



TITLE: A MODEL FOR CONTEXT RELEVANT APPROACH TO INCREASE DOCTORAL GRADUATES OUTPUT OF A FACULTY OF A UNIVERSITY OF TECHNOLOGY IN THE WESTERN CAPE.

By

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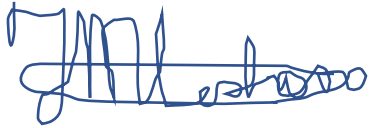
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In Sotho, my home language, is the popular proverb “motho ke motho ka batho” translated as “...*You are who you are because of other people.*” Inevitably there are people who have meant much to me that I wish to acknowledge as having made this endeavour successful. I give gratitude to the Creator who provided me with strength and “compatriots” on this journey, in the later years of my life. God gave me for a supervisor Dr. Larry E. Tamakga Jowah, unrelenting and always pushing me to “make it against all odds.” I could not have managed it without his guidance and his “keep on keeping on” attitude. It was in his office that I got the indispensable support, and encouragement. Miss Lisa Mhembere and Mr. Yanga Irvin Gwebityala, both master’s graduates who directed me on all matters technical and IT. This is not belittling in anywhere, the moral support from Mr Fred Nyambandi, Mr Thandabantu Nkwenkwezi, Ms Mpumi Mtirara and Mr Mbuso Tshaka. I don’t have enough space to say it all, but “*Thank You All.*”

ABSTRACT

There is a “decided” relationship between the level of education and the level of development in a country, a higher number of postgraduate qualifications is intrinsically related to the levels of development in a country. South Africa, like any other country, will equally be measured on the basis of the numbers of people doing postgraduate studies as a proportion of the country’s population. The current state as indicated by government statements and development monitors in the SADCC region indicates that the numbers proceeding to masters and doctoral qualifications **are exceedingly low**. This study focused on the possible causes of the low masters and doctoral graduates in a country rated as having the highest standard of education on the continent. Whilst there will be more people getting up to masters, the doctoral aspirants are disturbingly low, **this study focused on this cohort at a selected institution of higher learning**. The study used a descriptive research design and a mixed research methodology as this was expected to help in describing the phenomenon. The research was at a selected institute and targeting specifically people who had masters’ degrees, **had worked in the system (academic environment) for 10 years, had access to funded doctoral qualifications**, but never proceeded to doctoral level. The nature of the target population required purposive (judgmental) sampling to allow for accuracy in the choosing of the sample for the research. **A structured questionnaire with open ended questions and a Likert scale for ranking was used**, many reasons are given but primarily most people did not have ambition even though there was always someone to blame. Recommendations and suggestions for managing the situation and future studies are detailed in the discussion on findings.

KEY WORDS; Postgraduate education, importance of education to an economy, culture and altitude in education, **traditional impediments to academic achievements and Educational cognitive dissonance.**

DEDICATION

This is dedicated to me as the author of this work and also dedicated to my supervisor Dr Larry Jowah who worked tirelessly in supervising me. Lastly, this work is dedicated to both my parents; Kapeng and Seipati Leshoro who brought me up and looked well after me although at times it was tough but I am where I am because of them and lastly the dedication is also to my two daughters; Matheko and Seipati Leshoro.

DEFINITION OF CONCEPTS

Postgraduate education, or graduate education; academic or any other qualifications for which a first or bachelor's degree generally is required – this is considered part of higher education (Chisholm,2018:5) .

Tertiary education; also known as third-level, third-stage or postsecondary education generally associated with universities and other institutions of higher learning beyond secondary school education (The World Bank's 2019 World Development Report).

Cultural Values; believes, perceptions and or practices upheld in a community or society and regarded as the foundation of that particular society. Regarded as the way of life in that society, whether education or otherwise (Crew, 2018:4).

Social Structures; the way society is being organised. These structures are like the foundation of all facets of the society with education inclusive, and South Africa is no exception. These structures determine or easily show how the society is united or fragmented (Mbeki: 2017.1).

Cognitive dissonance; the presence of two or more views that may be utilised, but the individual is caught up in between these without knowing what to be or believe as authentic (Blitzer, 2019:53)

Funding; about financing education, either through loans or bursaries, meant to alleviate the financial burden of student (Price-Waterhouse-Coopers South Africa: 2012.1-2).

Impact of Low Tertiary Numbers; low numbers in post school number of students in tertiary institutions [bachelor's degree, master's degree or doctoral degree including post high school certificates / diplomas / qualifications (Oketch and McCown: 2014.1).

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CHAPTER 1

BACKGROUND AND INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

Research has established a correlation between the level of education in a country and the level of development in the same country. In the Southern African Development Community (SADC), of which South Africa is a member, the annual output of doctorate graduates was 2 000 total in 2018 (Morrow ,2010:5), 1 800 of whom were graduated in South Africa. This suggests that the remainder was shared between the other 15 SADC members. South Africa is a member of BRICS (Brazil, Russia, India, China and South Africa), Brazil, in the same year 1 800 doctoral throughputs from one city (Sao Paolo), whereas South Africa was producing that as a country. The rest of the BRICS member states have high yearly doctoral throughputs unparalleled anywhere on the African continent.

From the 10 best universities on the continent, 8 are South African, yet South Africa (population of 57 million people) at its best as a country graduates what Rio de Janeiro (a city of 6.748 million people) graduated in that one year (2018). The study focused on identifying the factors, be they structural or social that negatively impact on the progression of masters' graduates to doctoral level when they themselves work in an academic environment (Padrag, 2016; 2-3).

1.2. PROBLEM STATEMENT

South Africa, like any developing country aspires to develop to levels that will help reduce if not eradicate poverty in the country. As alluded to in the preceding review, there is a direct link between the population ratios to the number of doctoral graduates and the level of a country's economic and social development. Whilst South Africa is highly rated for its high standard of university education on the continent, the country fails to produce the expected levels and numbers of doctoral graduates in line with other countries with intermediate economies. The expectation is, since South Africa has such a highly rated standard of tertiary education on the continent, the country should produce out a

proportionally high number of doctoral graduates. The focus is on the masters graduates, employed in the academic space, who have access to both information and funding, and yet they have worked for long without taking up doctoral studies. This has prompted the quest to understand better the causal factors for the failure of the system to produce the desired number of doctoral graduates yearly. A deep understanding of the phenomenon is envisaged, leading to **the possible construction** of model that may assist in turning around the situation to mitigate the economic quagmire the country is in.

1.3. SIGNIFICANCE OF THE STUDY

An in-depth understanding of the phenomenon will assist in the developing of solutions and models to mitigate the impact of this stalemate on national development. This may be used by both institutions of higher learning and the government to counter the negative effects and causes to higher doctoral throughputs in the country.

1.4. AIM AND OBJECTIVES OF THE STUDY

AIM; is to provide adequate understanding of the situation and possible reasons (factors / causes) for the **low doctoral output amongst people already in the system**. These individuals have access to everything deemed necessary, but they do not see the need or are blocked from proceeding to doctoral levels.

OBJECTIVES; these are achievable expectations and outcome-based research intentions by the researcher (Backhouse, 2009:5), as derived from the problem statement. The research objectives are primarily extracted from the problem statement (the study gap) and are an interpretation of the study gap. In this study, the research objectives were divided or classified into two, namely, primary objective and secondary objectives.

1.5. RESEARCH OBJECTIVES

A research objective as is the expectations of the researcher on what would likely come out from the undertaking, this is classified into two types, namely, primary, and secondary research objectives.

1.5.1. Primary research objective

Identify factors that discourage university employees with master's qualification from advancing to doctoral level when they can be funded

1.5.2. Secondary research objectives

1. Identify factors that discourage individuals with masters' degrees from pursuing doctoral qualifications
2. Identify what it would take for a holder of a masters' degree to want to proceed to acquire a doctoral qualification
3. Identify if the employees with masters' degrees know of any material benefits that can be accrued from possessing a doctoral qualification
4. Identify if the employees with masters' qualifications would meet the minimum standards for entry into a doctoral program
5. Identify any structural and/ or operational systems that impact negatively on the process or desire to acquire a doctoral qualification
6. Identify if the employees with master's degrees may be impacted by the 'black tax syndrome and cannot study further

1.6. RESEARCH QUESTION

Traditionally the research question/s would follow the research objectives since the questions are the part of the research that seeks to extract data in the research. The research questions here have been divided into two types – main question and sub-questions. The questions assisted in the determination of the literature to be reviewed for the study, and these have been listed below as;

1.6.1. Main research question

Why is it difficult for a university employee with a masters' degree, having worked for 10 years or more, to do a doctorate, which is funded by the university?

1.6.2. Secondary research questions (Sub-Questions)

Secondary or sub-questions are a breakdown or elaboration of the main research question into finer components for a full understanding. These assisted in the determination of what literature was relevance in the construction of the thesis details, in that literature reviewed was related to the questions. The sub-questions asked and to be responded to by the findings are.

1. What factors discourage university employees with masters' degrees from proceeding to doctoral level when they can be funded?
2. What factors would encourage a university employee holding a master's degree from studying for a paid for doctorate?
3. What knowledge do university employees with master's degrees have about the possible benefits of studying for a doctorate?
4. Do the university employees with masters' degrees meet the minimum standards to study for a funded doctorate?
5. What structural or operational systems impede master's graduates employed by the university from proceeding to doctorates?

THE HYPOTHESIS

By definition a hypothesis is an assertion or presumption denoting a relationship(s) between variables, which can be subjected to research or test (Jowah, 2015:77). These are presumptions about the intended study which will guide the study process, these are divisible into 3 types, namely; simple hypothesis, complex hypothesis and the null hypothesis.

1.7 PROPOSED THEORETICAL MODEL AND HYPOTHESES

There are three (3) sets of directional hypotheses

First set of hypotheses:

1.7.1 First set of hypotheses:

H1.1 There is a relationship between having a masters' degree and a desire to want to proceed to a doctorate.

H1.2 There is a relationship between working in a university environment and wanting to have a doctoral qualification

H1.3 There is a relationship between observed benefits for doctoral studies and the willingness to pursue a doctorate

H1.4 There is a relationship between observed “doctorate holder stagnation” and the desire of a masters’ employee to want a doctorate

H1.5 There is a relationship between availability of funding and the desire for a masters’ graduate to have a doctorate

H1.6 There is a relationship between guaranteed promotion and the desire to acquire a doctorate qualification

1.7.2 Second set of hypotheses:

H2.1 There is a relationship between current salary with masters and higher salary after doctorate.

1.7.3 Third set of hypotheses:

H3.1 There is a relationship between communicated prospective benefits and the motivation to study further for a masters’ degree holder

H3.2 There is a relationship between prospective promotion for advancing studies and the willingness to study further.

H3.3 There is a relationship between an encouraging and conducive environment for studying and the desire to pursue a doctorate

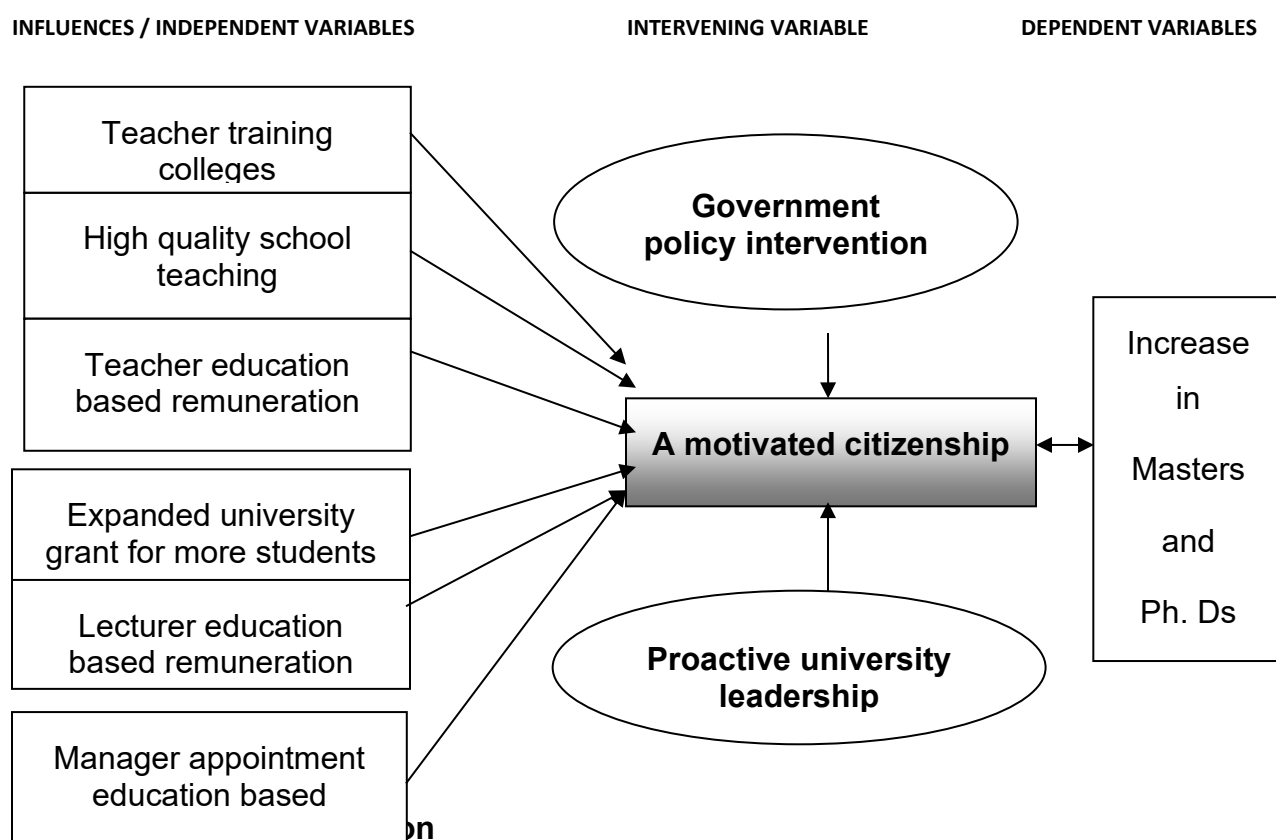
1.7.4. THE THEORETICAL FRAMEWORK

The research has resulted in the construction of a conceptual framework which should help ameliorate the untenable state of poor doctorates throughputs. The study seeks to identify causal factors with the intention to find a solution to this situation and help the country towards social and economic development.

The determination to do a Ph. D level is not a stand-alone, as it involves both intrinsic and extrinsic motivation factors. Whilst levels of motivation are individually based, the personality traits of the individuals’ matter, overall the structure and the environment create a reason for people to study further. The theoretical framework proposed

establishes the relationships and interconnectedness of the independent variables, to the intervening and dependent variables. Diagrammatically, the framework is illustrated in figure 1.1 below.

Figure 1.1 Theoretical model for increased Ph. D output



The researcher suggests a deliberate programme should be embarked on, since levels of literacy and rate of doctoral outputs impact on economic and social development. The current system where graduation of masters and doctoral students provides a university with a grant does not seem to have been taken advantage of by the university management. Briefly the provisional conceptual model is built around the identified variables, namely, independent, dependent and intervening variables.

1. Independent variables: these variables can presumably stand alone, but they have impact on the by-product of that process.

- **Teacher training colleges** (say 2 per every province) will produce the much needed teachers for both primary and secondary school teachers. The country has a critical

shortage of teachers at that level and the country continues to score very poorly on the internal scale, alluded to in the literature (Adam et al,2012:21).

- A well trained - quality teacher released to the school system will give exactly what they were trained to do, quality teaching. Inevitably, their motivation becomes contagious on the children they teach who will consider their teachers as their role models, and thus start a process of a motivated community (Bokana, 2014:261).
- **A well paid teacher** is a happy employee, it is expected that such a high quality teacher with a descent remuneration will want to keep their job and produce more (Fisher et al, 2011:6). The more satisfied the employee the more they are likely to play the role model function, keep their job and infect their learners positively.
- **Good remuneration based on level of education** will always give individual reasons to want to proceed to higher levels of education if it pays to (Teise et al, 2016:68). Promotion in the school system should be based on the level of education primarily, as this will encourage pursuance of higher qualifications, because it pays.

2. **Intervening variables;** for these independent variables to be there in the first place, there needs to be an intervention, and this should be seen as from the government and by employment of effective leaders.

- **Government policies and intervention** is necessary since the failure to lift up the education status impacts negatively on government's economic development programs. The government can increase or improve the structure of university funding to include more of the students in the "missing middle" who currently do not qualify for the current NSFAS.
- **A purposeful / proactive university management** needs to use education to promote people into management positions, within the university structure as a whole. Can a doctorate graduate, who lectures a student who passes a bachelor's or master's degree, be less able to manage what is given to the former student? Most managers have less qualifications than the lecturers that taught them but are generally paid more than their lecturers.

- Many Ph. Ds (in universities) sit at level 8 and are managed by people with basic or masters' degrees who sit at level 6, two levels above a doctorate graduate. *Why should such an individual aspire to do a doctorate when they already earn more than the Ph. D graduate?* Education has no value then in the universities themselves, and most people making decisions there have no Ph. Ds and yet they are expected to boast the levels of Ph. D qualifications.
3. **Dependent variables:** the presence of these independent variables as a direct result of the intervening variables above, inevitably affects the rest of the situation. This brings about a society that has value for education, where it is rewarding to get educated, getting a better salary, and living standards become the motivation to study further.

1.8. LITERATURE REVIEW/BACKGROUND

Higher Education, especially at Master's and Doctoral levels, is critically needed as a highly educated population is capable of helping to uplift the economy of the country. This higher education needs very determined students to achieve it. These students should also be assisted in their pursuit of these degrees in order to have motivation in studying these degrees. This is all about moving out of poverty and having permanent social security. Unfortunately, the number of graduates in both degrees has always been very low and needs to be attended to, especially the PhD degree (Ramdass & Kruger, 2014:17-18).

Dewey (2014: 1-4), stated that education is the process or system of acquiring knowledge irrespective of its level. It is a skill that can be used by anyone who undertakes its worth. Education involves skill, values, beliefs as well as habits and is also a system of empowerment in one way or another. Badat (2010:12) indicated that education could be divided into two sub-sets, namely formal and informal. Formal education is about attending school full-time or part-time it is a form of education that takes place in a classroom. Informal education is all about learning from others, and on most occasions,

it is based on storytelling from one generation to another. Education originated in Egypt pre-millennium, and the first academics were the Egyptians who taught many foreigners, including Aristotle of Greece, and others who followed (Spaull, 2013:13).

Redden (2009:2-5), indicated that education has been categorised into several levels and they are from pre-school/primary up to tertiary levels and in this level, the Doctoral degree being the terminal qualification. Education is also associated with several aspects such as social and economic development, entrepreneurship, the opposite of which is poverty. All the aspects mentioned above need resources for them to be appropriately implemented and managed. It is with good/enough resources that all these aspects can succeed (Ocampo, 2004:24).

In addition, for these aspects to be implemented successfully, there is a need for dedicated and able leadership. If well managed, resources can lead to successful execution of the projects and allow for the expected and intended development. For the successful execution of these programmes, there is a need for relevant competencies put together with honesty, dedication, and appropriate organisational skills (Davies, 2011:32).

Gouws (2002:41-8), indicated that education is beneficial in that if people are well educated, they will always reap the rewards. In addition, international recognition can be attained through educational links; a benefit for both students and lecturers. Finally, a good education should open the doors of success anywhere and anytime to the graduates. (Chisholm, 2018:4-5).

Joselyn and Mitchell (2006: 2-9) indicated that the status of our education in general needs the Government to take total control and not to allow anyone to disrupt the education system. Another point in this regard is that most of our teachers are ill-trained and thus ill-equipped and ill-disciplined (Spaull, 2013:13). The high failure rate and ill-discipline in our lower levels of schooling should be put mainly on the doorstep of this teachers' labour union as it is more interested in the union affairs than teaching the pupils (Modisaotsile, 2012:72).

When reaching university, these students are ill-equipped and cannot cope with the higher standards. In the interim, very few of them can reach either Masters or Doctoral

degrees. This inadequate preparation from lower levels of schooling might be one reason at a later stage, leading to the decline or stagnation in the registration of masters and doctoral degrees (Masondo, 2016:4-5).

Apart from the State, the Business world must also help and encourage more applications for the two degrees. Braham (2018:3) then indicated that the country needs a well-educated working group that can help with the reorganisation of the economy if the need arises. It is better to have more candidates than no candidates at all.

Houseman (2016:10-11) is writing on points, that are based on focusing on the bad status of South African education in general. This educational problem is experienced in most levels, from primary to tertiary, within the different population groups and the origins of their problems and their magnitude.

1.8.1. The Need for More Doctoral Graduates in South Africa.

In South Africa, there is a real need for higher education, especially at master's and Doctoral levels. The slow numbers of pass rates in these two most senior degrees are alarming and need to be halted as soon as possible (Willman,2011:92). The slow throughput/graduate numbers, especially with the Doctoral degree, should be halted at whatever cost and not only by the State but by all those who have the academic future of the country at heart, including big business. Registration can be achieved by financial support for the prospective candidates and the assurance of employment on completing the degree (Forkiva and Ramdass, 2012:1-4).

Teffera (2015;21) also indicated that for the sake of the country, both the government and the private sector should absorb the PhD graduates, and these should not only get stuck in the academic world. However, before that, all sectors of the country should help fund the PhD to help increase the slow numbers of PhD graduates at the end of the academic year, and all this is to the country's benefit at a later stage.

Crew (2018:4) indicated that education is not the State's responsibility only but all those who are the legitimate citizens of the country and are prepared to help develop it. Moreover, a highly qualified workforce can help develop the country as quickly as

unexpected (Teffera, 2015:14). Thus eligible candidates should be encouraged to enrol for masters and PhD degrees. Another reason for the need for more PhD graduates in South Africa, according to Mouton (2010:3-4,) is that PhD graduates as researchers are highly valuable to the country's economy indicating that, by 2010, only 40% of South Africa's full academics had a PhD. The problem in this regard, is that when all the current crop of Doctoral graduates retire, then how will we replace them as the production rate is very low. Crew (2018:3), said that most PhDs in South Africa are from outside the country, and the bulk of them did study their PhD here in South Africa.

