to perform at optimal levels. His work in the corporate world has exposed him to the complexity of managing the duality of revenue growth and cost efficiency and ensuring that the execution and measurements of success to clients, staff, shareholders and the organisation are effective and measureable. Prof. Kader is an Adjunct Lecturer at the GSB&L, and School of Management at the University of KwaZulu-Natal and the Management College of South Africa (MANCOSA), where he lectures to MBA and MCom students in Advanced Strategy, Managing Strategic Change and Research Methodology. Prof. Kader has co-authored publications in international journals, is supervising Doctoral and MBA students and has moderated public debates. He is also the lead in reviewing and assisting the Junior Management Programme (JMP) and Middle

Management Programme (MMP) at the Gordon Institute of Business Science. He is a business coach, the qualification for which was attained through Consciousness Coaching accredited by the International Coaching Federation. He is a research fellow at the University of KwaZulu-Natal and is a visiting Professor at Novosibirsk State University of Law and Economics in Russia. He is also a Senior Research Associate at the University of Johannesburg. Prof. Kader is the trustee of a religious organisation and has been instrumental in establishing a fully-fledged clinic in an impoverished rural area that serves the less fortunate.

Prof Cecile N. Gerwel Proches

Cecile N. Gerwel Proches is an Academic in the GSB&L at the University of KwaZulu-Natal in Durban, South Africa. She holds a PhD (Leadership Studies), MCom (Leadership Studies), BCom Hons (Industrial & Organisational Psychology) and a BCom. At present, she lectures the Leadership and Research module in the Postgraduate Diploma in Leadership to managers and leaders from the private and public sectors in South Africa, as well as those who are aspiring to reach leadership positions. She is the module co-ordinator of the Master of Business Administration (MBA) Leadership module, and also served as Programme Co-ordinator of the Postgraduate Diploma in Leadership for several years. Gerwel Proches has also taught in the Management Development Programme (MDP) and the Managing for Impact (MFI) programmes. She has successfully supervised a large number of postgraduate students, including Master's students (MBA and Leadership Studies) and Doctoral students (PhD in Leadership Studies and Doctor of Business Administration). Her research, supervisory and consulting interests include leadership, organisational behaviour, systems thinking, complexity theory and research methodologies. She has presented at various national and international conferences and has published a number of papers in academic journals.

Dr Magash Naidoo

Magash Naidoo graduated from the GSB&L at the University of KwaZulu-Natal with a Doctor of Business Administration. His research focused on analysing the green economy using Complex Adaptive Systems and Agent-based Computational Economics. Among his other qualifications, he also holds a MCom degree from the same university, which focused on Climate Change Mitigation Policy. He has experience in the energy, climate change, retail and automotive sectors. The vast majority of his career has been with eThekweni Municipality, where he has performed Management and Senior Management roles. One of his many focus areas is helping people grow, based on lessons learnt, so that others can develop from a more informed position. This focus was part of the inspiration for this book. He always strives to push the limits of what is possible for the benefit of the collective.