Most institutions have recruited them, which is good for higher education, but that is not the solution to the current predicament. South Africa needs to try at all costs to increase its home-born PhD graduates for the country's future at large. If our PhD graduates are being dominated by other outside graduates, with all our resources, why can't South Africa increase its throughput of PhD graduates? If the situation does not improve, then this country's education system will be stagnant and downgraded

1.8.2. Reasons for slow throughput of PhD graduates in South Africa

Blitcher & Associates (2012:10-12) stated that there are reasons for the low or slow numbers of PhD graduates at the end of the academic year; the numbers are not decreasing but are stable and very slow if the State and the business are serious about solving this slow throughput of PhD in particular, the sooner that begins, the better for all. Houseman (2016:2-3) also indicated that, the problem of slow or low numbers of PhD graduates does not lie with the universities but goes back to the number of high school graduates, very few of them qualify and they are not quality material for university. Thus, many learners fail to get admission into university-many students fail to get admission into B. Tech and honours because of space.

Crew (2018:5) stated that another method of increasing the PhD numbers is sending students to study PhD overseas, but in this regard, there should be funding made available. Alternatively, another way of increasing PhD numbers is by targeting promising master's students to enrol for the PhD, and in this regard, funding from both the Government and the Private sector will have to be made available.

Houseman (2016:5) postulated that whether at masters or doctoral, higher education can still be studied in different levels, such as entrepreneurship, which is vital for job creation and the upliftment of the country's economy. Education in this regard, especially in entrepreneurship, is based on two aspects, firstly; theories of entrepreneurship, and secondly; about instilling the culture of business. (Blitzer , 2019:50).

1.8.3. Problems related to slow numbers of PhD graduates

There are several social aspects that emanate from the above reasons for the slow numbers of doctoral graduates in South Africa, and poverty is one of them. According to Berg et al (2012:5), education and poverty in South Africa easily correlate with race. The majority of blacks are less educated than most other population groups. In addition, there are fewer masters and doctoral people amongst the Black population group. Thus in most instances, blacks are rooted at the bottom of the social strata. Duncan and Murname (2010:3) indicated that poverty plays a huge role in fewer numbers in both masters and doctoral degrees, but that cannot be a permanent excuse. The country needs to alleviate poverty and attempt to attract more masters and doctoral candidates to enrol.

Thus, after Masters', they decide to go for employment. In addition, some might be victims of loans they took for study, and now they want to remove that burden once and for all, and the only way is to work and pay back the loan. Sheperd and Cloete(2015:4) also indicated that one of the main problems for having fewer PhD graduates is that few masters candidates come from the black communities, with a primary factor being poverty.

Bitzer (2019; 51-53) indicated that the Ph.D problem is also embedded in the racial proportion in the country, more Indians and whites proportionally have higher PhD numbers than blacks due to poverty as already alluded to. South Africa cannot compete with other BRICKS member countries in the production of doctoral graduates...why?

Dell (2016:1), indicated that for the slow doctoral graduate production, lack of proper supervision at that level would forever hamper the throughput of graduates. Unless the institutions do something, the academic force will also decline as no well-qualified

succession will follow. Therefore, to increase the number of Doctoral graduates, this intentional development of both honours and master's degrees needs to be promoted: no master's degrees, then no doctoral degrees.

Blitzer (2019; 53) indicated that a doctorate is not as easy as many might think: there are several hurdles on the way, such as undergraduate success, honours as well as master's students' dropouts. Thus, the Higher Education officials need to develop strategies to combat that, such as making funds available. The Government needs to take the lead in this aspect of masters and doctoral degrees as these two most senior degrees will not only benefit the individuals but the entire country.

Braham (2018; 196) stated that the output of doctoral degrees for the whole country is less than a single university in São Paulo, Brazil. In this regard, it is not that the numbers are decreasing, but it is just that the country as a whole produces a very low number of PhD graduates, and that is not good for the country because as many as possible doctoral graduates are needed for the benefit of the country.

What needs to be noticed is that both South Africa and Brazil are economically comparable, but why is Brazil in just one university producing more doctoral graduates than the whole of South Africa? This indicates that there is something that Brazil is doing correctly that South Africa is failing to do. For instance, South Africa produces only 1 423 compared to São Paulo university's 2 244 doctoral graduates in a year.

Mouton (2010:4-5) stated that part of the problem of less doctoral graduates, is that there is little money made available for PhD studies, and that could be part of the solution, to avail more money for the doctoral degree. This, on its own, will entice candidates to enrol for PhD degrees, however, the Government should be taking the leading role as the national custodian of education.

Ferreira and Litchfield (2012:32) emphasised that South African households earn far less than their Latin American counterparts, making them unable to cater for their offspring to go as far as master's and doctorate levels. Their financial problems are forever dragging them down with no chance at all of a reprieve. In addition to this, those who are lucky to go as far as the junior degree are very few, which significantly affects the enrolment of

both masters and doctorate levels on yearly basis. Matlala (2021:24) refers to this as the black tax syndrome, in that young blacks as soon as they have their first exit university qualification, if they do, they immediately look for a job because of the poverty at home. Once they get involved in work (if they find it), the focus is on alleviating poverty from the families from which they come from (Spaull,2013:5)

Tertiary education is beneficial in the sense that it can help an individual to develop himself and also help develop others (Teise et al,2016:72) . Its benefits can be seen when the individual can go up the social strata faster than anticipated; acquiring tertiary education is very difficult, especially from a poor background. However, if individuals are well educated, they can easily afford whatever they want or need as they will be in the upper-income bracket (Sokana, 2010:1-2).

Thornton (2009:2-3) indicates that with good education, an individual stands a better chance of acquiring for his family or children, high-quality education, if they get a good job. The current high rate of unemployment amongst graduates is disturbing and discouraging to those that aspire to go further with their education (Bokana et al,2014:271) Education, in general, should help an individual with a good education to improve their employment opportunities are significantly improved to where headhunting takes place to secure the requisite skills.

Opportunities from all fronts emerge, and those who possess rare skills always stand a better chance of employment. With most of the population being well educated, the country stands a better chance of surviving any economic scare. Only through good education can one survive any threat of poverty as it is the key to being employed. Through good education, unemployment is avoided. Good or higher education goes hand in hand with individual independence, e.g., entrepreneurs could be self-employed and help create jobs for the unemployed (Fisher and Gill, 2011:2-3).

The status of education in South Africa is in a dire state due to several reasons, and one of the main reasons being the teachers' unions at Primary and High school levels. Their actions include striking at any time they feel like and have the students' interests under their care not at heart at all. Most of the members of this union are more interested in their

own well-being than that of the students. The main problem of this union is accountability (Rubbin, 2017:96).

In agreeing with both the above and below paragraphs, the reality is that the status of education at the lower level has collapsed to alarming levels. The authorities in this regard need to embark on a massive effort to bring back education in general to acceptable levels, where learners can read and write correctly at the primary school level. However, again, the pupils are not at fault but the teachers themselves (Braham, 2018:196). If pupils are not taught correctly taught daily, they will not be in a position to write or read. The education at this lower level is so bad that the researchers indicated that the problem is not about the issue of absenteeism from pupils but that the teachers were not there to convey the information to pupils. This leads to pupils not being able to comprehend their learning correctly (Atmore, 2013:152-160) Once the pupils at that level are failing, it will be impossible for them to proceed to higher levels, which affects the other higher education levels. Thus the researchers indicated that the entire education of the country needs to be overhauled (Thornton,2009:1-2).

The need for education in South Africa is very high irrespective of the students' financial problems. The need is supposed to focus on the entire country and not only on certain students. Higher education, especially at Masters and Doctoral levels, is more needed as the educated population can uplift the country's economy very easily, but it needs very determined students to achieve that. These students should be so determined that against all odds, they want to get out of the current poverty (Rubbin, 2017:98).

Irrespective of the problems within higher education, the declining numbers, especially at Masters and Doctoral levels, are very worrisome , but some students are determined to succeed against all odds. Other students see higher education as the only way out of poverty. Finally, some people see higher education as the best bet for developing the country and the citizens. A developed country can help create and sustain its entire economy and, in the end, help to create much-needed employment (Teffer, 2015:21).

This national problem needs to be addressed before it reaches proportions which will be very difficult to redress. Both degrees are highly needed for the benefit of the

nation/country at large. Masters and Doctoral degrees are the two highest degrees, and with numbers of registered students on the slow lane, that needs to be halted as soon as possible. This should be done not for the sake of specific individuals but the entire country in general. South Africa need to try and fast-track its home-grown academics and not rely on outsiders. The government need to hugely invest in those two degrees in order that there should be more experts in future, who will encourage the oncoming generations (Forkiva, 2012:3).

North (2012:1) stated that the country's industries on their own must help with the funding of the two senior degrees as they are, on most occasions, the benefactors of highly qualified graduates. Therefore, both the Government and the home-grown industries should help encourage the enrolment of these two degrees. In addition, the two entities should help provide graduates from these two degrees with employment to keep them inside the country after completion of their studies. Apart from the slow throughput with these two degrees, another reason might be the lack of senior academics teaching and supervising these degrees. In this case, the Government needs to encourage Senior Academics with reasonable remuneration to keep the balance equal on both ends. These senior Academics, if well paid, will be encouraged to be in an excellent position to help produce even more senior graduates. Thus the incentives on both sides of the academic field are needed and will then be able to produce the desired effects of more enrolments in these two degrees (Jesselyn and Mitchell, 2006:2-3).

1.8.4. Constraints within the PhD programme

The doctoral degree in South Africa has several constraints that need the Government to take a leading role in trying to help overcome the hurdle. According to Sokana (2010:1-3), the policy imperatives for doctoral production are under severe constraints. The reason is that the country needs as many doctorates as possible, but their production line is languid, and that is due to many problems, e.g., funding and fewer master's students who enrol and pass to register for the PhD.

1.8.5. Trends in doctoral production in South Africa

Beck and Rodger (2015:2) mentioned that South Africa needs to increase its PhD production rate by at least a factor of about five in the next 10-20 years. Their work clarifies that the escalation of numbers in this level is needed, and the best is to increase funding for full-time doctoral students. In this instance, the government needs to target specific institutions to encourage as many master's students as possible to enrol for the PhD degree. The public should also be conscientised by the actual value of the PhD to the country in general. the economy. Thus, the NDP is in full support in that the number of doctoral graduates should be increased to at least 100 PhDs per million people in South Africa. Both writers also indicate that, it is laudable and possible to achieve the feat, but the problem in this regard is the few master's graduates who might be willing to enrol for the PhD. Many will drop out along the way, and few will complete and graduate with their Doctoral degree (Jesselyn and Mitchell, 2006:5-6).

The low number of PhD graduates needs to be traced back to the schooling system, especially for the Black population. Do we have enough support systems in place to encourage students to study further? We need to try and address that from high school and not at the master's level. Dell (2016:9-10) in his account, insists that the growth of doctoral graduates in South Africa is very slow if not stagnant, and that is also within the different lines of study in accordance with the candidate's line of preferred degree. Some faculties have more enrolment at PhD than others, and thus they can produce more graduates than others. Those with fewer graduates need to be focused upon, and the State should take a leading role in this regard. Some of those imperatives will be discussed below (Tefferera,2015:24).

1.8.6. Transformation imperatives

Salem Badat (2010:3), indicated that one of the most critical imperatives is that of transformation. In the past, a lot has been said about transformation, either being negative or positive. In his reference, he mentioned the NCHE: 2000, and he listed equity, quality and responsiveness. In the end, he focused mainly on institutional restructuring and human resources. He also mentioned equity which includes several aspects such as race

regarding African student's participation in the PhD programme. Furthermore, when it comes to enrolment by race, whites have more, followed by Indians, then Blacks. Even when it comes to enrolments by gender, Blacks are still at the tail end of the structure. In whatever level of education, Blacks are always at the end, why? (Moore, 2015:3).

1.8.6.1. Quality Imperative

Berg (2016, 31-32), clarified that this imperative is one of the most critical factors impacting doctoral production. Internally and externally, PhD is the most sort after degree, but it needs to have good quality. The main point here is not just about numbers but the weight of the PhD (Chisholm,2018:1-2). The quality issue does not need to be verified by the CHE but by the (HEQC) Higher Education Quality Committee, which then shifts the responsibility to the universities themselves in that it is their degrees, and they need to accredit them. In this regard, the quality of the PhD is being measured according to the recognition of the supervisor to the students.

1.8.6.2. Increased Proportion of Academic with PhD: Is it Attainable?

Currently, the number of PhD staff members being targeted is 5000, and that means that about 17946 academic staff members are needed to produce a high number of doctoral students. However, in essence, or reality, the higher the number of PhD staff, the better in that we need to have enough for any emergency such as staff retirements, emigration and all other factors such as death. (Moore, 2015:5).

1.8.6.3. Reasons for the Possible Failure of the Above Imperatives

Several reasons are attributed to the possible failure of all the imperatives: the first is that South African universities have not been equal irrespective of their standing. This inequality stems from the past Apartheid era. There are former White universities that have been well resourced and can afford the funding for the PhD studies. Now, the other universities (Traditionally Black) are less resourced and can thus not be in a position to fund their PhD programmes. In this regard, the Government needs to come in and try to help these universities. With the resources available, the State should try to put all these universities on par to produce the required number of PhD graduates (Chisholm, 2018:2-3).

1.9. RESEARCH DESIGN

The descriptive research design has been chosen as the most ideal, and it allows for the use of both qualitative and quantitative research at the same time. It allows for the quantifiable aspects to be quantified whilst allowing a detailed investigation on the basis on which future exploratory research will be conducted. So the design essentially speaks to the “what is to be done”, including all the different stages that will be followed systematically to a logical conclusion (Dell, 2016:11). The design must fit in with the methodologies to maximize the benefits from the two systems. The research design is the most appropriate as it gives a detailed picture of our education. It is the most appropriate again because it is about the reality of the state of our national education per se. This design also entails what needs to be done to solve the problems that have engulfed our educational system in its entirety, but Doctoral is the most affected of them all (Ramdass and Kruger, 2012:27-29).

1.10. DEMARCATION/DELIMITATION OF STUDY

The study will be conducted at CPUT, focusing on the Faculty of Business and Management studies. CPUT is the second-largest contact university in South Africa. The faculty hosts approximately 18 000 students with a staff compliment (academics and administrators and accessories) just over 500 employees. The number of academics with doctoral qualifications is 15% of the staff compliment. Most of the lecturers in the system, just over 70%, have been in the institution for at least five years, even though there is minimal movement towards acquiring senior degrees.

1.11 RESEARCH METHODOLOGIES/PROCESSES

(Sample method/technique and sample size)

This is about who from the population defined above will be selected for participation in the study? (For example, the population can be females admitted at a particular hospital, but the sample be only mother who gave birth in the past two weeks). Remember, quantitative sampling requires probabilistic/representative sampling methods like random sampling, systematic sampling, stratified random. Define the chosen methods and justify

why they are the most appropriate. Note the concept of saturation for qualitative study and generalizable sample sizes in quantitative studies (Martin- Barbero, 2018:4).

1.11.1. Research Methodology

The research methodology discussed above was combining qualitative and quantitative techniques (mixed methodologies) to collect the data. This mixed research method was compatible with the descriptive research design that had been chosen to collect valid and reliable data for the research. As alluded to above, this method was expected to provide both breadth and depth in the study of this phenomenon which continues to be of concern to the sphere of higher education.

1.11.2. Sampling method and sample size

The nature of the study and the distribution of the prospects allowed for purposive sampling method since there was a specific class of people who qualify. The target sample was specific, people who had been in the system for ten years and above and yet had not acquired any other qualifications, with the particular focus on the doctorate. For example, some people have served for up 30 years in the system without furthering their studies even though the institution provided funding (paid for) of their education if they were permanent staff or staff on three-year contracts and more. Purposive sampling would allow for the respondents' effective (spot-on) identification with a degree of convenience / judgment This method would allow for targeted respondent as they were known; these were accessible but had to agree to participate because it was a voluntary exercise.

1.11.3. Sample size

The faculty has approximately 500 people who were eligible for the study, and the researcher considered that the higher the sample, the more accurate. The estimated sample size was 250, which is 50% of the staff complement that have not attained any higher qualifications. It appeared that most of them were working towards retirement; they have been in the system for that long without advancing themselves into better careers.

The study would be based on all people who have been in the university for at least ten years and have not improved their qualifications.

1.11.4. Data collection instruments

What data collection instrument were to be used in this research and why? E.g., structured questionnaire, standardized questionnaire, interview guide. Where was information for the development of these instruments going to be found? How credible/reliable were the instruments going to be (e.g., piloting of the questionnaire. Check application of other validation processes)?

1.12 STRUCTURED QUESTIONNAIRE

A structured questionnaire was designed for this research. The questionnaire consists of three parts, namely Section A – Biography, Section B – Likert scale and Section C – open-ended questions for discussion. The use of questionnaires has been decided on for a few reasons. First, this will enable the researcher to maintain the same standard of the questions across the faculty regardless of who has been interviewed. Besides, it will be easy to go back to questionnaires in the future should there be a need to validate the research findings. The questionnaire was designed and constructed, and under the supervision of a statistician, the instrument was administered to 15 people who would qualify for the research. The suggestions made to improve aspects of the instrument were incorporated, and, with the approval of the statistician, the document would be ready for the research.

1.12.1. Data collection/fieldwork

Five (5) students were recruited, trained, and sent to go and conduct face-to-face administering of the questionnaires on the campus. The training was intended to help the research assistants with the necessary information that they may need to give to the participants should the need arise. Besides, using face to face assists ensured that the return rate of the questionnaires was high and the data collection was done speedily too. The process turned out to be less costly and well managed with very little problems allowing for moving on to do the data analysis with little restraints.

1.12.2. Ethical Considerations

All participants in the research volunteered to respond and take part in the survey when they were sampled out for the study. The respondents were provided with all necessary information about the research, the purpose, and the role they were required to play. All their rights were discussed, and the expectations, confidentiality and protection were clearly stated to them before they started on the exercise. Consent was required and they all without exception accepted that they were prepared to get involved in the project. Conditions were clearly stated that no names or markings that would associate them to or with the questionnaires, would be put on the questionnaires on which they responded to the questions.

1.12.3. Data Analysis

The questionnaires were brought together and cleaned for any errors or inconsistencies that would affect the quality of these submissions. The questionnaires were edited, coded then the data was captured on to an Excel Spread Sheet (ESS) for the eventual construction of the illustrations (graphs, charts, histograms, tables, and frequency polygons) that were used to compare the variables. The ESS was the most readily available for the researcher to use for this purpose, and the illustrations provided the comparison required and allowed for interpretation of the findings. The open-ended section had all the similar items grouped together and reported in ascending order and comments are used to explain the submissions.

1.12. CHAPTER OUTLINE

Chapter One; introduces the study in the form of a proposal and provides the literature review used to establish the study gap, justifying the research. The problem statement [the study gap] is followed by the research objectives, research questions, design, methodology, target population, sampling and sample size, data collection instrument, data collection method, data analysis, and ethical considerations.

Chapter Two; focuses on the history of education (lower to higher) in the country, factors around the education and the cultural structures and impediments, the Bantu education and its effects.

Chapter Three; system statistics from entry to exit levels, the educational system's structure, factors impacting student progression, no change of system with the advent of the ANC.

Chapter Four; models of effective education systems such as the American and Indian models.

Chapter Five; Conceptual model.

Chapter Six; details the research design choices, types of research designs, research methodologies, and their different types and applications. The differences between the different methods, advantages and disadvantages of the different methods, and the data analysis leading to data recording.

Chapter Seven; Data collection, cleaning, editing, coding, capturing and interpretation thereof

Chapter Eight; summary of findings, conclusions, recommendations, limitations, suggestions for future research in the subject.

1.13. CHAPTER SUMMARY

The need for PhDs on the continent in general and particularly South Africa cannot be understated considering the relationship between doctorate qualifications and economic development of a country. The levels of doctoral outputs is miserably low on the continent as if to predict that Africa has a long way to go before there is remarkable shift on the output of the Ph. Ds. Whilst South Africa has its own history that may have been breeding ground for the status, it is equally true that by now situations should be showing progress. The continent in general is in this state and it is not clear why there are these poor aspirations for this doctoral qualification. There is no meaningful explanation why the continent is in such a state, for this reason, the study is focused on the situation in South Africa which seems to have higher Ph. D output compared to the rest of the countries on

the continent. A sizeable number of the few Ph. Ds from South African universities are from the continent, leaving South Africa with a much more reduced output. This research was intended to develop a structure that will assist with the boosting of Ph. Ds graduates in a country with the highest educational budget and yet such a low output. The model, the researcher is convinced, might be the beginning of the turn-around if it is properly implemented and adjusted to suit the conditions and ever-changing circumstances.

CHAPTER 2.

BANTU EDUCATION AND IT'S LEGACY

2.1 INTRODUCTION

Chapter 2 will focus on the history of education in South Africa [bantus, coloureds and whites education system], and the impact on the current system of education. Like in all countries, colonised or not education has been developing over the centuries, but the lived experience is different from country to country. The history of education can be divided into dispensations for the indigenous, among which will be noted that the first exposure to education is tied to the arrival of missionaries. Whilst their primary purpose was to “convert” the indigenous to Christianity, they had to educate the prospects to enable them to read and write.

Though, education or the civilisation of writing and reading started in Egypt (Brewer, 2005:1-3), as people migrated further south, they had adopted a nomadic life which inevitably lost the writing skill. Education syllabus and curriculum had always been “standard” until the apartheid (separate development) era after the National Party (Nats) took charge of governance (SAHO, 2018:2). This era ushered in the three-tier system of education, the standards and facilities were based on the three racial groupings in the country. The three racial classifications were, namely, the indigenous blacks (3rd or the lowest class), coloureds and Asians (second class and intermediate class) and the whites (Europeans) as an upper class (more privileged and rated as 1st class citizens). Education type quality and offering was aligned according to these racial classes, specifically made easier because residence was also based according to racial groupings.

2.2. THE HISTORY OF EDUCATION IN SOUTH AFRICA

It is difficult to accurately chronicle the history of education in South Africa since there was no country called South Africa until colonisation (Beck, 2000:3). The country as it is called today had different language groupings that lived in their own parts of the present-day South Africa. Chief amongst the groups were the language groups that presently comprise what is known as official languages in the country. Cross (2006:185) posits that

there were no boundaries or borders amongst the different tribal groups of the then (currently South Africa) separated groups according to their languages.

Malherbe (1971:4) indicated that except for Afrikaans and English, which were spoken across the “land,” the rest of the people spoke their own languages. The presence of the two European groups (the English and the Dutch) brought conflict among themselves resulting in the establishment of the Union of South Africa (1910) and later the Republic of South Africa (1961). This led to the accelerated development of the current Afrikaans which is a conglomeration Dutch, English, Portuguese and elements of the indigenous languages. By default, after the shipwreck that brought the Dutch settlers to the continent, they then decided to settle in the country. (SAHO,2018:5).

2.2.1 Dutch settler education

Little is known about establishment of schools by the settlers, suggesting they may have lost the writing and reading skills over the years. The levels of technology, transportation and communication were too primitive to have allowed easy access to the entire country. Maskew (1971:7) indicated that however, the arrival of the British at the Cape of Good Hope and their settlement in the year introduced a new form and / or type of settler. The British errand, unlike that of the Dutch (later to become the Afrikaners), was purely the quest to conquer land, occupy and exploit the minerals which were sent back to develop England. Braham (2018:195) the British settlement occurred after approximately 200 years after the Afrikaners, it was this settlement that brought noticeable changes in terms of education as we define it today.

Lately, excavations in Limpopo (Mapungubwe) and Johannesburg (Gauteng) have discovered what should have been an existing civilisation. These settlements are believed to have been constructed between 990-1100 AD (SAHO, 2011:6) according to archaeological estimations. This suggests that these settlements were constructed 400-500 years before the Portuguese explorers Bartholomew Diaz and Vasco Da Gama discovered the sea route to India (Nkabinde, 2016:82). Since these travelled round the Cape Point 200 years before Jan van Riebeeck’s shipwreck and eventual settlement along the west coast of the current South Africa . This suggests a form of education for the

people to have been able to develop such architectural skills and the levels of gold trade with the Arabs along the east coast of modern-day Southern Africa. In the north of South Africa across the Limpopo River is the Great Zimbabwe equally believed to have been built at the same time and possibly by the same people considering the architectural designs (Rose, 1965:208). None of the commercial activities have been adequately chronicled and, but all these seem to suggest a form of education that prevailed in that period. In the same vein, little has been chronicled about education systems during the Dutch settlement until the British came to settle in the region.

2.2.3 Missionary endeavours for gospel and education

Much of the influence of education over the years in South Africa and indeed across the SADC region was the establishment of missionary schools. These are too numerous to name and through the ages these religious organisations established boarding schools, day schools and training institutions (Ndimande, 2013:23). Much of their education was centralised on the preaching of the Bible, and therefore the need to teach people how to read and write. Chief among these, in descending order of their sizes are in table 2.1 below.

Table 2.1 Church organisations involved in early education

	CHURCH ORGANISATION	ESTABLISHMENT DATE	STRUCTURES
1	Methodist Church	1824	Schools
2	Seventh Day Adventist Church	1890	Hospitals / colleges and schools
3	AME Church	1908	Schools
4	Catholic Church	1912	Schools / colleges
5	Anglican church	1920	Schools/colleges
6	Lutheran Church	1954	Schools

SOURCE: Own Construction

The churches (missionary houses) were focused on the preaching of the gospel (Bible), but to be effective they established schools for the purpose of educating the natives. Further to this, the churches also built mission hospitals and teachers training colleges some of which became large enough to offer degrees (Giolimee, 2009:1-2). Church vestries were also converted into schools from whence many of the future politicians for the liberation from colonial control, were educated (Chisholm, 2018:357). The missionaries established what was known then as mission schools and built hospitals and clinics wherein the natives were taken for treatment. To complement this, they built nurse and teacher training colleges that became the source of their indigenous labour supplier for those services. Cooper (2008:109-110) identifies these institutions as the real beginning of civilisation amongst the natives, the primary target. These existed whether there was a government bringing institutions under one ministry or not. Davis (1972:1) stated the same institutions were used by colonisers for their own purposes. These were the sources of native conscientisation about rights and political literacy.

The history of education (formal impartation of knowledge) in South Africa was largely uncoordinated until the country eventually became one country (Chisholm, 1983:360). From 1903, after the Anglo-Boer war, and the eventual creation of the Union of South Africa, education became structured and controlled by the government. Formalised political activities came to existence and the form of education was changed each time there was a different political party in government. Legislation changed each time a new political party (political dispensation), at the centre of these changes was the fundamental practice of leaving natives out (Dugger, 2009:9). Post the missionary activities days or period, it is therefore logical to discuss the history of South African education according to political dispensations, since these had overlapping effects on black education. Giliomee (2009; 190-198) proposes that the history of education in South Africa can be classified according to the political dispensations through which the country passed.

The researcher has classified these into 4 dispensations, largely based on the political dispensations the country passed through. The different periods are, namely; (1) British settler education, period from 1900-1948, (2), Union of South Africa Education, period

from 1948 – 1983, (3) education in the apartheid era, and post-apartheid education era period from 1984 to 1994, and (4) present day period from 1994. (Cooper,2008:111)

2.2.4 British settler education

It cannot be ignored however that whatever education that was there was in pockets and not universal and not coordinated as we know education today (SAHO, 2011:9). The existence of Mapungubwe and the infrastructure below the Johannesburg area are fairly recent excavations, but clearly indicating certain levels of civilisation before colonialism. The current assumption by the excavators of Mapungubwe is that this may have been built by and through collaboration between the two tribes of the Pedi and Venda groups that occupied the Northeast part of the present-day South Africa. There are identifiable official language groups who lived and developed separately from each other before colonialism (Ndimande,2013:24) These are listed in alphabetical order in table 2.2 below.

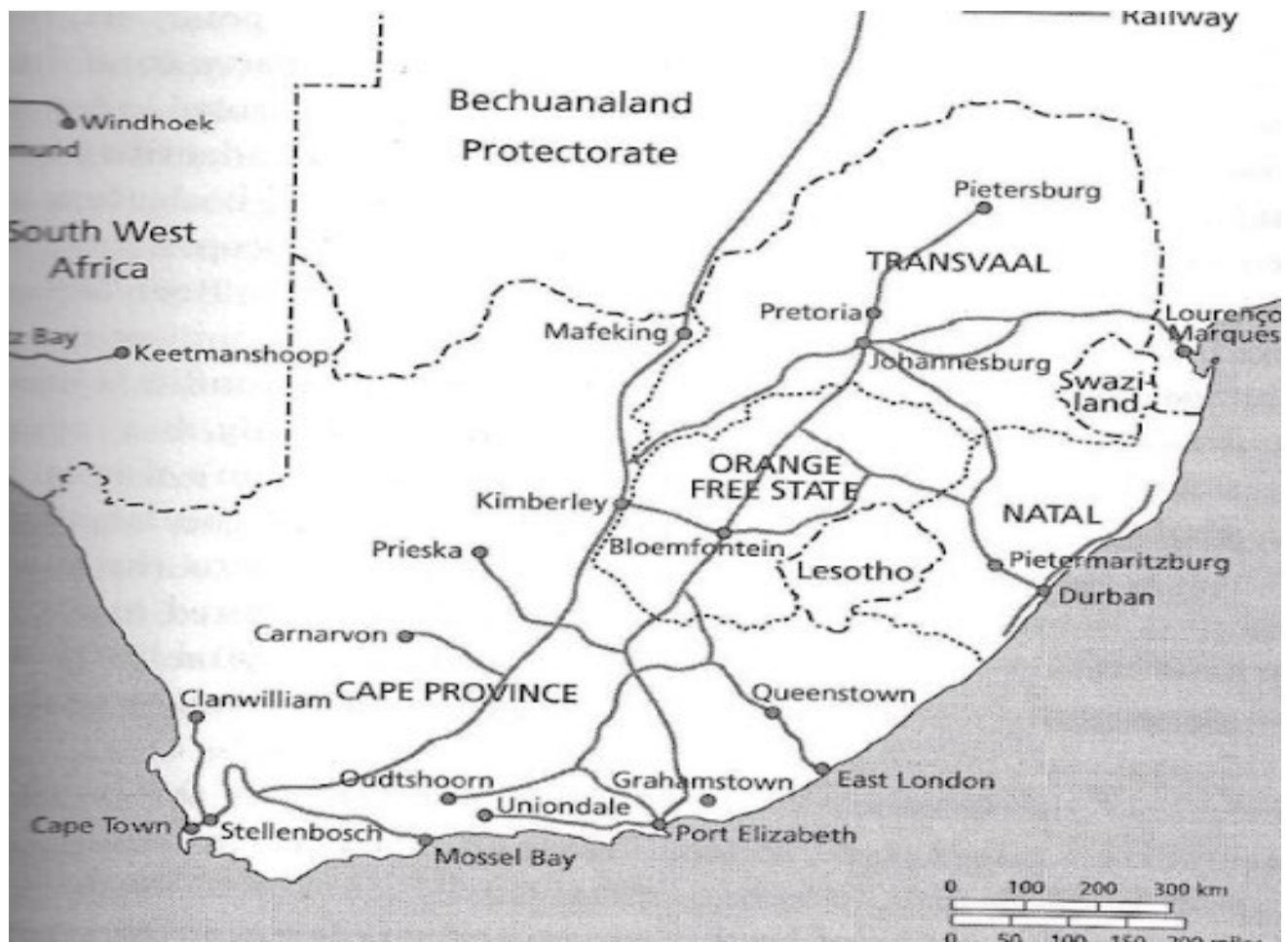
Table 2.2. Indigenous groups who became South Africa

TRIBAL GROUP	GEOGRAPHICAL LOCATION
Khoi	Western Cape
Ndebele	Mpumalanga
Pedi	Limpopo
San	Northern Cape & Kalahari
Shangani	Limpopo
Sotho	Free State
Tswana	North West
Xhosa	Eastern Cape
Zulu	Kwa-Zulu-Natal

SOURCE: Own Construction.

The movement of these groups to the position or location where they are now is not clearly chronicled in the history of the country, so is the total silence on any form of education – formal or informal. However, the reality is at colonisation, these people occupied largely much of the land they occupy today (SAHO, 2011:11). As alluded to above, little is known about any forms of education these people had, if any, except to say that they were actively involved in some form of economic activities. The findings by the archaeology department of Wits University have added immensely to this aspect of history (Beck, 2000:8). At that point the distribution of the population can be best illustrated in the map, figure 2.1 below.

Figure 2.1 Geographical population distribution in South Africa



SOURCE: SAHO: 2011/2019

The arrival of settlers in their large numbers, most of whom were looking for diamonds and gold resulted in the eventual capture of the tribal groupings. Eventually these were brought together as one country though they were diverse and in separate geographical settings and for most of the time English became the unifying language amongst both the settlers and the natives, with the development of other languages like the *fanikalo* (Robbins, 2017:96).

Giliomee (2009:6) asserts that this was a “concoction” of all the languages and was commonly spoken in the mines because of the diversity of the language groups in there. It is also perceived that Afrikaans itself is a *fanikalo* version based on Dutch, English, Portuguese and little of the indigenous languages. Schooling under one government there resulted in difficulties to communicate between the offices and the tribal groupings, the English settlers being in control there enforced the use of English as a language of education (Dugger, 2009:2). English became the predominant language for education purposes, considering that the Dutch settlers had little of education themselves 300 years from their settlement after a shipwreck.

2.3. DIFFERENT ERAS OF EDUCATION IN SOUTH AFRICA

When the tribal boundaries were dissolved, one country was formed to be named South Africa. Davis, (1972:1-2) asserted that the new country ruled from a central office inevitably had a ministry or department of education. Legislation for the harmonisation of the education subsequently came into place to try and unify the country and coordinate all the islands of education scattered throughout the country. Cooper (2002:109) asserted that there is a direct relationship between the level of education and the level of development in a country, suggesting that the settlers needed a certain level of education for the natives. Inevitably, there is a level of literacy in a country that should propel economic development through the offering of industry relevant curricula. The world’s poorest countries generally have the lowest literacy levels, but education without the appropriate context for the populace does not help much either (Ocampo, 2004:7). The economic development of a country is driven by entrepreneurship, which itself is a result of the type of education and skills that are taught to the citizens (Du Toit *et al.*, 2018: 37).

For this reason the dispensations of education through the political dispensations become necessary to study taking note of the overall effect on the natives who comprised 85% plus of the population.

2.3.1. Period from 1900-1948,

South Africa was established as a country in 1910 and this heralded the new dispensation that brought together all the different components (Motumi, 1997:6). Initially with the capital city in Cape Town, the national; headquarters was moved to Pretoria but parliament remained in Cape Town, referred to as the mother city. The new government largely controlled by the British, had specific education related legislation, chief among them were;

- The land act of 1913 .This law made it clear that the Africans majority should be landless and occupied just 13% whereas Whites occupied 87% (SAHO, 2011:12).
- Population Registration Act of 1950 .This law was to document the population in accordance with racial groupings: Africans (blacks), Asians, Coloured and Whites (SAHO, 2011:14).
- Group Areas Act of, Act No41 of 1950.This act grouped people in accordance to their colour and enforced that separate groups should stay in different areas/locations (SAHO, 2011:16).

According to Giliomee (2009:192) this period was characterised by the inflow of many English-speaking migrants who came in to work as teachers in the school system. Apparently, this was meant to counter the Afrikaner resistance in the Transvaal and the Orange Free State, the inflow was resented by the Afrikaners (Brahm, 2018:5). It is also noted that this period experienced the proliferation of educational institutions aided by the growth in missionary activities in the education of the country. The political structure favoured primarily the white government and the natives did not have political rights to vote nor would they take part in governance. Jan Smuts, then leader in the Transvaal favoured the coming together of the two white groups, Afrikaners and the English, which was resented by the Nationalist Party led by Louis Botha (Cooper, 2002:102).

2.3.2. Period from 1948 – 1983,

The general elections of 1948 were won narrowly by the National Party who were protagonists for separate development - apartheid. Presumably wanting to preserve the

new language, Afrikaans, they opted for separation in schools based on the language groups. Jesselyn and Mitchell (2006:2) posits that this issue of language grouping, gave Afrikaans the much needed boost to be developed into a formal and distinct language. Further justification was made for the separation because of the different religious affiliations which, as was suggested, would cause conflict. Analysts such as Ndimande (2013:20) have argued that the inclusion of separate development and schooling for religious purposes was purely a cover up, as the primary purpose was to preserve the Afrikaner language and culture. This separation was followed by the legislation on education, which became the critical milestone in the education system of the country. The Acts that were promulgated were,

- Reservation of Separate amenities Act, Act No 32 of 1960. This law at all cost was meant to prohibit any form of mixing amongst all racial groups in the country (Dugard, 1978:66).
- Bantu education act No 47 of 1953. This law meant that Africans should have their own system of education which was inferior to that of all other racial groups (Lapping, 1986:184).
- Extension of University Education Act: Act No 45 of 1959. This act meant that Blacks should have their own universities which were inferior in all standards as compared to those of Whites (Ocampo, 2004:2).

All these parliament enactments excluded the 85% plus of the indigenous population who were provided with substandard education system with low grade subsidies (Cooper, 2002:103). This was justified by the use of “fear of the black men (swart gevaar) as there was fear of providing adequate education for the black men to eventually take over from the whites.” The indigenous languages were not suitable nor developed enough to be used for teaching, and instead of developing the languages, English had been the language (Badat, 2010:9). The language structure in the country had always been based on the racial and tribal groupings, these became the foundation of formalised separate development. Once the National Party had taken over governance, they started on a self-preservation campaign (Cross, 2006:188). The Nationalist Party then legislated for the use of Afrikaans as a national language for learning on the natives. The indigenous who

had been using English for official and formal communication, were now expected to add on to this a new language, primarily for the convenience of the Afrikaners (Chisholm, 2018:358). The language groupings at the time are illustrated in the table 2.3. Below.

Table 2.3 Language groups for separate education

COLOUR	LANGUAGE	RACIAL GROUP
Black	Nguni languages	Ndebele, Xhosa and Zulu
Black	Tswana languages	Pedi, Sotho and Tswana
Black	Other languages	Venda and Tsonga
Coloureds	Afrikaans	Cape coloureds used Afrikaans mostly
Coloureds	English	Inland coloureds used English mostly
Whites	Afrikaans	Used Afrikaans largely
Whites	English	Used English mostly
Other	Mixed	Mixed language but tended to use English

SOURCE: Own Construction.

The disintegration of the schooling system according to language groups (mother tongues as it was called) was under the pretext of language preservation. In practical terms, the only language that was threatened was Afrikaans as it had no base anywhere, not in Africa and not Europe either (Giliomee, 2009:192). Black languages were not developed enough to be used for educational purposes or as such the use of home language for education had other connotations. SAHO (2011:2) is of the view that the liberalism that resulted in separate development was merely because of the Afrikaner's dislike of association with the blacks. There was also a sense of fear about the likelihood of blacks wanting to take charge of the country as the indigenous and majority. The writer further indicated that the trend in the white politics was to discriminate against blacks and hence the continued exclusion from governance. Separate education therefore helped to confirm that plan and retarded the progress of the blacks in education and thereby deny them

meaningful participation in the affairs of the country. This separate development strategy laid the foundation for future poor black education the legacy of which we live with today (SAHO, 2011:4). Much of the problem with black education today is primarily because, education like wealth, is generational and very few blacks got the correct education to serve as a model for the generations to come. The enforced use of Afrikaans at schools was resented by the African community (Cooper, 2002:111) leading to nationwide violence with many casualties during the resentment in 1976. Numerous activists were either arrested or were ruthlessly murdered by the “regime” and this brought about the turnaround to the quest for liberation by the indigenous population.

2.3.3. THE PERIOD: 1984-1994

After the 1976 uprising against Afrikaans as a compulsory teaching language, the political landscape changed drastically. The resistance against white domination took a different turn and the whole country “caught fire” thereby forcing some changes to education (Cooper, 2002:113). In real terms the changes were cosmetic and did not mean much to the indigenous people considering their aspirations and determination for a united black South Africa. Ocampo (2004:5) opines that the success of the resistance to the use of Afrikaans as a language of tuition gave the impetus to the desire for self-determination. There was a sudden surge in the proliferation of movements to counter the “settler entrenchment” in the affairs and decisions on how Africans would live their lives (Chisholm, 2018:358). Meanwhile the authorities made small little changes to try and appease the natives and possibly reduce the determination for self-rule.

The cosmetic changes in the new legislation, with the following acts;

- Education and Training Act No 9 of 1979: This act repealed the Bantu Education Act of No47 of 1953. This new law was just cosmetic in that it allowed Blacks to attend so called White schools (Government Gazette, 1979:2-48, cited in SAHO, 2011).
- Extension of University Education Amendment Act29: 12May 1971; about changing of courses, was repealed and relaxed. In the past the changing of courses needed ministerial approval. (Eshak, 2011:3, cited in SAHO, 2011).

- Extension of University Education Amendment Act No32 of 1960. This law allowed Blacks to attend the previously exclusive White universities (Giliomee, 2009:5).

Ocampo (2004:6) postulates that education became even more racial as the new political dispensation took shape. The introduction of the tri-cameral parliament came into existence, this brought about three minority groups together, namely, Asians, coloureds and whites. The three together constitute less than 20% of the population, yet they formed a government to the exclusion of the indigenous. The education system remained largely the same with the classification of the system into models, namely, model A, model B, and model C schools.

Table 2.4 Classification of education by race

MODEL	BENEFITS	TEACHER PUPIL RATIO
A	For blacks – Africans;	1:40
B	For coloureds and Asians;	1:24
C	For whites;	1:18

SOURCE: Own Construction

The apartheid structure also affected the quality of teachers, model C schools had 96% of teachers as qualified teachers with teaching certificates. Makou (2016:3) says an allowance of 15% qualified teachers with teaching qualifications were allowed for the African schools (model A). The Bantu Education Act also reduced the funding for missionary schools which were predominantly Afro-centric, resulting in closing of many of them. Alluding to this, Giliomee (2009:196) opines that Bantu Education was inferior and specifically targeted on the indigenous population where low numbers of qualified educators were allowed. The Asians and coloureds who were always classified together, had the second-grade level of education at Model B (Ndimande, 2013:21). The whites remained at Model C and the government highly subsidised the white schools including the universities that were equally classified. The whites, Indians and Coloureds, were

involved in the power sharing as blacks were excluded from all forms of governance (Masondo: 2016:7). Irrespective of this new political order, the white education, was still on top of all other racial groupings. By 1990, white education was restructured into different models e.g. A, B, C and C was the most well known as the previously white system of education. Under Apartheid system, the country had several education departments setup according to tribal/racial groupings and the white education department was being regarded as the best of the lot in terms of funding and administration (SAIIR, 2011:6-7).

The period after the democratic elections of 1994 came with a different view of education. This period was characterised by the Outcome Based Education (OBE) education system which was a dismal failure as it was not in line with the expectations of the nation (Ndimande, 2013:2030) and did not serve the needs of a “new country” at that. It is this OBE system of education which rather than upgrading our primary level of education, it instead created chaos and literally downgraded our primary education as some of the worst in the continent. Currently, South African education especially at primary level, is in a state of chaos and it seems that no one is prepared to shoulder the blame (Martin, 2003:7).

2.4. BANTU EDUCATION AND ITS MEANING

The Bantu education was designed for the indigenous people of this country by the Nationalist government. The type of education was prescribed to keep the natives under check, under a certain level of thinking and force them to be permanent cheap source of labour for the settler master and their economy (SAIIR,2011:8). Bantu education was derived and expanded on from the old Native Education which was originated drafted for the natives by the British colonial masters (Davis, 1972:6). The new structure further downgraded the native education and put more restrictions to keep and maintain it at a certain level to give it the new look it became. It was a system of education designed for constant cheap labour supply to the anticipated economic growth along the same ways of the slaves (Indians and Malaysians) that had been “imported” to work in the sugar plantations in Durban and citrus orchards in the Cape provinces respectively

(Ndimande,2013:2036). Nokwe (1954:14) observed that the Bantu Education, was brought into being by the enactment of the Bantu Education Act of 1953 (Act No47 of 1953). In concurrence, Moore, (2015:1-2) went a step further and quoted the Architect of Apartheid; Hendrik Verwoerd the then Minister of Native Affairs, when he said **“There is no place for the Bantu in the European community above the level of certain forms of labour. What is the use of teaching the Bantu mathematics when it cannot use it in practice?”** (Giolimee, 2009:2-3).

According to Moore (2015:4) Bantu Education was so bad that it downgraded all progressive systems that were introduced by the missionaries for the black education. The then new repressive government forced most missionary schools to close down especially those that did not want to follow the government’s policy of segregated education. Ndimande, (2013:24) states that to effectively enforce compliance by the schools against the new law, all government subsidies (funding) was withdrawn resulting in the closure of many missionary schools Clark and Worger (2000:.48-52) indicated that this new Bantu Education act was extended to the higher education in 1959 as University Education Act 1959 and the first to be affected was Fort Hare. This had been established initially as a missionary school (University College of Fort Hare) which was eventually taken over by the state to become the University of Fort Hare (Motumi, 1997:4-5). Bantu Education equally affected tertiary institutions and Fort Hare was equally downgraded to offer bantu education.

Moore, (2015:5) concurs that the strict control of the education of Africans was aimed and based on the total emphasis of constant supply for manual labour to work in the mines. Bantu education denied the natives from technical education and restricted Africans to nursing, teaching, interpretation and priesthood. The implementation of the Bantu Education Act was complemented by other pre-existing laws relating to the indigenous people. In 1935 the Native Urban Areas Act of 1935 was promulgated, the law restricted the movement of the indigenous people from rural to town settings (SAHO, 2011:2). The main aspects of this law that restricted the movement of blacks are illustrated / summarised below;

1. To divide people according to tribal lines.
2. To make it certain that blacks do not unite at all.
3. To make sure that there was a constant supply of cheap labour.
4. To force blacks in carrying ID/Dompass where ever they go as a form of humiliation.

In a sense this impacted negatively on the education system with specific on resource distribution and quality of life which is critical for good education. Ndimande (2013:28) postulated that better qualified teachers were more likely to prefer working in towns that out in the country side where there was no electricity and running water.

Industrialisation on a global scale started to take place and South Africa rich in mineral resources became attractive to both local and foreign whites. The Native Urban Areas Act became a contradiction of terms as there was now a sudden need for unskilled labour which resided in the tribal trust lands (SAHO, 2018:4). Thus, Bantu Education was enacted during the period when capitalism was growing and its growth could only be sustained through cheap labour, the poor natives considered it a privilege even though they survived on a slave wage. Being able to work was considered an advancement in one's life, despite the oppressive and cruel conditions under which they worked (SIRR,2011:4).

Baard and Schreiner (1986:1/2) posited that the Bantu Education Act was one of the most horrible laws ever enacted in our modern day, referring it to total full-time enslavement of the indigenous people to the advantage of the minority white population group. The system prepared blacks to work in the factories, mines as well as in the farms under those very harsh conditions without complaining.

This system made black children to attend schools in shifts (morning and afternoon – hot-sitting) which meant that they got less hours of schooling compared to their white counterparts. The number of schools was generally few with many children needing schooling, this therefore encouraged hot sitting as there were no facilities. The government was not prepared to adequately fund the native's education as a means of

making them permanently sub-servant to the settler employer (Dugger, 2009:7). The then government was prepared to spend as little as it could when it came to the black education. Native education was of low standard for the African people, but the introduction of Bantu Education was even worse as it lowered the already substandard education facilities of Africans (Nokwe, 1954:15-16). The curriculum for the Bantu education barred pupils from gaining life skills and requisite working knowledge, history only taught white history (Motumi, 1997:5). The main components of Bantu Education that affected the future of the black child were,

1. The education was basic knowledge that did not go beyond literacy but just to serve the master and servant relations.
2. A child could not repeat a grade twice, they would be removed out of the schooling system permanently. This was done irrespective of the reasons which caused the failure.
3. There were no opportunities for technical education as blacks could not become artisans.
4. The ergonomics in the school facilities was not conducive to effective learning and thus did not produce the best from the native child suggesting they could not learn.
5. Poor though they were, they were expected to pay fees and the deal was strictly no fees no schooling until fees was paid.

By and large the native child grew up therefore with no adequate education to enable them to effectively use what they learnt in school to improve their life situations. Sad to say that passing matric was considered a milestone of worth in a black child's life. Few ever managed to go to university and other colleges, those that qualified could not study sciences in general because very few of them ever did mathematics and sciences which are requirements for medicine, engineering, and other natural sciences (Forkiva, 2012:4). Education like wealth is generational, meaning that the forerunners impact positively or negatively on the progeny, as these play a positive model role for the future. Consequently, many families never had graduates and the situation has not changed much to date, Featherman (2016:416) suggesting that education is considered for a

certain class of people. This is further complicated by the high levels of unemployment amongst those who are perceived to have done well in their families (matric, diplomas and first degrees) prompting the notion that education is of no value.

Du Toit (2018:36-38) opines that many of the qualifications acquired are generally of no economic value in a stagnant economy like that of South Africa. The course offering by the universities, and as a government directive should be focused on going studies that have direct relationship with the government plans for economic development.

2.5. THE FACTORS AROUND THE EDUCATION IN SOUTH AFRICA

The factors around the education system in South Africa are being based around the structure of the system itself i.e., from Grade O up to Tertiary level. The most problematic level is the primary to secondary schools where the education standards are collapsing due to socio-political problems. It is these two levels that need to be concentrated upon as they form the foundation of the tertiary education in future (SAHO,2018:8). It is evident that without a good foundation at these two levels, then there will be problems with the higher levels of education. In other words, the standard of education at the lower levels is in a dire state and needs to be attended to with immediate effect (Brahm, 2018:196).

The standard of education within the primary and secondary levels, is so low that South Africa is rated second from the bottom i.e.,75th place in accordance to the 2015 OECD rankings (Jesselyn, 2006:3). Even with the PISA rankings, the situation is even worse as South African student/pupils are unable to reach the top 40 in both mathematics and as well being unable to read properly (Gouws, 2002:41-42). These are the problems that South Africa through the National Department of Basic Education, should address as early as they come up, lest problems emerge at a later stage. Morris (2018:2-3) stated that what needs to be done, is to thoroughly prepare the lower levels to produce good students or candidates at a higher level. It is not only the students that need to be looked after, but also the teachers themselves. The teachers need to be well qualified to teach properly (Bunting et al, 2010:54). The current government closed all teachers training colleges leaving a serious gap of education at the lower levels, in the same way with Bantu Education, affecting the rest of the stock destined for higher degrees.

The researcher hypothesises that because of poor primary and high school education, potential graduates for senior degrees are lost to the system.

2.6. STRUCTURES AND IMPEDIMENTS TO EDUCATION IN SOUTH AFRICA

The deficient education system in South African is a major impediment in relation to any social advancement. According to Morris (2018:3-4) to be able to remedy this situation, a new approach is needed as soon as possible, and this approach needs to focus more on parental control and involvement instead of bureaucratic control. Cronje (2018:2) indicated that most students at primary and secondary schools, cannot do well in reading and it is even worse in Mathematics Literacy, as out of every hundred matric students only one student is able to get a distinction. But the problem here, is not about the low pass rate, but it is about the poor maths education being given to these children.

Brahm (2018:197) also comes up with three factors of our education system. The first factor is about the quality of mathematics education which is very low from the beginning. The second factor is about the tertiary education participation among black people as it is very low too. The third factor is about the high dropout rates of high school learners which rather than decreasing, just keeps on escalating. All these factors grouped together are adding to the poverty as well as contributing to the high unemployment in the country as no economy can be able to absorb the uneducated in large numbers (SAIIR,2011:8).

2.7. THE HIGHER EDUCATION IN SOUTH AFRICA

Higher education in South Africa is about the levels above high school education. These levels might be TVETs, university of technology or other university education depending upon which one an incumbent is registered at. Higher education is about education which is based upon the higher level of thinking as well as research and critical thinking and analysis.

The history of higher education in South Africa is two folded i.e., the Apartheid or Bantu Education, and the post-1994 period which was characterised by restructuring. The background is characterised by old racial discrimination of advancing white education at the expense of blacks as white universities were being established on the basis of English

and Afrikaans languages e.g., University of Cape Town and University of Stellenbosch (Blitzer, 2009:10-11).

Dugger (2009:2-3) postulated that the Afrikaans universities grew and were assisted by the then rising Afrikaner nationalism with the National Party coming to power in 1948. The black universities came about some years after with the serious aim of separate education based on separate racial lines and these universities were established in accordance with the University Education Act of 1959. The establishment of black universities were based on permanent separate development based on the racial and ethnic structures. Another aspect of these ethnic universities is that they were based on unequal distribution of resources for both learning and teaching (Giolimee, 2009:2-3).

Since 1994 the Government has been giving attention to higher education with the intention of transforming it from the bad past into democratic national education. With the new dispensation, there were massive expectations about higher education as it was regarded as the level that can upgrade the nation from the doldrums of poverty (Ndimande, 2013:25). The transformation did not bring what was expected as many people were still reeling from the past different systems of education especially the old Bantu Education. The transformation, while it had good intentions, did not fulfil the majority's expectations and the problems in this regard, emanated from the educational past of the country. Up to this day, there are some universities that are still more resourced than the formerly black universities (Blitzer, 2009:12).

One of the good intentions involved the establishing of the National Commission on Higher Education (NCHE-1995). This was to cater for the universities, Technikons, and nursing colleges as well as the teachers training colleges. Some of the good intention NCHE put forward, were the following.

- (1) An expansion of student enrolment and broadened access to reach a wider distribution of social groups and classes, including adult learners
- (2) Greater responsiveness of societal needs and interests.
- (3) Increased cooperation and partnership in structures of governance, both at the system and institutional levels.

(4) Distance education and resource-based learning.

2.8. THE EDUCATION WHITE PAPER³, 1997: AN EXAMPLE OF GOVERNMENT STEERING HIGHER EDUCATION IN SOUTH AFRICA.

This paper was organised by the government in trying to redress the educational imbalances of the past which affected mainly the black population of this country. This paper stated very clearly that the higher education in this country needed to be overhauled for the benefit of the entire country. Furthermore this paper made it very clear that all institutions need to cooperate for the sake of the advancement of the country and should assist in steering the government's goals for the country's improved education (Bunting et al, 2010:56). Asmal (2002:16) explains that the main aim of this paper concerned the stability of the institutions of higher learning which, however, proved to be easier said than done. The major aim of this paper is to come to the unification of higher education to the benefit of all, irrespective of colour or creed. All in all, we do have 36 institutions of higher learning and from originally different educational system of the past and to unify them, would necessarily be a massive task, but that has been achieved and the number reduced to 23 (Ndimande,2013:36)

In trying to institute Universities of Technology, the State had to combine some technikons which involved more saving of funds and was to the benefit of all. The other aim is about the policies on higher education and how they should be implemented and to be well financed. Again, these policies need to be followed and monitored regularly in trying to check if they are really serving the intention they have been intended for i.e. are they really serving what they are there for? Another aim is that of transforming the entire system of higher education. The policies being formulated for higher education, need to be thoroughly scrutinised for the purpose they are being formulated for (Blitzer,2009:57).

2.9. CHALLENGES OF TRANSFORMATION IN HIGHER EDUCATION IN SOUTH AFRICA

The Higher Education Ministry (2018:19) stated that South African higher education has got a history of inequalities dating back to the previous political dispensation, and since

1994 transformation has been much needed. The problems are as old as our history and are not that easy to solve as the shadow of the past system is still looming very large within our society with higher education being no exception. The reality being that it is not easy to transform a formerly deeply divided society in all aspects of humanity like our society as it was before 1994. The entire country needed to be transformed, higher education being one of the leading aspects of transformation. The aspect of higher education transformation was embedded in the Constitution of South Africa 1996 and the 1997 Act and the White Paper provided guidelines as to how the state intended to transform higher education (Badat, 2010:1-2).

Blitzer (2009:15) indicated that the national constitution committed the state and all its institutions whatever their social standing, to abide by the laws emanating from the constitution. Thus, even higher education must subscribe to the Constitution hence the “Higher education act” declared that the entire national higher education, needs to be under one umbrella body for the sake of progress at that level and for the sake of the country at large and the White Paper would provide the guidelines. The White Paper then identified several aspects that higher education needs to serve:

- . To mobilise “Human talent and potential through lifelong learning”.
- . To undertake the “production, acquisition and application of new knowledge”
- . To “address the development needs of the society” and the problems and challenges of the broader African context”
- . To contribute “to the social, cultural and intellectual life of a rapidly changing society”
- . socialise “enlightened, responsible and constructively critical citizens” and
- . “help lay the foundations of a critical civil society, with a culture of public debate and tolerance” (Badat,2010:5).

However, higher education has tensions of its own especially when it comes to goals and values. For instance, both the government and the universities have their own priorities in relation to their needs which involve funding. Again, both these two entities do suffer a lot from previous political backgrounds and the problems in this regard, as well as the

issue of public finances of which the Government is in charge, while the universities are more concerned about the academic development which also needs funding which has to come from the State. The universities argue that they do need major funding, one of their reasons being that they must prepare for poor students who come from working-class backgrounds or, worse, from the rural areas (Morrow, 2010:7). Butler-Adam (2015:2-3) recommended that the issues of politics and education are two differing interests which need to be taken equally seriously as both are equally needed by society. For instance, the country needs politicians as well as it also needs a well-educated workforce; thus, they should both complement each other in terms of funding. It is the very politicians who must debate on how much can be allocated to higher education and it is the education authorities who will indicate how much is needed for the educational projects or initiatives they are intending to undertake. The politicians will then finally decide where the money is mostly needed and if they give higher education less than initially requested, then a standoff or rather trade off will be on the cuts from both parties. At times the stand-off might be long and drawn out before a settlement is reached (Fisher,2011:20).

Cloete (2009:43) focused on post school education as far back as 2008, when he indicated that there were then an estimated 874 680 students within the higher education system, 79 9490 at public institutions and about 75 190 in private institutions. He further indicated that in training colleges there were 640166 and there were also 520235 in public institutions as well as 147 901 at private institutions. Thus, in the table 1, it indicates the clear numbers who were not in either employment or in education or even in training and when that was grouped as one, it went up to 2781185 who were not in employment nor in education or not even in training institutions (Bokana,2014:263).

Table 2.5: people between the ages of 18-24 not in employment, education or training

Qualifications	Numbers
Bachelor's degree/Masters/PhD	11 552
Grade12 plus diploma/certificate	72 588
Grade 12 with exemption	98 335
Grade 12 without exemption	598 657
Grade 10 and less than 12	990 794
Less than grade 10	1009 259
Total	2 781 185

SOURCE. Cloete, 2009:43-44.

According to Cloete (2009:43-44) the numbers above clinically indicate the problems and challenges of post-school education and training and show that the problems are not only in education but also in the social and economic arena and might be spelling trouble for the country. The problem in this regard, is that the findings indicate that 41.6% of the 18-24-year-olds are not in education nor training and not even employment and stand no chance at all of any opportunities in the economy. In this regard, the National Plan for Higher Education set itself a target of 20% participation rate by the years 2011/2016, but that target only went up by 1% in 2008 and that indicated the negative outcomes for the national economic and social development (Adam,2012:22).

The recommendations, according to Cooper et al (2002:110), are that our schooling as well as post schooling levels need immediate reconstruction so as to be able to deal with the problems of post-schooling people and where they fit in, in the economic and social

structures. The recommendations also state that the institutions of learning need to be able to prepare the students for eventuality of life after schooling and the prospective aftermath thereof. Teffera (2015:14) indicated that it should not be only the higher learning institutions, but the entire fraternity of post high school institutions should join in and help in arresting this problem. The country's education system and its problems no longer need just the government, but the entire social structure with the private sector included to help.

2.10. FREE HIGHER EDUCATION

Braham (2018:196) on free higher education in South Africa postulates that it is a very thorny issue, and more so now than before 1994. Before 2015 problems have been there especially for most black students and most, if not all, were centred on funding. This issue of funding frustrated a lot of students as some had to drop out of school to try and raise funds anew. In this regard, others did manage to make a comeback to school but others could not. Tensions kept on rising to until 2015 when university students embarked upon a nationwide strike in demand of free education.

Mbiza (2018:4-5), writing on the student protests for free higher education, explained that the protests continued unabated into 2016 and were about to bring the higher education down on its knees, when the then President Jacob Zuma set up a commission to investigate whether it would be feasible for there to be free higher education. The fees commission clearly indicated that the demand is not easy to meet, but the students insisted on free higher education. Du Toit (2018:37-40) indicated that the President took some months before coming out with an answer, but ultimately agreed that, as from 2018, that would be possible but that it would be phased in over a period of five years "From 2018 onwards, eligible South African children of the unemployed, social grant recipients, South Africans earning below a minimum wage, domestic workers, farm workers, mine workers and entry-level civil servants such as teachers, nurses, policemen, municipal workers, security guards, refuse collectors and informal traders amongst others will now access public universities and TVET colleges for free through grants provided by their government" Zuma(former state president) (Butler-Adam,2015:11-12) .

According to the Dept. of Higher Education, (2018) the government's breakdown plan on funding is based according to the status of the institutions, the Public TVET Colleges, and public universities as follows.

2.10.1. PUBLIC TVET COLLEGES.

The provision of fully subsidised free education and training will be extended to all current and future poor working class South African students' at all public TVET colleges starting in 2018 and phased in over a period of five years.

- . Full cost of study will include tuition fee, prescribed study material, meals, and accommodation and/ or transport.

- . Government will further invest in the training and development of existing TVET staff and the recruitment of additional qualified staff to improve the quality of teaching and learning at TVET colleges.

- . Funds will also be directed towards the improvement of infrastructure in the TVET sector. (Butler-Adam, 2015:12).

2.10.2. PUBLIC UNIVERSITIES

The Council on Higher Education (CHE, 2016) indicated that the public universities were of a higher priority in terms of funding as of their historical background. It thus put forward several points pertaining to funding of public universities.

- . As a result of this substantial increase in subsidy to universities, there would be no tuition fee increment for students from households earning up to R600, 000 a year during the 2018 academic year.

- . Government would increase subsidies to universities from 0.68-percent to one percent of the GDP over the next five years as recommended by the Hither Commission.

- . NSFAS packages already allocated to existing NSFAS students in their further years of study would be converted from loans to 100%grants effective immediately.

- . Fully subsidised full cost of study would include tuition fee, prescribed study material, meals, accommodation and/ or transport (Du Toit, 2018:43).

2.11. CHAPTER SUMMARY

In summarising this chapter, several aspects were raised in relation to our national education as it is i.e., from the colonial period up to the present. The issue of education in this country has a very thorny past and it will take a very long period to be brought into line with what the government wants it to be or is intending it to be. Our education from the beginning was not good for most of the population of the country, as it was not designed for human advancement, but for the enslavement of Blacks to serve the economic interests of the government of the day. It is true that colonial, or missionary, education was not good for the indigenous people, but it was able to shed better light on education than the Apartheid Bantu Education system.

For as long as the country's education is not on equal level for all the people/students of the country irrespective of racial and economic background, problems will always disturb the smooth learning especially at higher levels. The problems at lower levels, are also causing and delaying the progress of pupils. At those lower levels, the State should consider reopening the old teachers training colleges of the past and have properly trained teachers. Strict school rules should be brought back and be applicable to both learners and teachers for the sake of maintaining order.

CHAPTER 3

STATISTICS, STRUCTURE OF EDUCATIONAL SYSTEM, FACTORS IMPACTING ON STUDENTS PROGRESSION,

3.1 INTRODUCTION

This chapter will deal with all the levels of education in the country and the problems being experienced by the different levels. The chapter will also establish whether our education has improved or deteriorated since the ANC came into power, i.e., has the education improved or collapsed nationally at all levels since then?

3.2 THE EDUCATIONAL SYSTEM OF SOUTH AFRICA –. AN OVERVIEW.

The educational system of South Africa has undergone several changes since the colonial periods of both the British and the Dutch. With the ascendancy of Apartheid of the Nationalist Party in 1948, more changes were forcefully brought into the education system and to the disadvantage of the indigenous people of the country (Braham, 2018:195). In 1994, it was the beginning of the massive dismantling of the Apartheid structures, which also included the educational system of the entire country. As the government changed hands, the education system followed suit, i.e., from primary school to tertiary levels. In 1995 the government established the South African Qualifications Authority (SAQA), which then, in its midst, created the Qualifications Framework. The Qualifications Framework's main aim was establishing assessment and benchmarking of educational qualifications according to a standardised format (Houseman, 2016:1).

Morrow (2010:171-173) indicated that the population now in large numbers needed to be skilled/educated to stand a better chance of developing and uplifting the country's economy. If most of the population is skilled, then there is a high possibility that they will be readily employable, reducing the risk of unemployment. Unlike in the past, the current education system needs to prepare people to face the socio-economic realities in South

Africa and help develop the economy of South Africa. Without a well-educated workforce, the economy of the country stands slimmer chances of growing (Butler-Adam, 2015:11).

Houseman (2016:2) notes that, in South Africa, education is supposed to be compulsory from primary to secondary school levels, but it seems not to be the case as one will always come across many children of school-going age wandering the residential areas during school hours; so where is the compulsory part in this regard? Is education compulsory just a theory, and if so, when will it be compulsory, as the children wandering the streets will be adults of tomorrow? Breier (2010:658) asks whether it is the State's or parental responsibility to ensure that children of a particular age group are in school? Whose responsibility it is needs to be determined. Until this is clearly defined, this will remain a problem that feeds through to tertiary education levels. This speaks directly to this thesis' argument.

Dunpath and Vithal (2012:4) focusing on Secondary level of education have indicated that the highest level at secondary, is the attainment of the National Senior Certificate and it is the benchmark for the secondary level of qualification in South Africa. The secondary level of education is the gateway to the tertiary level of education, which is divided into two categories: academic and vocational oriented qualifications. Now the issue is the preparedness of the students for higher education. Cross (2006:188) postulates that the problem of students and institutions of higher level, are the students themselves coming from lower levels being underprepared or are the institutions themselves underprepared to deal with these students? Any form of unpreparedness puts the quality of education at risk, which is already at stake from all levels. The lower level of education is quality assured by Umalusi, and the higher level of education is quality assured by the Council for Higher Education (CHE, 2016). The CHE is for two levels, albeit being vocational or academic in origin. At this level, the education system is divided into the bachelor's degree programme (academic), usually a three-year programme and a three-year diploma (vocational) followed by an honours level of Bachelor of Technology, to make it a four-year programme in the vocational stream.

According to Blunden and Macmillan (2014:4), the main issue here is whether education is a help or hindrance to society. Does education help society or not? Education is all about the empowering of the individual in preparation for the future. Therefore, the culture of education needs to be inculcated at earlier levels: primary and secondary. Education is the lifeline to a better life at a later stage; it does not hinder anyone's progress but helps advance it, much more so tertiary education. Houseman (2016:3), after the bachelor's degree of either side, a candidate can proceed into the higher levels for his /her line of study, e.g., from honours up to PhD level. The authenticity of the qualifications at this higher level is measured through the National Qualifications Framework (NQF). Through this system, we know how much credit score the trained incumbent should have to have a fully recognisable degree/qualification at this level.

3.2. FACTORS IMPACTING ON STUDENT PROGRESSION (Primary and Secondary Levels)

The South African educational system has many problems that impact student progress. From the external outlook, it seems all is good, but it can be argued that the opposite is true, and all became evident just after 1994. There were problems before then, but they became evident since the advent of democracy, where more money was pumped into education to redress the imbalances of the past. However, matters became worse, proving that money cannot solve all problems, especially if there is no appropriate dispersal and proper management of resources (Cross, 2006:190). As it stands now, South Africa is spending more money proportionally than even both the United Kingdom and the USA on lower levels of education, e.g., the educational budget in 2018 was about R213.7billion. In the end, the South African education system is being rated 126th out of 138 countries (Martin- Barbero, 2018:4-5). The system in South Africa is so bad that poorer countries such as Zimbabwe and Kenya are doing far better at basic education than their South African counterparts. What is the problem in this regard with South Africa having so many resources? Thus, the dictum of: "money cannot buy success, but only dedication by educators and quality in qualifications" can deliver the desired effects (Mbiza, 2018:1-2).

Bailey and Dynarski (2011:117-120) indicated in concurrence to Mbiza's explanation on factors impacting on learners'/student's progression at the primary and secondary level in that, many children at those two levels fail to progress due to a lack of opportunities within their neighbourhood. The lack of opportunities is due to fast-rising inequality within their society. Thus, some children from low-income families end up being discouraged to continue with their studies because they cannot be on a par with their schoolmates from affluent families in all forms of social aspects, e.g., clothing and entertainment, just to name a few (Dugger, 2009:6). Aspects or social issues such as these can either slow down students' progression or even bring it to a halt permanently, and these students might never even think of higher education at all as they have not managed to succeed at the lower levels. The inequality goes hand in hand with those who have and those who do not have. This inequality within the society is the breeding groundplace of many social ills at all levels of society in general (Giliomee, 2009:196).

Further on, in supporting the above writers in their work, both Makou and Wilkinson (2018:1-2) clearly indicated that South Africa has the third-worst education system in the world. Their account on this fatally flawed education system is based on the World Economic Forum report which indicated that 50% of the primary/secondary level students drop out of the system. In addition, about 30% of the remaining students barely achieve the required grades to be admitted into a university. Gustafson (2018:2) also indicated that South Africa has compulsory schooling up to grade 9, but how well is it being adhered to as many learners of grade nine age group are out of school due to different reasons, e.g. poverty or lack of parental or adult guidance. So, where or how does the compulsory attendance requirement become enforceable? It is an indication that many learners drop out of school even before attaining grade 9 level of education. In the end, this has a direct impact on the number of students who should be able to register or qualify for university education at a later level. In the end, this leads to fewer students getting into the university level and further to postgraduate studies. Butler-Adam (2015:1-2), in concurring with the above writers, argues that if the problem is not fixed from the beginning, it might lead to the decline of the South African universities' standards and prestige in general. The problem will be that fewer students will be motivated to study and attain university

qualifications. The numbers intending to further their studies will automatically decrease in that regard. The problem, thus, is at the lower/primary and secondary levels. If that is not attended to as soon as possible, then the university education, in the long run, will be in danger of facing a decline. The lower levels of education, all in all, are the feeder system to the tertiary levels (SAHO,2018:16).

Onwu and Sehoole (2011:121-123) maintain that the problem starts at both primary and secondary level with the development of teachers for both these levels. The development of teachers at these levels needs to be of the highest standards. The fact is that excellent and well-trained teachers will always produce better and well-equipped students who will have a seamless transition from secondary to tertiary levels of education. Ndimande (2013:24-25) stated that teachers need to be developed so that when in class, they can take complete control of the subject matter they are to teach the students. Thus, it is the responsibility of Government and the Department of Education that before teachers are being allocated to teach, they should have undergone rigorous training in order that they should be able to deliver quality teaching. Teachers should know more than the students need to know and not be on the same level as their learners.

The Economist (2017:1), in concurrence with the above information, painted an even bleaker picture of how bad the country's education system is. A shocking case was recorded at a primary school in Cape Town, where learners could hardly pass a simple English language class test at 12 years. It was clear that they could hardly write and read properly at that age. This resulted in very disheartened educators, which negatively impacted their outlook on the education system. In this regard, the current teacher could not be blamed as he/she met them already in that state, but the blame should be put squarely on the shoulders of the teacher who taught them previously. The blame, in addition, should also be focused on the Department of Basic Education in that how does it employ teachers who cannot teach kids how to read and write correctly. Houseman (2016:7) indicated that the teachers themselves, in such circumstances, clearly show that they did not receive proper and intensive training in teaching. This could be directly linked to the problem of the government closing the Teachers Training Colleges immediately after 1994, as mentioned in earlier chapters. Inadequately trained teachers will always

produce poorly taught learners. A question in this regard arises; “How are we supposed to help these children?”(Spaull,2013:4).

Feartherman (2009:417) indicated that the situation with our education is so bleak that out of 76 countries drawn up in a table, South Africa ranks number 75 in the selected countries and this shows how bad is our education and this is the international list drawn up by the OECD club. In Mathematics and Science, at the international level out of 57 countries, South Africa is almost at the bottom irrespective of the significant funding provided by the fiscus annually. Thus, in this regard, the problem ought to be lying with the educational authorities in South Africa. Education Statistics-ZA (2013:3-6) indicated that in percentage statistics, about 27% of learners who have been attending school for a maximum of six years in South Africa compared to the learners from developing countries such as Tanzania (4%) and Zimbabwe (19%), can hardly read properly. Educationally, South Africa is almost at the bottom of every list that has been compiled from whatever sector of education, albeit having massive resources put into the basic education system.

According to Onwu and Sehoole (2011:123), most educational problems originate from the old era of Apartheid with the enactment of the Bantu Education Act of 1953 by Hendrik Verwoerd. In his words, he said that Blacks are just to be “the hewers of wood and the drawers of water.” The Black education at that time was just not well catered for in funding. However, funding improved after 1994 when the issue of separate education was abolished. As a result, previously disadvantaged schools received more funding for their educational activities from the government, but the standards are now rapidly collapsing. This is a clear indication that money is not the problem but a massive lack of accountability from most teachers (Teise,2016:74)

There is a problem of undertrained teachers who cannot produce capable students, especially in reading and writing. Shockingly, South Africa (6.4%) spends more money than some European countries (4.8%) of its GDP on education, but no improvement is evident. The problem, in reality, is lying with both the South African Democratic Teachers Union (SADTU) and the ruling party, the ANC, as both these entities are allies in the

country's politics (Houseman, 2016:8). The Economist (2017:8) posits that SADTU is on a corruption trail and abuses its relationship with the ruling party. Some of the corruption involves teachers paying a bribe to be employed in the education system. Whatever complaints have been referred to the government, nothing gets done because of the political links. Thus, the government officials are somehow to blame for the dire conditions prevailing in the schools as they cannot reprimand their comrades or else face loss of political support in the future. It is alleged that the school governing bodies are controlled by SADTU or even gangs in some instances. The unions' influence in government-related issues is so massive that they appear to be in charge of education rather than the government.

Feartherman (2009:418), states that even if conditions could be improved, most teachers would dismally fail to be productive, as was shown in 2007, when some teachers were given the same test usually set for 11–12-year-olds and 79% of them performed far below the average expected from the children they are supposed to be teaching. This indicates that most teachers are not fit to be in front of a class and are not even qualified to be teachers. The question then arises as to how do we expect teachers to drive the education process if they are performing worse than the learners they are teaching?

In the Western Cape, the provincial government has already embarked on the collaboration system of education with schools from both England and America to improve the quality of teaching, and this initiative appears to be bearing fruit. H. Zille (Western Cape Premier; 2017) refers to this new system as the “seminal moment”. The same teachers' trade union, SADTU, aggressively tried to halt this programme, but they were defeated by the very learners they are supposed to be supporting. Matlala(2021:17) posits that learners think further ahead than the teachers in what is good for their education. It is, in this case, very evident that SADTU should take the blame for failing so many learners and not place the responsibility wholly on the legislature. The teachers will have to choose between their classes or politics, which are incompatible: the choice must be made between being a political activist or a teacher. Politicians are for politics and teachers should be for the classroom (Blunden and McMillan, 2014:14).

The negligence of SADTU affiliated teachers in their teaching duties is a self-destructive tactic and negatively impacts the desire for education of many learners. Once that aspiration is eroded, it will take a very long time to come back, if ever it will. Politicians in the form of SADTU and the governing majority party, the African National Congress (ANC), need to consider their policy in education and the direction they intend it to go, or the country's education will be forever damaged (Modisaotsile,2012:72). The governing party should be aware that once education is eroded, the country's prospects in terms of the economy, socialisation, and technological growth, will be squarely put on its shoulders, not the trade unions. Activities by trade union are a severe impediment in the progression of learners in their quest for education (Sokana, 2010:4-5).

3.3. FACTORS ON STUDENT PROGRESSION: (Tertiary level)

The problem of students' progression at the university level, especially Black students, dates back to the Apartheid era as resources were very scarce for them to access. The lack of resources contributed a lot to the almost non-existent progression at the tertiary level, to the extent that many prospective students ended by giving up their original intentions to pursue post-matric education. Since the advent of democracy, more resources have been directed into higher education. However, at the end of the qualifications' stipulated period, graduates are far fewer than was initially expected. The question then arises as to where the problem might be? (Butler-Adam, 2015:2-3). The National Financial Aid Scheme (NSFAS) provides funding, but the number of dropouts is increasing alarmingly. This is an indication that there are some underlying factors to this problem. These factors need to be dealt with as soon as possible to prevent a national disaster in education. Fisher and Scott discuss (2011:1-2) the indications here, where the number of students registering at the beginning of every new academic year at tertiary institutions being very high. However, as time progresses, many students drop out each year without graduating. High dropout levels need government intervention and all stakeholders in higher education or education in general. The critical issue is how the nation at large can arrest this problem (Naik and Pahad, 2015:1-2).

In concurrence with the above writers, Breier (2010:657-70) indicated that financial problems could be closely linked to poverty. In this regard, most students from low-income family backgrounds struggle to get on with their higher education, as it is costly to maintain. Thus, they drop out due to a lack of funding, albeit how academically capable they can be. Badat (2010:9) indicates that the funding in higher education needs to be reconceptualised in trying to arrest the student dropout rate. If this reconceptualisation of the role of funding can be achieved, most students will not drop out. The blame of dropping out at times, is not with the funders but the very students who might receive sufficient funding but then embark on squandering it for their own reasons. Thus, the reconceptualisation should also include measures of how to curb that problem too.

Masondo (2016:9) suggests that the student's success lies in how the individual adapts to the new environment of higher education level. What needs to be taken into consideration is that higher education provides an individual with many opportunities to succeed. Higher education is a foreign environment and needs one to take full accountability for one's actions.

Fisher & Scott (2011:2) point out that the role of higher education is to close the skills and technology gap in South Africa. Therefore, the government must embark on attempts to entice as many students as possible in enrolling for higher/tertiary studies. The significant aspect that can help the government succeed is making available the funding for those prospective students. Breier (2010:670) then added that the State should develop conditions that the graduate must amortise the funding received via working for the government for a set number of years after completing a study programme. In the absence of such employment, the student will have to pay back all the funding received for their studies.

Naik and Pahad (2015:2-3) state other factors that influence university dropout as being, *among other things*, societal behaviour in general, the financial standing of an individual, family support structure, transition and adaptation to the university setting. The societal behaviour (psychological being of students based on their background as affected by the society they live in, tends to be the most influential factor to this massive dropout of

students at tertiary institutions. These factors are very crucial to the academic progression of students and thus the success of the entire country as a nation. Blitzer (2009:4) indicates that the progression problems such as financial constraints have been noted to frustrate students and result in a high absenteeism rate and ultimately dropping out of studies or slowing down academic progress. Masondo,(2016:11) posits that other factors (classroom factors) that can impact the student progression are language proficiency, i.e. English, which is the medium of instruction and it is to many of them, not the first/home language; overcrowded classes; the relationship between the lecturer and the student, inadequate learning and teaching resources and infrastructure.

CHE (2016:9) states that student funding plays a huge role in student progression at tertiary level. Thus, some of the progression problems, being financially related, can frustrate the student, causing them to drop out of their studies or slow down the academic progress. Another factor that can impact student progression might be the inequality in pedagogic learning skills among students. This inequality can stem from those who come from the underprepared schooling environment, such as the impoverished areas where most school equipment is of a low standard or is even non-existent, and those from the affluent areas where the student would have been exposed to the latest technologies and other educational media (Spaull,2013:8).

Dunpath and Vithal (2012:13), concurring with CHE (2016), assert that higher education on student lack of good progression is a two-way process. That is, does the problem lie with the underprepared students or the underprepared institutions? In this regard, the students are the ones who are underprepared, and they come with that problem from high school into tertiary level. At this high level, the universities are trying to control the damage that has taken place earlier on at the high school level. The Government needs to try and help improve the learning and teaching conditions at the lower levels of education to prepare the student for the higher education levels, with the sole aim of decreasing the rate of dropouts later at the higher/tertiary level.

Naik and Pahad (2015:7) have highlighted the most intriguing factors such as being from low-income family background or even from the rural areas and which are the reality, and,

if not looked into carefully, can continue to hamper student progression at the higher education level. Most of these factors easily lead to feeling incompetent, demoralised, and declining self-esteem, resulting in missing classes. Once the individual feels inadequate or unable to cope in the classroom, that student starts to miss classes and ends up dropping out. Mgomezulu, Dhunpath and Munro (2018:132-134) indicate that the factors leading to low progression of students in their studies, by referring to poverty as another contributing factor. Their account indicated that lack of funding and poverty are primarily responsible for students' academic failure and progression problems. Student enrolment increases every year, i.e., the intake, but the problem is with the throughput at the end of a particular period. It is realised that a sizable group of students who enrolled earlier are no longer in the system due to many and some of the factors already being raised above.

CHE (2016:132) indicated that students receive enough financial support these days, but many still find it difficult to progress with their studies. Thus, it is true that money cannot buy success, especially in the academic world. Thus, this failure to progress at the higher education level needs to be sought elsewhere and not to always blame lack of funding as the leading cause for failure in academic progression. This is crucial to their survival at university Bokana (2014:266). Financial aid, thus, is not a guarantee that a student will survive and progress safely at university. However, as stated above, the choices being made by the students after receiving that aid are very crucial in their progression or retrogression. Mbiza(2018:5-6) A case in point is of the student at Fort Hare University who received R14 million financial support payment from the financial handling institution, NSFAS, an error that cost the university its integrity and consequence of the student's actions. This incident casts doubts on the efficiency and competence of the NSFAS officials.

Mgomezulu (2017:134) indicated that a student's success needs not to be linked only to sufficient financial assistance, but certain aspects not at all linked to education also play a very serious role in the student's progression at university. In other instances, it has been found that students with insufficient funds cannot afford the ever-rising university general sustenance costs. Worse cases include aspects where it has been established

that some of these students, the poorest of the lot, are forced by circumstances to share their limited funds to support their low-income families back home. Where do we draw the line between this financial support being meant solely for student studies instead of being extended to a social grant to the student's family? Such actions lead to the student being under pressure about their studies and the family back home, and in the end, the student does not progress due to all those factors combined. In concurring with the above writer, Morrow (1994:134-135) indicated that the other problem in student progression is also about the student themselves in their culture of entitlement forces some students not to have the essence of urgency in their studies, for example, with a total cost of their studies being paid for, some students tend to embark on a relaxed attitude and take their studies very lightly and end up failing to progress. Braham, (2018:195) indicated that another setback in academic progression is the failure of some of the students to manage their funding accordingly. It is found that some students who have never handled large sums of money may become confused and waylaid and embark on the wrong and erratic lifestyle of a spending spree and then lose focus on their studies.

Cross (2006:13) stated that another reality of progression is that students from lower social structures meet with those from higher levels, and both these groups are not going in the same direction. In the end, those from lower social structures feel belittled and inferior to their peers from affluent families, leading to academic discouragement and regression in their studies. Thus, even if it is full-cost, funding at the tertiary level does not guarantee success or progression as it depends on several reasons mentioned above. As discussed earlier, some students, as discussed earlier, share their financial aid with their extended families and that, in the end, becomes counter-productive to their progression at school with their studies (Mbiza ,2018,7).

Soria, Weiner and Lu (2014:2-4), in concurrence with Morrow (1994) students from low income and working-class social backgrounds, some of them whenever they start attending tertiary institutions, they receive funding which they have never seen before, and that might cause some confusion for them in how to handle that amount of money. It has been found that some of them do end up abusing the funding for issues that are not related to education. CHE (2016:135) indicates that some of the students squander the

money on such things as high-level lifestyles but forget that they are students. So, it is not reasonable to blame lack of funding as the main reason for regression at the tertiary education level. However, some of the students need to bear some of the responsibility. Money, if not being well looked after, will soon disappear. Breier (2005:3) indicates that the other issue with students from low-income families is that when they reach tertiary level, they want to be on the same social par with students from wealthy or socially advantaged families and those two scenarios are incompatible. What the students need to realise is that their funding is for nothing else but their studies.

Soria et al (2014,3-4) argue that funding being applied to studies and domestic needs is incompatible. Thus, with academic funding, students are expected to pay for their studies and nothing else. In the end, the very student will not progress with their studies and then be frustrated and not the friends or family members. How can a student support a family with bursary money, then how will they maintain their studies? Financial illiteracy is another point of regression where the student spreads the academic funds across other not academically related aspects. Butler-Adam, (2015:3) postulates that students need to spend bursary funds on school-related aspects to avoid failure to progress lest, in the end, lose the funding altogether, and then frustration will creep in. Funding, if not well managed, can easily lead to failure or regression. Students must refrain from conflicting interests, focus on their studies, and then turn their attention to extras only after completing their studies.

Mubangizi (2005:48-50) indicates that financial literacy is not straightforward but depends on who is handling the money. On most occasions, it depends upon the student and what they want to do with the money, especially if it is easily accessible. Mubangizi also states that no matter what advice can be given out to the students on how to handle the money, once it is in their hands, it is another story. What is more important is that the individual should exercise maturity and face reality. Once the funding has been allocated, it must be used for its intended purpose and nothing else.

Another factor closely associated with the problem of low progression at higher education institutions, according to the National Plan for Higher Education (NPHE:2001.2), is low

enrolment in the first place and that of the high level of drop-out-rates at that level of study. South Africa, in reality, just manages to produce 15% of graduates yearly, and according to the international standards, that is too low for a country with so many resources at its disposal.

Letseka and Maile (2008:2-3) have indicated that out of the entire student population in the country, both the blacks and coloured Africans are the most affected in terms of lagging behind with their education success rate and this problem originated from the Apartheid era and is still persistent even up to now. Even if the enrolment of these two groups can be increased by about 70% by the academic year 2030, other social factors, which include funding, will come back to impact their progression at this higher level of education. The NSFAS financial support needs to be increased more than currently as the financial problems of these two poorest groups are not only about education but go deeper into the social fibre.

Nimubona and Vencatachellum (2007:4-5) show that even where funding is made available, the enrolment numbers are still low, and the throughput is affected in the long run. Tertiary education is very beneficial once attained and can also contribute to the country's skills base and help the economy to improve at the same time. What is the problem of the low numbers coming through at both master's and doctoral degrees, and what can Government do to arrest that problem? Bunting et al (2010:54) stated that another reality is that in South Africa, generally, postgraduate studies are not appreciated, be it be in industry, governmental level, or even worse academic institutions themselves. For example, it will be interesting to know the qualifications of all managerial positions in different institutions, from HODs to Vice-Chancellors—if the information can be made available. Such cases always discourage undergraduate students from further studies because no financial rewards or better work positions are associated with obtaining a postgraduate study.

3.4. ADDITIONAL FACTORS LEADING TO LOW NUMBERS AND PROGRESSION AT MASTERS AND DOCTORAL DEGREES (Enrolment and dropout)

Letseka and Maile (2008:6) stated that loans and bursaries on their own do not cover all that is needed by the students, especially those from a poor background. Due to their social origins, these students from poor backgrounds drop out, unlike the students from affluent families. The students from poor origins, despite NSFAS assistance, drop out because they cannot cover living and other costs in their time at the university. Students can register in large numbers at the beginning of the year, but the real problem in this regard is how many of them will complete their studies in record time?

Matsolo (2018:7) noted that the Department of Higher Education stated that by the year 2000, about 120,000 registered for different studies but about 36,000 dropped out in their first year and never came back to continue and complete their studies. The reasons in this regard are different. Thus, for the 2nd and 3rd years of study, 24,000 dropped out still for different reasons. Some of these students drop out after the DHE has helped them with their studies, and this shows that lack of funding is not the only problem for dropping out at a higher level.

One other prevalent reason or problem that leads to dropping out at the tertiary level is unplanned pregnancy or childbearing by teenage students. Thus Dlodlo (2018:8), indicated that unplanned pregnancies easily lead to many students terminating their studies at university.

Another aspect of dropping out is based on racial lines in that the majority race at all institutions of higher learning is black and then followed by coloureds. Due to many different reasons, these two racial groups have the highest number of dropouts at any tertiary institution in the country. These two racial groups will always show the highest number of dropouts because they are both in the majority and very poor nationally (Onwu and Sehoole, 2011:121). The dropout issue within these groups is that more females than males drop out. Some of the reasons being given are based on household responsibilities, work-related issues, or even business-related issues. The dropout issue is not a new aspect as in the past; people would say that the old regime system favoured

people of certain races at the expense of others. However, currently, the rate of dropouts at university level is alarming as the conveyor belt of both Masters and Doctoral studies appears to be stalled, despite the country's resources (Matsolo, 2018:10).

Letseka and Maile (2008:8-9) raised a bleak future for South Africa if the current dropping out continues to be at the current unabated rate. The rate of dropping out is due to several reasons that have already been raised in the text above, e.g., lack of financial support, no prospects for job opportunities even after completing the highest qualifications acquired, falling victim to an unplanned pregnancy, and being forced to raise a child. Both writers further indicated that the dropout rate at lower degree levels would ultimately lead to fewer students registering for the senior degrees such as master's and doctorate. This needs the country's government to look at that seriously and try to come up with how to combat this imminent disaster. Houseman (2016:4-7) stated that we need a highly skilled population that can pull the country out of any bad situation if the need arises. The government might be attached to the responsibility of being the actual custodian of national education. However, it is the duty of all those interested in the safety of national education to help as it is not only the State and its Government who benefit from the highly skilled but the entire nation.

Mbiza (2018:9) indicates that the takeover by the ANC-led government brought many expectations to the people, especially for the education sector. The expectations were in the form of reforms over the entire educational landscape. The entire national education needed to be restructured to be in line with the new democratic dispensation; thus, even aspects of the previous inequalities, such as funding of education, needed to be restructured.

Fraser and Killen (2005:1-2).stated that the new government introduced a new National Plan for Higher Education (NPHE), which included a new language and funding policy, including statutory bodies tasked with overseeing and promoting quality assurance. The restructuring of higher education had to be done through several methods such as mergers and incorporation of institutions to create manageable operation clusters and increase access to more students intending to enter the tertiary level. At the same time,

student enrolments increased from all fronts as previously white institutions also experienced a massive influx of black students in search of admission (Brussow, 2007:1).

When the restructuring took place, it seemed as though it would bring good news on the education front. However, sooner than expected, as the numbers of enrolment went up, at the other end, throughput numbers were very low. That is the indication that the new educational policies are not working but failing. (Atmore, 2013:156). The new reality showed that fewer students could complete their studies, and the majority were from the black community. The stark reality is, against the backdrop of a significant increase in black students in tertiary institutions, white graduates are in the majority, with most completing their studies within the minimum prescribed period (Letseka and Breier, 2008:12,). They also indicated that the completion rate of black students is much longer than that of their white counterparts. Among those who manage to complete, it takes them much longer than necessary, and very few can complete it in the prescribed time, with the rest dropping out for several reasons.

The problem of low throughput is attributed to many factors, one of them being preparedness for entering higher education. In this regard, it has been found that most students cannot make a clear distinction between high school and university. (Griffin, 2006:1), cited in SA. Journal of Education). In complimenting Griffin in his work, Sedlacek (1999:2-4) new students still exhibit the same attitude to their studies as they did at high school, and that shows unreadiness for higher education; hence, in the end, they drop out before they go any further with their studies. At entering higher education, most are finding it very difficult to adapt to academic life.

Thus, according to Phar (2010:10) in his account stated that the problem he sees is that of transition, as he calls it, in that moving from rural to an urban area comes with some environmental changes that might negatively affect some rural students and making them not to be well focused to their studies. The new lifestyle in the urban setup is unfamiliar to the rural students, and in the end, it affects their initial aim, which is that of studying and then leads them not to complete their studies. Senet et al. (2003:108-9), show that black students are the most affected by the challenges they come across at university,

especially those from rural areas. The indications are that it is even worse when they are studying at a mainly white university as there is a different cultural setup. In this regard, they face institutional alienation, which is as bad an experience as they will ever encounter. This appears as isolation, and black students will have to overcome it to settle and succeed in a predominantly white institution. Bitzer (2009:52-54) explained that while not being incapable, many students operate in a hostile environment having to study in a place intimidating to them as they might not have had the opportunity to attend a multiracial school. Thus, focusing on their studies becomes challenging to them, and Government has done very little to help as this problem mainly affects black students and, in the end, may affect the throughput at all levels up to the Doctoral level.

Gunasekera (2006:101-102,) argued that since the ANC led government came to power, expectations were created that once the students were through with their studies, they will automatically get good jobs. Those expectations have not been fulfilled, and instead, student throughput is almost stagnant or very low, which leads to slow progression on reaching the higher levels, e.g. Doctoral degree. The system is still as before for the majority of the blacks; hence for most of them, the numbers for the higher degrees, such as masters and PhD numbers of graduating, are minimal. This, on its own, leads to many students becoming discouraged and dropping out of their programmes. This indicates that black students are still struggling as before the advent of democracy.

Braham (2018:193) commented that wherever there are long queues at universities, even if it is a white oriented institution, most students in those queues are still black students. Why? Despite the ANC assuming power in 1994, the education system has not changed as promised before the first elections. Consequently, there is no way that the number of black graduates at both masters and doctoral levels will increase before the government deals with the perennial, recurring problems which have carried over into the new dispensation. In this regard, the problems for progression are not only about funding but are numerous, affecting mainly black students. That is why their numbers for graduating are always lower than all the other racial groups in the country (Gunasekera, 2006:102-103).

The problems faced by the black student, including progression at tertiary level, begin at lower levels of schooling. Thus the National Education Association (Bitzer: 2009:55), indicates that to stop the problems of progression at tertiary level, what is needed, is to focus firstly at the significantly lower levels of education its quest, further indicated that the other aspect which affects progression at tertiary level is that the students, when entering university. Therefore, many of these students do not progress with their first-year studies due to that fact. Badat (2010:11) indicated that the other problem that proves that the system has not changed is that despite the new political dispensation, black students cannot finish their studies, despite the funding the government provides. The government in this regard need to address this problem and come up with a plan to arrest the problem before it is uncontrollable.

Bitzer (2009:55-56) argues that financial problems are the primary reasons behind the low throughput rates, but it is not the only challenge full-time students face. Some of the reasons are socially related, such as family background, where the student does not get any support from the family members due to different reasons, such as single parental hood where it is difficult to make ends meet. Dunpath and Vithal (2012:6) came to the view that, no matter what, some still insist that the financial problem is the major one to prevent many poor students from progressing with their studies. The students in this regard are being faced with too many challenges that lead them to cancel their studies as they can no longer cope with the stress coming from the academic challenges they face. On most occasions, the financial support offered to students is not enough to cover all the university student needs. Bursaries offered do not cover the total cost but just cover the major expenses such as tuition, residence, and boarding fees (Fisher,2011:18)

Other university aspects such as textbooks are not well covered, and that is yet another challenge the students are faced with at university, and this affects mainly the black students. The above writers are of the notion that even with the advent of the 'new' dispensation of the ANC, the system does not yet show any change and with specific reference to the black students who mostly are still struggling at university with their studies. English as the medium of instruction at university level is a problem for many black students, especially those from a poor background, as a significant hindrance to

their progression. It has been found that many students who come from poor schools in the townships and the rural areas on most occasions have a problem with their progression because of the English language (Bitzer,2009:58).

In supporting Bitzer, the Ministry of Education RSA (2011:5-6) indicated that with the government advocating the mother tongue medium of instruction, the students from a poor background would struggle even more as they will only make use of their mother tongue and will not be able to go anywhere after that. Most black students do have a problem making use of English at school, and it is a severe handicap for most of them, especially those who did not attend the former Model C schools. The incapability of failing to master the language lead to the discouragement of many students, especially those from poor communities, who then, in turn, abandon their studies.

3.5. CHAPTER SUMMARY

This summary will highlight and identify several factors relating to the state of our education as it is currently. The main problem with our education is that it has been segregated along racial lines for a very long time, and it was unequal in all respects. The 'white' education was regarded as superior to all those of other racial groups. The country had four racial systems of education based on racial demographics of the country, i.e. White, Black, Coloured and Indian education. The Black or Bantu, as it was commonly known, was classified as the lowest of them all, and that was designed for most of the country's population. The other aspect of our education, unlike in other countries, is that it was never compulsory; hence it was optional to go or not to go to school and in the end, that contributed to the current levels of illiteracy we are faced with now, especially within the black population group. Currently, we are faced with large numbers who register every year from primary until tertiary levels but never manage to complete their studies. The reasons are multi-faceted. For every exit level, be it be at the lower or highest level, the numbers are very low, and the question is, what do the State and its government do about it? The actual problems in our educational system are at the lower level of the system, and in the end, they affect even the higher levels.

CHAPTER 4

DIFFERENT MODELS OF EFFECTIVE EDUCATION SYSTEMS

This chapter will deal with the different models of education in other countries. South Africa can copy some in trying to solve its educational problems. Some of the countries had the same issues that South Africans are faced with their education, but they ended up pulling themselves out of that predicament. One of the countries being discussed here is India, a member of the BRICS economic block, and it can be much easier to copy from India. This simply shows that there is something that India does correctly, which South Africa is failing to do correctly in educational terms.

4.1. INTRODUCTION

Models of education are the different systems of education that various countries have adopted to suit the interests of that country. These models are also the way or manner of channelling national education according to the aims and wishes of most of the population of that specific country. These models are at times being referred to as types of education systems that varies from country to country. UNESCO (2011:3-4) points out that every country has its strategy according to the needs of that country's population and the system being preferred by the rulers of that country. All those systems, irrespective of the country of origin, do emanate from the term education. Whatever method is being used or preferred, the most critical issue is improving or advancing that country's national knowledge and economy. These systems can also still be referred to as the structure of education, (European Commission; 2011:3-5).

Choi (2014:1) asserted that the structure or system of education systems also differs according to the governance and ownership, e.g.in other systems, we come across public schools rather than monolithic systems and in other systems segmented systems with private schools. The term school, no matter in which country, signifies children/learners irrespective of who they are. Thus, without children/learners, there is no school. The curriculum of every country's education is formulated according to the need that the government thinks is good for that country's schooling. Horner, Dogbert, Reuter et al. (2015:2-3) asserted that formal education begins from the primary level to the tertiary

level and occurs in the classroom. Its pillar of strength is funding from different sectors, but the government being the primary custodian. Another form of education is non-formal and does not need any classroom but just storytelling and practical training like that during the days of Socrates in Greece. Thus, the models discussed in this chapter are all formal and come from countries such as Malaysia, India, South Korea, Finland, and the USA, just to mention a few. These countries' models are being chosen to try to see what they have done correctly that South Africa cannot do correctly on its own.

4.2. WHAT IS AN EDUCATIONAL SYSTEM?

According to Education Statistics S.A (2013:1-2), an Educational System refers to public schooling from kindergarten to high school. It comprises everything that is closely linked to educating public school students at community levels. The educational system has only one problem: when used or applied without qualification, specific examples or even additional examples or additional explanation. Coates and Morris (2016:3-4) asserts that this term education system can fall prey to what is known as illusion knowledge, where people think they know something and only find out that they are wrong or only know the opposite. Thus, this system needs to be well understood before anyone can interpret it without confusing others. This system is based on how teachers apply specialised teaching methods known to help students grapple with what they are being taught. Again, this system is about education research and informs new instructional approaches or even how certain kinds of professional development can improve teaching effectiveness in a school or even describe abstract concepts such as the very educational system.

Mouton (2016:1-3) asserted that education is a public good to as many as possible individuals and it helps to accumulate as much knowledge even of the previous eras and preserve it for many generations to come. Education helps to socialise people and help them learn rules of conduct and expectations about future behaviour. An educational system comes about through education: an educational system can be seen as a by-product of education. A teaching programme can be developed through education and its system that can inculcate values, norms, and social skills that can help an individual develop his personality and sustain the social system. An educational system is a method

or way of educating people, be it be formal or informal system/method. The educational system has different connotations such as its meaning, aspects and social functions, and all these give information about where and how educational system developed. Every education system teaches people about rules of conduct and what to expect, and how to behave in the future. Therefore, it is not possible to disassociate education from the educational system (Burns & Bush,2011:322).

Clark and Woggerty (2014:4), posits that the educational system is an intentional system consisting of at least a teacher and one student in a context. Although the educational system does need to be formal, such as high school or university, teachers need not be licenced or be formally educated, restrictions based on who must attend and at what age, the content there, need not be subject matter typically being taught in schools and university, such as mathematics and other formal subjects. All that is important is what is being taught. Coates and Morris (2016:6) indicate that the educational system also has requirements: it is an intentional system; one or more teachers guide. It is also about more than one student being taught and includes the content being learned. A clinical example of an education system without boundaries for learning is the old one of Socrates in Greece, where his students were all adults and did not attend a formal school or class. This is the education system's early example of no formal class/school, described in *The Republic* by Plato. Socrates met his students not at one constant place but in different places to meet and talk/discuss. This is a clear indication that education has different systems through which it can flow, and they are not only at primary and secondary only, but also at a higher or rather tertiary level too and that will be explained in the below information.

4.3. THE THREE GLOBAL MODELS OF HIGHER EDUCATION SYSTEMS

Martin-Barbero & Monck (2018:1-4) indicated that university education systems originate from unique historical and social traditions but can be categorised under three coherent models. These models indicate that very few people were initially studying tertiary education, but more and more are currently involved in university education. These

models are Equalisers, Revolutionaries, and Globalisers. These three systems are being used in different countries depending on the university education system in that country.

4.3.1. The Equalisers

This system is being regarded as being home-based in that it is concerned with promoting egalitarian convictions and institutional rigidity that advocate equity within that country. It is a system concerned about equality among people, i.e., balance and access in education and social cohesion in all significant education policies. All countries that adopted this model argue that education is a public good and needs to be accessible to all (Phar,2010:14) In this regard, these countries prefer the inclusive system in which enrolment fees are below the actual operating costs. This indicates that education, in general, is the state's responsibility. The only problem in this model is that the state and its government can cut some funding on certain academic programmes or projects. The government embarks on such measures when the performance is unsatisfactory (Bakhouse,2009:6).

4.3. 2.The Revolutionaries

These countries have growing economies with substantial resources at their disposal and are eager to venture into the unknown for their national advancement. They place much effort on education as they believe that good education is the way to advancement and economic success. They focus much attention on university education as they believe that higher education is the source of knowledge at its best. Funding is not a problem for them as giant corporations such as Anglo Americans are highly active in education per se. It is in these countries that polytechnics institutions are being established and with great success (Teifse,2016:65) These countries are highly involved in reshaping their national education into what they want it to be. Some of the countries that have taken that route include Singapore, China, Saudi Arabia, The United Arab Emirates, Qatar, and Russia. Some of these states do have universities worldwide while they cater to all levels of higher education in their home countries with great success. A clinical example is that of Australia and its foray into South East Asia (Teffer, 2015:12).

4.3.3. The Globalisers

This category is mainly about the well-developed and rich countries. These countries have long put up the benchmark in education in subjects such as maths and science. They are excellent in fundraising and how to account for those funds. Some of those countries include the USA and Canada. They might differ in success, but they are all highly developed and successful in education. The problem in these countries, some of their qualifications, are highly questionable as in the end some of their graduates' struggle to get employment. Most of their students are on high student loans, and after completion, they have to pay up, albeit not being employed yet (Matlala,2021:17). However, some of their degrees are very good and offer students work as soon as they complete their studies. Not all universities in rich countries are good and offer a good degree with good work prospects. Education is a public good upon which everyone is entitled to get, and it is the duty of every government, be it be still developing or already developed, to take full responsibility for it(Spaull,2013:8).

4.4. WHICH EDUCATION SYSTEMS ARE DOING RIGHT FOR THEIR NATIONAL EDUCATION

4, 4.1. The South Korean model

Choi (2014:1), in addressing the issue of education internationally, states that it is about having a sound education system and determining what the country is doing to maintain that system. Both South Korea and Finland are not concerned about the proper schools per se, but what is needed to help turn a flawed system into a successful one. In this regard, all is about what both South Korea and Finland have done to turn their once chaotic education systems into the current success stories of today. Soria (2014:2-3), asserted that after the liberation from Japan, the new government intended to avail education to as many of its citizens as possible, but that did not last as the Korean civil war between the North and South took place. The government of Rhee reversed many of the reforms of post the inter-Korean war and focused on national education for the entire population. The education control was taken away from the school boards and placed under the direct control of the government. The Ministry of Education took total control of

schools under its wing and directed most resources into education. Spaul (2013:11) indicated that the issue of education in South Korea is regarded as human capital advancement. Statistics indicate that the education in South Korea clearly shows that since the Korean War, in the South, there has been a massive improvement in educational standards moving from a position where in 1945 the adult literacy was 22 per cent, but by the 1970s, adult literacy had grown up to 87.6, and by the 1980s it was around 93 per cent. Phar (2010:11) stated that it took massive efforts and national sacrifice for that country's education to match and even outperform most educational systems, even those in the industrialised West, mainly due to sacrifice and hard work. No matter which party was in office, the successive governments all invested massively into national education.

Feartherman (2009:417) the Koreans in their education had to sacrifice a lot to turn it around from what it was before, mainly through hard work. The Koreans adopted a culture of sacrifice and hard work as they believed it would be the only way to succeed. The Koreans rely less on talent only but mainly believe in hard work and endurance as the main ingredients to success. Thus, students are being mandated to study very hard and be focused at all times on what they are doing. In Korea, the government introduced all year round studying and at times with the assistance of tutors, thus no excuse for failure. Hard work has been and is still the road to success. Reeden (2009:4-5), stated that the Korean model of education is one of the best in the world as it instils discipline and grit into students and teaches them responsibility. It further teaches the students that hard work and dedication will always meet with success. The Koreans always put hard work first no matter how difficult it might be to be happy in the end, sacrificing short-term unhappiness for long-term success. Success comes with a price, and that is, students are constantly under enormous pressure to perform. Thus, the Korean education model is challenging, but it bears fruit as it teaches children to be self-reliant at an early stage (Adam, 2012:24).

Thornton (2009:24) demonstrates that classes in Korea are extensive in size, which is the opposite compared to the American situation. In South Korea, big classes are for promoting peer relationships and the aspect of community relationships later. The situation in South Korea is all about nation-building at an early stage for the future. The

reality in that country is about learning and working hard and how to persist after failure, which is never giving up easily. In analysing the situation, it is for every government to dictate terms for national education as it is through good education that a country can be economically stable and prosperous. Is that the case in South Africa? No, not at all. However, before 1994, it used to be almost like that. What went wrong? (Masondo, 2010:8)

4.4.2. Levels of education in South Korea

South Korea has several levels of education that exist in their education system, namely, infant school, primary school, middle school, high school, post-secondary education, and tertiary education (college or university). All these levels are the sole responsibility of the government of the day (Reeden, 2009:9).

4.4.2.1. The Kindergarten

Savanah (2012:11) suggests the number of kindergartens in South Korea has increased, and the reason being that they are being regarded as the first step of formal education. Most of the young children from the age of three are being enrolled into these pre-schools, and their majority offer their teaching in English, Korean and Chinese. This helps to introduce these children to diverse languages at an early age. The central government channels massive support into these pre-schools, which pays dividends for the country later. The Korean pre-schools are expected to teach basic mathematics, reading and writing, and numeracy. The kindergarten in Korea even teaches children games such as playing to be a doctor or teacher or even being a nurse. This, according to the authorities, gives these children a good head start when they begin with their primary education. Education in South Korea is mandatory (Feartherman, 2009:420). Sorensen (1994:18), indicated that education in South Korea is free at the elementary level. Thus, there is no excuse for funding in this regard. The only issue here is that enrolment competition is very high; hence not everybody can be accommodated. The private schools then try and accommodate the rest who could not get a place in the public schools. Education in South Korea is public, or instead, national priority number one and almost everyone wants to get into school. Sahlins (2006:2-3) said that hiring of teachers, either in private or public

schooling, is done only via the permission of the Superintended of education, and the process is very rigorous and thorough. All the elementary and secondary schools, whether public or private, do follow the same curriculum. The funding and general support from the government favour public schools more than private schools.

4.4.2.2. Primary education.

This level of education is also referred to as elementary schooling, and it consists of grades one to six and from the age of 8 to 13 per the Korean system. This level of education has two grade levels: grade 1-2 and grade 3-6, and each teaches different subjects in relation to the national curriculum (Houseman,2016:9) The grades 3-6 start to teach serious subjects such as Korean, English, Moral Education, Social Studies, and Mathematics, Science, Art, and Music and Practical arts. In the Korean system, the class teacher is expected to teach all those subjects to the same class except in the circumstances requiring specialised teaching in subjects such as English (Global Education; 2007:3).

Secondary education: This is the last level before high school, where the seriousness of education begins. It is within this level that vocational education falls within. The vocational schools specialise in agriculture, fishery, commerce, trades, merchant marine, engineering and arts. All in all, irrespective of whatever path the students have taken at this level, seriousness is mandatory. The teachers are well trained in every subject they are supposed to teach. The learners' progress is being closely monitored, and the Ministry of Education is stringent in monitoring these schools (Soria,2014:4).

4.4.2.3. High school education

Soria et al, (2014, 2-5) the period student is expected to stay at a high school, is three years and students graduate at age 18 or 19. Students at high school are expected to study for longer hours than usual under the strict supervision of teachers. After school, they are, on most occasions, expected to study at the school study room or library and do not go home for dinner as most schools provide paid dinner by the school from the State funding (Sorensen,2004:1). The Korean education system is rigorous and instils discipline and to the advantage of the student at a later stage and is very rigorous. The

learning of English is being encouraged as it is acknowledged as the international language, which will or can help any student study successfully at any university locally or even abroad. The South Korean Government is highly involved in the entire national education and encourage the students to embrace the strict culture of education not only for the individual but national benefit (Rubbin,2011:1-2). Sorensen (2004:2)postulates that South Korea still have Vocational high schools for those students who could not get accommodated into the academic high schools. The only problem with these vocational high schools is that they are less desirable in their nature and educational standards. They might be forsaken as the last option for the educational system, but their advantage is that all their graduates are almost guaranteed jobwise. Albeit for their status when it comes to employment, these schools just attract fewer students than the other schools.

Fisher (2011:4-5) the Korean education is based on strict levels for advancement to upper levels of study. Students who wish to enrol in college need to pass the preparatory examination before applying for college admission. The high school system in Korea is being made to sort out students according to their achievements. In this regard, even in the formal job market, job preference goes to the students from the Seoul universities and those who have been to the best public high schools in the country. Choi (2014:9). The Korean Government plays a very pivotal role when it comes to national education. This issue of tests in the Korean education system is taken very seriously, and no student can just go past to another level before meeting or writing a test for that level as per the educational rules that apply to all nationals at any level.

4.4.2.4. Tertiary education

Adam (2012:22) Tertiary education in South Korea is not as easy as people might think, but it is very tough, from the entrance tests into the university system. Students are encouraged to be very serious in preparation for those tests if they want to study at university. The entrance examinations are taken very seriously by all students, and none enjoys them. The failure of these exams is so costly on many occasions that some failed students commit suicide. Educational failure in South Korea is unacceptable. Tertiary

education includes colleges and universities where an individual is expected to study for four years and vocationally for two years.

Gouws (2002:48) Koreans usually consider universities to be ranked according to the monotonic scale, and the leading institution in this regard is the National University of Seoul. The high schools are ranked based on which prestigious university students admit the various high school graduates. The same is for the middle schools in that they are being ranked according to the prestigious high schools that admit a certain number of their students into their system. When it comes to their education, Koreans are very, if not extraordinarily competitive, and they need the best out of their system. Rubbin (2011:3-4) vocational education, in this instance, is about handwork, and it is the most practical form of education in which students develop skills in electricity, carpentry, electronics, and farming. It is where an individual is supposed to be thoroughly hands-on, and it is all about acquiring trade skills at the highest level. What has been discovered is that it is much easier to get a job after graduating in whatever trade qualification is achieved with a vocational qualification. On other occasions, the student does get a job whilst still busy with their studies. Coates (2016:16) indicated that parents in South Korea play a vital role in their children's education by being strict and encouraging them to be dedicated to their studies as they believe that only education can lead them to prosperity. This education system demonstrates that the central government is the primary driver of education. However, the parents in Korea also play a massive role in encouraging their children to be serious with their studies. This is because they believe that achieving the highest level of education is not just the social status achieved but also a lifetime safety valve.

4.5.THE FINNISH MODEL OF EDUCATION

Schleicher (2014:4) demonstrates that fifty years ago, Finland had an awful and chaotic educational system and was at risk of being referred to as the economic stepchild of Europe, and those circumstances forced the country to change for the better, although it was difficult. In Finland, school, irrespective of whatever level, is the centre of the community. The Finish culture values intrinsic motivation and the pursuit of personal interest. Finland has a short school day rich with school-sponsored extracurricular, as the

Finns believe that the most important learning happens outside the classroom and not inside. Sahlberg (2013:4-5), from his perspective, asserted that Finland is being for a very long period trapped between the superpowers of Europe but was not discouraged by that and wanted to improve its system of education. Finns embarked and relied upon academic rigour in order to turn their situation around. To that, they focused on hard work and dedication to their national education, and that did not only involve the government alone, but the entire community became involved for the sake of the national education salvation. Thus, teachers in Finland teach 600 hours a year, spending the rest of the time in professional development and focusing on feedback. Salish, (2007:36) postulates that the Finnish system differs from the USA in that American teachers teach for 1,100 hours per year and with little time for feedback. Finns put in whatever effort and sacrifice they can for their national education. They emphasise that the key to success is education. They also encourage students to learn to be multilingual to avoid being just confined to Finland. Both the Finns and Koreans have one significant common aspect of education, and that is that both societies have a high level of respect for teachers and their academic accomplishments. Education in both societies is being attended to as soon as possible and is always prioritised (Cooper, 2002:112).

Lonka (2018:1-3), in concurrence with Sahlberg above, asserted that Finland has an equal school system and highly well-trained teachers who went through the high-profile training programme, and the society has high respect for teachers. The science teachers are extraordinarily trained, and they are part of why Finland is the best educationally in the world. All teachers are required to have a university education, and thus they have to be well trained in that regard. Finland values the teaching profession as it has turned the country into what it is now. Schleicher (2014:6) posits that Finland changed the focus of teaching from subject-focused into developing comprehensive learning skills to develop an advanced way of teaching. In brief, Finland has contributed a lot to the improvement of education internationally. Finnish schools are seeking to activate and engage children.

UNESCO (2016:1-3) education in Finland is an education system that is fully subsidised with meals served for full-time students. The structure of education differs slightly from that of South Korea in Finland; they have a system referred to as compulsory basic

comprehensive school (from age seven of sixteen and come out with a graduation diploma). Senet and Berger (2006:67) Children below that age are still at the kindergarten with well-trained toddler-care officials. At age 16, pupils can choose whether they want to continue with either academic track studies or vocational track before applying for university studies in either of the two tracks.

Rubin (2017: 1-2) points out that Finish education, especially at the childhood level, emphasises respect among the students as well as for the adults, and this builds these kids into well organised and mannered adults. The Finish believe that early education is the first and most critical stage of lifelong learning. Lonka (2018:62) posits that education in Finland starts once a child is born, where they are allocated three books, each being given to the parent, and that is regarded as part of the child's development. This aspect of books is intended as early childhood development with the main aim of teaching them in caring about other people and not only about themselves. The authorities in Finland believe that the first five years of a child is the most critical stage in a child's life.

Sillius (2007:3-5) the children in Finland begin the formal period of schooling at the age of seven years. The reality here is that before they reach seven years of their primary learning mode is just through playing (just like in South Korea). For all these early years, they do attend free day-care from eight months until five years. At these day-care centres, kids are given proper and well-balanced meals to grow eating healthy food. Salish(2007:38) posits that classes in Finland are not overcrowded, and there are even health sector officials at day-care centres, which is being fully subsidised by the local municipality. The number of adults at these day-care centres is one teacher and two fully qualified nurses for about 20 children. Any payment that might be needed is billed on the family account. One other thing where the Finish differs with the Koreans is that childhood education is not mandatory although it is being encouraged (Campbell, 2016:5-7).

Infopankki (2019:1-3) indicated that the Finnish education system encourages small classes with not more than twenty students in class. The education system also encourages bilingualism where both Finnish and Swedish are taught. The reason for small classes is to try and promote student achievement. It is believed that smaller

classes give the teacher a good chance of paying full attention to the learners. It allows them to get to know the children thoroughly in terms of their strengths and weaknesses. Reading is encouraged at all costs within the school-going age group. Lonka (2018:4-6) Children have age-appropriate books that are meant to encourage them to read. Pupils are issued with a card report at the end of each term—autumn and spring. In comprehensive schools, grades are awarded in terms of the subject at the end of the spring period and are being monitored for any improvement, and that is being done by the end of the summer term. This is like being given a second chance to pass a particular subject. Rubin (2017:2-4) says that pupils at a comprehensive school have several social entitlements such as free lunch every day and health care. Additionally, pupils receive free book material and free school trips and free housing in the event of travelling very long trips between home and school. Comprehensive school education in Finland is sponsored by the municipalities that carry the entire costs through taxation funding. In this regard, the teachers at this level are specialists in the subjects they are teaching. Children usually have the same teacher for the first six years, and that helps a lot as they can form a firm bond, and the teacher, in turn, can know the strength and weaknesses of every learner.

4.6. UPPER SECONDARY EDUCATION: FINLAND

These are the next level after the comprehensive schools, and they cater for the students who are at school but not with any profession in the end. The same subjects are still being taught and studied more intensely at this level. This level takes 2-4 years in total, and then after, students are eligible to apply to university or even to vocational institutions. The medium of instruction in these schools is mostly in Finnish and Swedish. It is at these upper secondary schools that adults are also being allowed to further their education. Kyro and Nyyssola (2006:2-3) show that vocational schools contribute to the system of education teaching hands-on education, and these prepare students immediately for the job market. Once students enrol, they are already being trained for the job in future. The advantage of this vocational education is that the students are already on the job practically. (Infoppaki,2019:5).

4.7. HIGHER EDUCATION IN FINLAND

This is all about university education, and in Finland, they have two types of universities: the normal and applied science universities. The applied science universities are teaching about on the job. The other type of university is about research. Irrespective of what line of university one follows, the issue of qualifications goes hand in hand with the course of study. The tuition language is either Finnish or Swedish, but English is an option, but it is encouraged that students should be multilingual. In Finland, those from the EU are not charged any tuition fees, especially if studying for a bachelor's degree. In brief, this is all about free education (Rubbin, 2017:4-5).

Euro Education.net (1995-2009:2-4), Finland has different types of higher education institutes, all under the Ministry of Education and Culture and there are fourteen (14) in all. Most of the universities are having the status of being semi-independent from the state but are still the responsibility of the State and its Government when it comes to funding. Government funding is being valued at about 64% of the total funding. The rest of the funding comes from private funders. Infopakki (2019:4) of all the fourteen universities, there is also a special university—the National Defence Forces university—attended by all armed forces members. Finland is a tiny country geographically, but its university population of students is about 170 000, and that was back in 2012. The state in Finland is still being taken as the custodian of the entire national education and is being held fully accountable for that. Military education is being taught strictly and expressly at the National Defence College by highly qualified army personnel.

Kyro and Nyysola (2006:2-3) the different lines of education in the Finish military are the army, the navy and the air force. The other level of tertiary education in Finland is the Polytechnics which are 24 in number and are all under the Ministry of Education and Culture. Just like the full-time universities, they are also funded by the state and its government. The last type of university is the Aland University of Applied Sciences and then the Police College of Finland under the Ministry of Interior. Euro Education.net (2014:8) both the universities and the polytechnics are not that much apart, but each with its academic curriculum. The Polytechnics degrees are based on fundamental and

professional studies such as nursing, musician, music pedagogue, maritime engineer and sea captain. The degrees are from Bachelor up to masters and doctorate. Coates et al, (2016:230) indicates that the admission requirements are straightforward. Once the incumbent has fully graduated with the bachelor's degree, the same method of applying for higher degrees applies up to the PhD level. Most doctoral students are already in the employment system, and thus, they do not struggle for work after completing their studies.

The Finnish education system is excellent, and it gives the participants a good chance from childhood in deciding what they want to achieve as they progress with their education. Again, they have a well-educated military force which can help in any case of any educational crisis. The government is fully committed from the beginning to the last. Hence, they have a 100% educated population. However, adult education is still being taken very seriously, as it was in South Africa before 1994. If possible, SA needs to follow this example by reverting to some of the old parts of the previous system. (Infopakki, 2019:3-4).

4.8. THE SYSTEM OF EDUCATION IN THE USA

Ripley (2013:4) indicates the USA is much behind in its education, especially at the lower levels compared to Korea and Finland. The main problem is that there is a very high rate of dropouts in American schools. This dropout crisis is just the tip of the iceberg, as many of those in school do not enjoy being there but are just there to be away from the streets and troubles thereof. American education is quite a mess, irrespective of its strong economy. The other problem with American education is American kids' failure in mastering sophisticated problem solving and critical thinking to survive, as is the case with Korean and Finnish students. The level of school performance of children in the US is dropping in that kids are not growing up with the kind of skills or grit to make it in the global economy as both the Koreans and Finnish are. According to Wagner (2014:7), America needs schools for their kids that can mirror the American experience or be thought to be needed by the parents. The conditions currently do not give any hope of improvement if the nation does not stand together and copy from what the Koreans and the Finnish did for their educational systems. USA education needs to be revamped for

the sake of the entire population of that country. Very few schools still produce good educational products. Campbell (2019:1-3) says education in the United States is being provided in three levels in general: public, private, and home schools. Every federal state is expected to be the custodian of the entire system in setting up the standards expected in education and to provide the funding. The bulk of the funding comes from the local state governments, and the remainder then comes from the federal government. The majority (87%) of the school-age children below higher education are attending the state-funded public schools, and the rest (10%) attend private schools, and the last (3%) attend the home-based schools. In the USA, education is supposed to be compulsory between the ages five up to 16/18 depending upon the federal state they are based in. Every type of school has its requirements pertaining to education (Zinkmund,2007:602).

Generally, at lower levels, children are being classified according to their different age groups to be in different levels at school such as the kindergarten (5-6years) and first grade for the youngest children at school and up to the final level or grade of high school, and that is up to the final year at secondary, and that is ages 17-18 years old. All the above levels are being referred to as the elementary level of education (Davis & Julie; 2015:1-3).

4.8.1. Secondary Education

Dept. Education USA (2013:103) show that secondary education is divided into junior high school and high school proper. The junior high school is catering mainly for the seventh and eighth grades. Full high school is from grade 9-12, where students can study various subjects with no specific speciality. Some subjects are being referred to as being mandatory subjects. These are the subjects that every student must do to be considered having completed that course. Each state has the authority of setting the curriculum and the educational standards it prefers. The individual states have the power to decide which subjects can be studied within their area of jurisdiction. Ripley (2013:7) states that the public schools are all under the central government's control and operate under standardised testing. This system is supported by the No Child Left behind Act and Every Student Succeed Acts, which mandates all states to test students in all the public schools

and they each name those public tests differently from one another. Some of the different tests are the New York Regents Examinations, the Florida Comprehensive Assessment Test (FCTAT) or even the Massachusetts Assessment System (MCAS). These tests are being used to test the students' mental ability with what they intend to study and whether they will succeed or not. These tests are also being used to test the emotional behaviour of the students to cope with the modern challenges of 21st-century skills (Cooper et al 2002:120-138).

4.8.2. Education for Students with Special Needs

Kingsbury (2008:14) reveals that these types of classes are being referred to as the special classes and are being taught by well-trained teachers with special or rather exceptional skills for the students with special needs. The federal law referred to as Individuals with Disabilities Education Act (IDEA) indicates that all government-run schools should provide students with disabilities or special needs services. Such schools meet with the parents to develop a programme suitable for the students in that category. These students with special needs have free access to education which the central government is fully sponsoring. These students at these special public schools have a positive success rate, and the majority (67.1%) qualify at the public high school level. (Coates,2016:230).

4.8.3. Public and Private Schools

Juergen (2006:107) the local government and the state are being tasked with overseeing private education. The Federal Department of Education plays a critical role in setting standards in these schools to align with the national curriculum. The private schools in the United States of America are much fewer and include parochial schools and non-profit independent schools. Private schools are costly, and their fees vary per geographical setup. Their funding further comes from different church denominations of which their member's children are attending these schools. Their tuition is costly as compared to their public counterparts. The largest private school in the USA is the Roman Catholic Archdiocese of Chicago office of the Catholic Schools. (Martin-Barbero & Monk, 2018:9).

NCES (2019:1-3), in concurrence with Juergen, asserts that the public schools are being supported by the local, state and federal government funding. These public schools have many student populations, and all rest upon the different needs the students' have. Further on, they depend on their funding from the local property taxes, which vary in accordance with the size and wealth of the state. The most extensive public school system in the United States is in New York City, with 1200 separate public schools and more than one million students. The admission requirements in these public schools differ accordingly but mainly based on where the student is residing (Dept. Education, 2013:17).

4.8.4. Higher Education

Zinkmund et al (2007:608) This is an optional level of education after the secondary level, and it comprises the different levels of university degrees. Every university has its method or system of accepting students. The higher education attainment in the USA is being measured according to the number of students passing their registered course of study. The table below clearly explain the educational attainment in the USA.

Table: 4 Educational attainment in the United States: age 25 and over (2009)

Education	Percentage
High school graduate	86.68%
Some college	55.60%
Associate or Bachelor's degree	38.54%
Bachelor's degree	29.0%
Master's degree	7.62%
Doctorate or professional degree	2.94%

According to this table, education in the United States is on the downward slope from high school; there is a steady decline to where there is only a small percentage of the

population proceeding to higher levels of masters and doctoral degrees. The number of students decreases with every level they undertake; the higher they go, the lesser the number of students registering for the higher level. The above table paints a different picture compared to either South Korea or, more so, Finland, where many students are registering for tertiary levels. In the USA, the higher up the ladder of qualifications, the fewer students register. It is important to note that this is not the example South Africa can copy and follow.

Dept. of Education USA (2013) there are mainly two types of universities in the USA: public universities and private universities. Private universities are more expensive in tuition than their public counterparts, catering mainly to students from poor backgrounds. Both do offer degrees with the same duration of time, namely four years. Students mainly at the public university do survive through the loans they make to pay for their studies, and these, in turn, affect some other social grants as the federal government have to carry the load of the loans (Martin-Barbero and Monk,2018:2-4).

The US standard of education is far lower than that of either South Korea or Finland. The standards are rapidly going down, and the higher the level of education, there more the dropping out of school. There are fewer candidates at both masters and doctorate in America than in both South Korea and Finland. Thus, something needs to be done with the USA national education to raise the standards to where they should be.

4.9. SYSTEM OF EDUCATION IN INDIA

Sen and Bhattacharyya (1991:67-69) Education in India is regarded as the primary weapon that can take many people out of the cycle of poverty. The issue of education goes back to the colonial era. For a very long period, India laboured within the framework of colonial education. India needed the type of education which would benefit the country. Education is the key to realising the people's aspirations of that country, and it needs to be transformed to meet their expectations. In this instance, it would become the most potent tool for national advancement, and it would help increase productivity and achieve social and national integration and fast track the process of modernisation. Featherman (2009:21-23), in concurrence with Senet et al., observes that India embarked upon

modernising its education system for the benefit of India. Education is the primary main weapon of national investment in the present and future, and thus it needs the government to take it very seriously, especially the lower level of education. The country has exerted significant efforts towards educating the population to advance the economy of the entire country. In this regard, India adopted the policy of education first with everything else to follow.

4.9.1. Class Basis of education in India

Education in India is divided into the higher (educated) and the lower class (less or not educated). India is a huge country and with very diverse population groupings and each with its language and religion. The only way to administer the country was through education, and by then, it was only to be the colonial education that was all about to serve the colonialists. The other system used to administer the vast country was the old traditional Caste system, which categorised people following a social stratification structure. However, it is education that brought about the country's independence (Nimuboma and Vencatachollum, 2072:p.p.6-8).

Chattopadhyay (2000:72) point out that for the country to succeed, India had to remodel its education system after independence but with great difficulties, especially in the rural areas where the primary activity was agriculture.

In short, the socio-cultural basis remained dominant, especially in rural India where the education system got alienated from the society and where the education system established its dominance (e.g., in most of the urban areas), the educated became alienated from the rest of the society.

Sahlins (2006:6) postulates that for India to succeed in most spheres, they had to remodel their education to fit in with the needs of the country's population—the system of education suitable for Indians. The problem of class struggle was now being fought on an educational basis. The ruling class had used education to control the less or non-educated. The revamping of education in India was about an all-inclusive education system suitable for all of India.

4.10. PROVISION OF EDUCATION IN INDIA

Education in India is being provided mainly by public schools, which are controlled and funded by the central, state and local levels of government, and there are also private schools with different donors at their disposal. The Indian government has made it crystal clear that education is free and compulsory, especially at the basic levels. At the upper levels, the enrolments are forever increasing. Sahlin(,2006:9)There are several levels of education in India, such as primary, secondary, and tertiary levels education. At the two lower levels, India has a large stem of the private school system of education. Compulsory education is working in India, where children between the ages of 6-14 years old are enrolled in school in the rural areas. The system in India has reduced illiteracy by at least 2.8% among the students of the age's 6-14 years old. The numbers of children in school are increasing due to the compulsory system of education (Ninphuanyeh; 2018:28).

4.11. LEVELS OF SCHOOLING

Indian has several levels of schooling, somehow almost similar to both Finland and South Korea. The pre-primary (kindergarten) primary education is being divided into two parts, and they are Lower (Class I-IV) and the Upper (Class V-VIII) and the elementary level, which is for children of the ages 6-14. The Indian government emphasised primary education as the foundation of good or bad education further down the line in any country, (Featherman, 2009:81-82). The central government then, in 1994, embarked on the revitalisation education programme, and the central government has allocated 85% of the funding, and the federal states funded the remaining 15%. The enrolment at the primary level has increased tremendously, and many children are in school, but the only problem of this process, is that although enrolment has been increasing, the quality remains low (Martin, 2019:6-7).

4.11.1. Secondary Education

Secondary education usually covers pupils aged 14-18 years old. The final two years of their schooling at this level is referred to as higher secondary. These two halves of education are regarded as very important and the gateway to enter higher or tertiary

education and are being sanctioned before a student can advance to higher education by the Ministry of Human Resource Development. Ninphuanyeh (2018:30) Secondary education in India is only passed by writing a complete examination and attaining a good passing mark. Most schools let their students write the standardised examinations, especially at grade 12, which are also referred to as the board examinations, and they lead to the granting of the secondary school completion diploma, which can be used as an entrance to university or vocational school (Martin,2019:11).

4.12. TYPES OF SCHOOLS

Different types of schools exist in the Indian education system, namely the Government schools where education is free for all up to the age of 14. The students who study here are from vulnerable and needy home backgrounds. Thus, most of the students are attending these government-oriented schools and are very large in number. Some of the government-run schools are, for example, Kendriya Vidyalaya in urban areas and the Jawaharlal Vidyalaya Navodaya for the gifted children, as well as the Indian Army Public School run by the army for the children of the soldiers. There are also private schools, and the state is partially aiding those private schools in their funding (Joshi, 2019:1-3).

4.12.1. Unaided Private Schools

Sahlins (2006:1-3) asserts that private schools are schools for children from very affluent family backgrounds, and their families can afford to take their children to these expensive schools. Apart from wealthy families, there is the middle class that is not very rich but can afford better education for their children and can pay for their expensive education. The medium of instruction at these schools is English at the most. Chattopadhyay (2000:188) in support of Sahlins indicated that most of the private schools in India are in line with the British public schools; hence they are being referred to in most instances as public although being privately administered. These private schools are costly but do produce excellent results. Joshi (2019:4-5) these private schools are said to cover many subjects not being covered by the public schools. In addition, their curriculum is said to be more advanced than that of their counterparts.

4.12.2. International schools

These types of schools are not uncommon in India and are estimated at 410 all over the country. Collectively, they are being called International Schools Consultancy (ISC). The medium of instruction at all these schools is English, which is for the entire curriculum per se. infrequently a second language is being used as a medium of instruction (Government of India; 1990:1-3).

4.13. HIGHER EDUCATION IN INDIA

Higher education, as it is in many countries, is in two formations: university and vocational. Admission into both levels and formations is a good pass mark of grade 12.

4.13.1 University education

University entrance is guaranteed only by a clear grade 12 passing for a bachelor's degree in whatever field the student would choose. India's higher education system is the third largest in the world after the USA and China. Indian higher education is being governed by the University Grants Commission of India (UGC). This commission is in complete control of all degrees, from junior to doctoral, in their accreditation. India has, all in all, 152 central universities, 316 state universities and 191 private universities and 12,748 institutions offering diplomas. (Government of India 1990).

The government, irrespective of whatever level, is putting more emphasis on both science and technology. Irrespective of some complaints about Indian education, some of the institutions in the country are being internationally acclaimed for their standard of undergraduate education in engineering. Chattopadhyah (2000:80) indicated that some of the institutions with fundamental research are the Indian Association for the Cultivation of Science (IACS), Indian Institute of Science (IISc). Most of these institutions are well acclaimed for their standard of research in basic science and mathematics. The shocking part about India and its education system is that it has failed to develop world-class universities in public and private sectors (Alawi, 2005:32-33).

4.14. PROBLEMS IN UNIVERSITY EDUCATION

India, irrespective of its top-rated universities, is also well known to have in its midst the

universities that are well known to be there only for the main aim of making money: those are the bogus universities. These bogus private universities are not recognised anywhere but are just there to milk the people of their money. The problem is so massive that then Prime Minister Manmohan Singh in 2007 indicated that

“India's university or higher education is in a very bad state of disrepair. In almost half the districts in the country, higher education enrolments are abysmally low; almost two-thirds of the universities and 90% of the colleges are rated as below average on quality parameters. In addition, there is a concern that many states' university appointments, including that of vice-chancellors, have been politicised and have become subject to caste and communal considerations; there are complaints of favouritism and corruption” (Chattopadhyah,2000:82).

Habermas (2009:130), in concurrence with the above Chattopadhyah's report, indicated that the Government of India is much aware of the problems besetting higher education and has been trying at all costs to repair whatever it can, but it is challenging due to some red tape around. The three best internationally accredited universities in India are the Indian Institute of Technology, the Indian Institutes of Management, and the Jawaharlal Nehru University in 2005 and 2006. These three universities are flying the Indian flag very high despite problems with other institutions in the country.

4.15. CHAPTER SUMMARY

The summary of this chapter will highlight the different education systems, highlighting their good and bad aspects and how they can be compared to the South African education system. Furthermore, their advantages and disadvantages will be indicated, and what is it that South Africa can copy and refrain from copying from those systems. Furthermore, the best system of the four systems will be identified and which would be prudent for South Africa to emulate. There are three models of education which I think that South Africa should choose at least one of them to follow, and they are: Equalisers- home-based system and open to all to follow and practice; Revolutionaries-it is for mainly still developing countries such as South Africa and the Globalisers which is for the already developed countries which are very rich in general.

The educational system is an all-inclusive system that can differ according to different countries. It is further all about attending school irrespective of being public or private. Education is a public good and need not be deprived of anybody. Systems of education differ accordingly in different countries as some are better or somewhat better than others.

CHAPTER 5

CONCEPTUAL MODEL FOR EFFECTIVE PROMOTION OF Ph.D. GRADUATION LEVELS

5.1. INTRODUCTION

Tatomir *et al* (2018:188) posits that a conceptual framework is a visual representation of the research expressed graphically. This imagination is to show how things are likely to be if certain results are expected or are to be achieved, primarily showing the relationship between the variables. Mylopoulos, (2017:49-50) asserts that this conceptual framework should be understood as a tentative theory constructed to predict the result of certain relationships of variables. This involves interrelated ideals emanating from observations or known relationships, thus allowing for a generalization. The presence of other models used elsewhere cannot be underestimated as that informs the overall thinking pattern of the researcher. The framework is then constructed into a conceptual model through the development of the interrelated concepts creating the basis on which a phenomenon is studied (Teffera, 2015:16). Thus, the conceptual framework is essentially the position of the researcher relating to the subject matter, not as merely a grouping together of concepts, but systematically bringing together of the concepts as integrated and related variables. According to Trochim (2006:4) the conceptual framework should identify and lay out the key variables, concepts, and factors with an indication of how they relate to each other. This should provide a logical interpretative approach to the realities of the phenomenon and allow for knowledge and easy interpretation of how the concepts and variables are presumably related (Levering, 2002:38). This speaks to a presumed reality that may inform decisions on the research design, research objectives and the resultant research questions. Much of what is included in a conceptual framework is derived from existing literature and indispensable yet unrecorded knowledge resident in practitioners and related sources. This conceptual model is intended for use to address the problem of low Ph.D. throughput in South Africa (Spaull, 2013:16).

5.2 IMPACT OF SOCIETY ON EDUCATION. The social structure in the country was never constructed to promote education to the doctoral level for all the population groups. The general understanding would therefore be that one gets educated or goes

to school for a period to enable them to get a job (Adam, 2012:22). The South African population is distributed amongst the four racial groupings, emanating from the previous structure and adopted in the current situation, as, in alphabetical order: Africans, Asians, Coloureds and Whites. This classification is illustrated in table 5.1 below.

Table 5.1 Racial demographics of South Africa

RACE	POPULATION	FEMALES	MALES
WHITES	4,662 per thousand	2,325 900	2 194 200
BLACKS	48,6440,per thousand	23 896 700	22 786 200
COLOURED	5,295 per thousand	2 614 800	2 459 500
INDIAN/ASIANS	1,545 per thousand	7 08 100	740 200

SOURCE: Adopted from Statistics South Africa (2021)

The racial demographics should be understood in the context in which the populations have been classified before and the structure has remained like that. The African (blacks) being the indigenous account for **79.2%** of the population according to statistical records, **(48.6 million, 2021)**, and this constitutes the single largest group. This is followed by the Coloureds (products of interracial relationships), the second largest group who themselves constitute **8.9%** of the national population. The whites (of European origin) are the third largest group comprising of **7.9%**, lastly, the Asians (Indians, Chinese, Arabs) who account for **3%** of the population.

The country has 26 universities officially, and this is in reference to state subsidized institutions of varying sizes. There is at least a university in every province, with more and larger universities found in the metropolitan cities. The total average total enrolment at all levels for all these universities is estimated at 300 000 and below students at any given time in a normal year. Suggesting that 1 million have been lost since Grade 1 when they

started as 1.3 million. Using yearly dropouts as stated by Bokana et al (2014:263) , the enrolment figures are estimated and illustrated in table 5.2 below.

Table 5.2 Yearly enrolment at South African universities

LEVEL	Overall yearly enrolment	Overall dropout rate
1st year	120 000	9%
2nd year	60 000	50%
3rd year Bs	30 000	20%
4th year Hons	15 000	12%
5th year Ms	7 000	6%
6th year Ds	4 000	3%

SOURCE: own constructed from university records

The natural reduction in the number of students as the years continue is acknowledged, but of primary concern is the dropout before exit years. Bunting et al, (2010:53) worked out that only 25% of the students starting from 1st year graduate at the first exit stage after three years. The two types of universities (comprehensive universities and universities of technology) all have the basic three-year courses (Bachelor's degree and National Diploma, respectively) which constitute the first exit level. Dewey (2019:3) estimates that between the entry level and the first exit level only 50%-60% of the students remain in the system, the high dropout cannot be accounted for. Through National Student Fund (NSFAS) all students considered too poor to pay for their university fees are funded. Therefore, failure to pay for fees may not be a factor, except if students have academic exclusion because of poor performance (Bokana, et al, 2014:261). There is a sudden increase in the drop on the enrolment figures soon after the first exit year, and research needs to be conducted along this line. Matlala (2021:4-6) refers to the black tax effect as a contributory factor as most of the students immediately embark on the “working for the

family” journey. Much of this is attributed to poverty, and the new graduate becomes the bread winner at home (if they get the job). As indicated in the table, the number proceeding on to postgraduate study is heavily reduced, accounting for only 6% of the 1st year enrolment.

Backhouse (2009:4-5) opines that going in for postgraduate studies is generally the last thought in the minds of the university 1st exit level graduate. Dewey (2019:3) concurs and states that going in for postgraduate studies is the last thought for the university student at 1st exit level, it is considered unnecessary. The social and economic conditions of the individuals also have a bearing on the decision to go for postgraduate studies with the expected spin-offs into job prospects in mind. Critical to this decision to proceed to higher education is the understanding that there is a high number of university graduates who cannot get employment (Cross et al, 2014:155-160). The levels of unemployed graduates are a demotivating factor in an environment that has not been traditionally prone to higher education as a generational practice. Little association is made between the levels of education and creation of employment, that entrepreneurship amongst the graduates, as people study to look for jobs. Of particular interest is the relationship between entrepreneurship and countries that have higher literacy levels, suggesting a correlation (Fisher et al, 2011:4-6). Entrepreneurship is the confirmed vehicle that can be used to create employment and thus absorb the numerous jobless graduates, but there is little of entrepreneurial activity. Backhouse (2013:1-5) suggests that the South African economy has been stagnant for a while, and as such the purpose of university education has been diminished. Jowah and Beretu (2019:252-254) identified misfit of curriculum and industry need as a causal factor for employability of the graduates, this was specifically for Human Resource Management graduates.

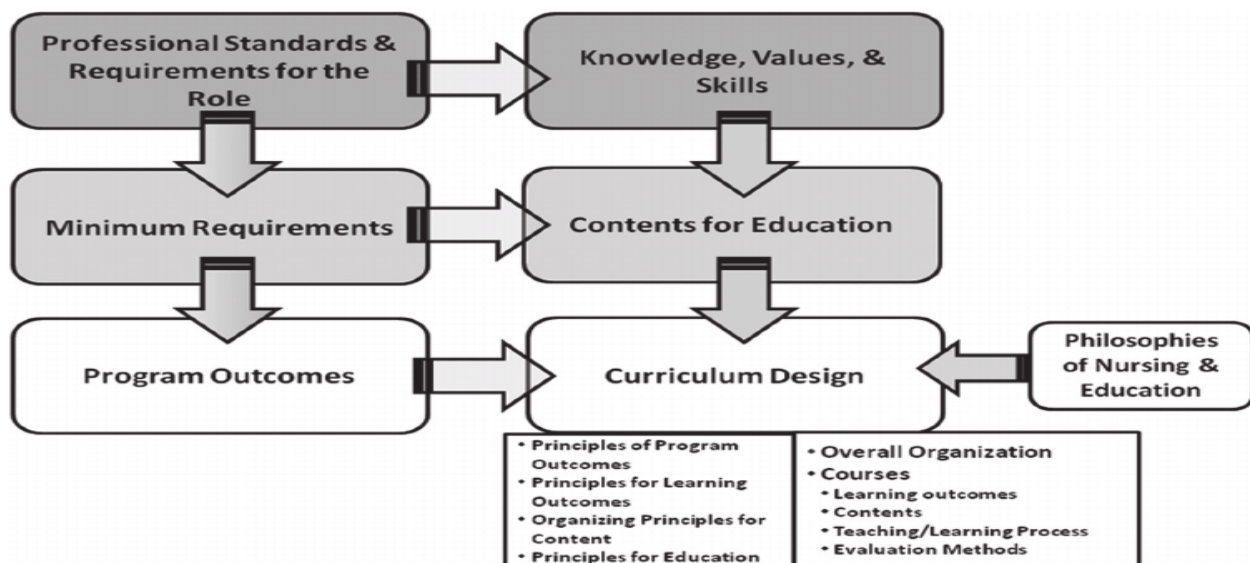
The researchers indicated also that the economy was not expanding at a corresponding rate to accommodate new graduates and the growth in the population. In a different research, Fisher et al (2011:10) confirmed that the personnel recruited from universities needs to go through extensive training to enable them to adjust to the realities in the workplace. This reluctance by the industry to employ young graduates and rather prefer the older but more experienced workers dampens the desire for many prospective

university students because of employability problems (Backhouse,2013:7-8). The basic theory however applies, in that the researchers consistently found a serious disjuncture between the curriculum taught and the expectations of the industry in this regard. It can also be hypothesized that the desire to further one's education is impacted on by more factors that what generally "meets the eye." These possible factors, are, namely;

1. the social or cultural background of the individual candidate / doctoral prospect, or
2. the form of education the individual has in preparing them for higher studies, and, or
3. the general political, social and or economic conditions prevailing in the country.

Phar, (2010:16) alludes to the fact that salary remunerations for professional academics are not attractive and may therefore impact on the desire for masters graduates to proceed to doctorate level. A simulation of the critical factors necessary at lower education levels is illustrated in figure 5.1 below.

Figure 5.1. Preparatory model in developing a balanced learner



SOURCE: Bokana et al (2014:270)

This model, though specifically designed for training in nursing, still applies to the general needs for the development of a future postgraduate student. It is important to realise the importance of the background and environment to the development and aspirations of individuals (Adam, 2012:2-22). The thought of having a doctorate qualification can be

easily associated with the benefits expected and the structure of the society at large and what it can take. The levels of doctoral qualifications in the Southern African Development Community (SADC), this suggests that there is an environment specific to the region (if not on the continent) that does not promote studies to doctorate level. There is a need for recognition of the impact of the structure of the environment, the benefits to or absence thereof to the aspirants for doctoral degrees.

Teise *et al* (2016:65-70) alludes to the suggestion that the environment and the cultural set up also plays a critical role in shaping the aspirations. Knowledge about qualifications and how they are rewarded means a lot in the development of a future university student. In the apartheid structure, the average black child (clearly the majority) grew up knowing that they would either be a teacher, a nurse or a social worker (Teffera, 2015:12). The other professions were either not known nor could they be aspired for as it was outside of the cultural, political and societal scope. Becoming a medical doctor was an ambition but mathematics and sciences were “never meant for blacks” and thus medicine was out for most (Spaull, 2013:1-5). Education, like wealth is generational, and this has been passed down for generations, to date mathematics and sciences are viewed as too difficult for the average child (Teise *et al*, 2016:70-74). South Africa is currently short of science and mathematics teachers, most of whom are expatriates from Zimbabwe and other neighbouring countries.

According to Cross *et al*, (2014:17-18) role models play a critical part in career decisions and development of children as they grow and seek to emulate successful members of their society. Regardless of how motivated an individual is, there is a degree of “reshaping” of the determination that emanates from the societal structures. Either in the form of limiting, promoting or enabling that status quo be maintained, notwithstanding that the individual has a critical role to play in the process (Wolhuter, 2015:13-14). Society, in the form of government and policies promulgated will inevitably impact on the eventual structure of the education system. This is evidenced by the differences in the outputs of doctoral graduates from countries in the same economic zone, South Africa and Brazil as examples. Backhouse (2019:5-6) noted that in 2014, South Africa which is a member of the economic zone of Brazil, Russia, India, China and South Africa (BRICS) had 1800

doctoral graduates as a country. Sao Paolo (city in Brazil) in the same year had 1800 doctoral graduates from one city. The population differences and doctoral population ratios for these BRICS countries (over a period of 5 years = 2016-2020) are illustrated in the table **5.3** below.

Table 5.3 Population and doctoral output ratios in the BRICS countries

Country	Population	Ph.D. Output	Ratio to population
Brazil	212.6 million(2020)	13000 per year	0.2%
Russia	144.1 million(2020)	11000 per year	1.1%
India	1.38 billion (2020)	140,000 per year	0.5.%
China	1.402 billion(2020)	49,498 per year	1.5.7%
South Africa	59.31 million(2020)	1800 per year	1.2%

SOURCE: own construction

South Africa appears to have the lowest Ph.D. output of the 5 BRICS countries in numbers but with a higher ratio. Approximately 50% of the doctorate graduates in South Africa are foreign students most of whom will stay on after completion because of economic conditions in their countries. Wolhuter (2015:14-15) asserts that the single highest department budget in the country annually is for the two ministries of education (Ministry of Basic Education and Ministry of Higher Education) which should be complementary to each other. Teise (2016:69) notes a seeming contradiction in that, though the budget for these Departments of Education is higher than that of its neighbours, universal ratings keep suggesting that the basic education in South Africa is rated lower than that of countries that have lower budgets. Adam (2012:21) concurs and suggests a restructuring of the system of education that is well financed but does not produce required standards. The latest ratings on global “education standards” showed South Africa at number 84 (Basic education) scoring below what should have been considered as poor countries in the region (Spaull, 2013:5). Yet the average rating for university education on the continent, puts South Africa as having higher standards. Table 5.4 illustrates the production in South African students.

Table 5.4 Top 20 University ranking in the continent-2010-2014

RANKING	UNIVERSITY	COUNTRY	Ph.D. OUTPUT
1	University of Cape Town	South Africa	204
2	University of Pretoria	South Africa	237
3	Wits University	South Africa	199
4	Stellenbosch University	South Africa	234
5	Johannesburg University	South Africa	106
6	North West University	South Africa	171
7	American University of Cairo	Egypt	190
8	University of Kwazulu-Natal	South Africa	264
9	University of Nairobi	Kenya	154
10	University of Cairo	Egypt	601
11	Rhodes University	South Africa	76
12	University of Ghana	Ghana	32
13	University of the Western Cape	South Africa	104
14	University of Addis Ababa	Ethiopia	300
15	University of Mansoura	Egypt	701
16	University Mandumo Ya Mufayo	Angola	455
17	University of Free State	South Africa	104
18	University of Makerere	Uganda	56
19	Cape Peninsula University of Technology	South Africa	17
20	University of Codi Ayao	Morocco	63

SOURCE OWN CONSTRUCTION

South Africa has more doctorate graduates than all the SADC countries combined (Teffer, 2015:13) as illustrated in table 5.4 above. South Africa is ranked highly on the top 100 universities on the continent (Adam, 2012:22), in the table 5.4 below the top 20 of the continent's universities are displayed.

It can be noticed that 11 out of the 20 top universities on the continent, are South African universities. Three (3) universities come from Egypt, with Angola (1), Ethiopia (1), Ghana (1), Kenya (1), Morocco (1) and Uganda (1). South Africa has 11 universities (55%) highly ranked in the top 20 of the continent, the country has 26 universities, compared to the continent with 500 plus universities. Africa in general appears to be under performing in the production of doctoral qualifications, and this may account for the levels of underdevelopment in Africa (Spaull, 2013:4). It is difficult to pinpoint the causal factors for this low throughput, but it is also correlated to the levels of development on the continent with Africa being entirely a third world continent (Teffer,2015:14).

Of particular interest is the relationship between the levels of education in a country and the levels of economic development, tied to the levels of education and poverty in the continent. Spaull (2013:6-8) further posits that Africa possesses 67% of the world's mineral resources, but Africa has the poorest population with a 15% formal employment rate. The continent exports all its minerals unprocessed and thus lose the opportunity of creating jobs from beneficiation which may incentivise postgraduate studies. Bokana (2014:271) observed a direct relationship between levels of PhDs in a country and the levels of entrepreneurial activities, implying that South Africa needs to create an environment for more doctoral graduates. There is a need for a change in the structures in the South African socio-cultural and economic structures to enable a higher Ph.D. output.

5.3. UNIVERSITY DROPOUT RATE IN SOUTH AFRICA

Moeketsi Letseka and Simeon Maile (2008:124) opined that the university drop-out rate in South African universities was a direct threat to the future of the country. The National Plan for Higher Education (NPHE, 2001) estimated graduation rate at 15% of the students that register for first year to those at first exit level. According to the NPHE (Department

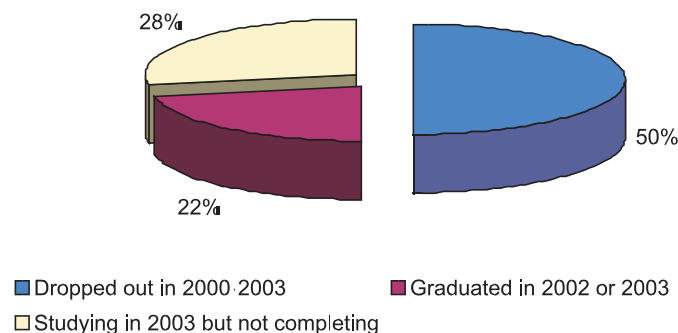
of Education), this is the lowest in the world, this seriously impacts negatively on the doctoral outputs, let alone the government economic development plans. Teffera, (2015:14) noted also that the dropout pattern has some racial intonation, with less dropouts amongst the white students who have 50% ($\frac{1}{2}$) of the dropout rate amongst the black students. There has been no meaningful change in the funding pattern for former white schools and black (African and coloured) students since apartheid. The United Nations Development Programme (UNDP) ranked South African government spending on public basic education (as percentage of GDP) at 32nd in the world, and tertiary was rated 59th on the global scale (Teise et al,2016:69-70).

Evidently, not much funding has been allocated to higher education adversely affecting poor Africans and coloureds who may want to pursue higher education. This inevitably reduces the numbers that would eventually qualify for postgraduate studies, and impact on the doctoral output. Matlala (2021:7-9) opines that apart from the assistance provided to poor students financed by NSFAS, the black tax syndrome persists. Though NSFAS has been brought to the black child as relief for tertiary education, the poverty levels at home still put pressure on them to immediately start working and supplement, if not be the primary providers.

Clearly there are numerous factors in the process of preparing a child through 12 years of schooling and 4 years university before postgraduate level (16 years). The average primary school enrolment rate of 1.3 million ends up with only just over 700 000 sitting for matric at the end of the 12 year journey (Spaull, 2013:58). South African universities have a combined average first year university intake / enrolment of 120 000, a further 580 000 is lost in the system for many reasons. Fiske and Ladd (2015:16) state that the matriculation pass rate amongst blacks is very low, with high levels of repetition and drop-out rates at all levels of education. In 2005 the Department of Education reported that, of the 120 000 students who enrolled in higher education in 2000, 36 000 (30%) dropped out in their first year of study. A further 24 000 (20%) dropped out during their second and third years. Of the remaining 60 000, 22% graduated within the specified three years (3) duration for a generic bachelor's degree or three year (3) diploma qualification.

This excludes figures from private institutions which normally (with a few exceptions) offer one (1) year certificates that may be intended as a bridging course for university entry. These are largely students who may have done badly in matric and could not qualify for direct entry into universities (see Table 3 and Figure 5.2 below).

Figure 5.2: South Africa's drop-out rate, 2000-2003



Source: Department of Education, 2005

According to the department, it emerged that at some institutions the drop-out rate is as high as 80%. Macfarlane (Backhouse, 2009:6) argues that even when the movement of students between institutions is taken into account, close to 50% of undergraduates drop out. About one in three (1:3) university students and one in two (1:2) *technikon* students dropped out between 2000 and 2004. This dropout rate raises serious questions about the sector's ability to generate a viable throughput rate. Whatever the reasons for the dropout rates, they are too high and are a threat to future economic growth and development of the country (Bokana, et al, and 2014:275).

5.3.1. Socioeconomic status

Recent evidence shows that on average, 70% of the families of the higher education drop-outs surveyed were in the category "low economic status. Poverty in the South African context has a racial bias (face) as indicated by statistics in the country (Adam, 2012:22-23). This suggests that the ANC government (since 1994) has not changed the economic status of the blacks meaningfully. Between 61% - 70% of the indigenous people in the country are classifiable as poor according to the United Nations (UN) rating (Teffera, 2015:16). The UN scale states any individuals living below the US \$1.00 per day is considered as poor. Africa in general houses 80% of world poverty (even though mineral

wealth is in abundance) to the extent that Africa imports food when the continent has the lowest population per continent and has a higher per capita ownership of land (Wolhuter, 2015:15). With such levels of poverty amongst the majority population, the “supply” of prospective doctorates is extremely reduced, hence the low throughput. NSFAS is not new, the government offered funding to those who met the “criteria.” The NSFAS funding for periods 1996 – 2003 is illustrated below in table 5.5.

Table 5.5: NSFAS-supported students in higher education

YEAR	TOTAL ENROLMENT	NSFAS SUPPORTED	% of NSFAS SUPPORTED
1996	576,872	67, 709	12%
1997	580, 060	64, 433	11%
1998	591, 831	69, 598	12%
1999	585, 234	70, 416	12%
2000	590, 153	70, 080	12%
2001	652, 421	80, 593	12%
2002	675, 160	86, 194	13%
2003	717, 793	96, 605	13%

SOURCE: Student Enrolment Planning in Public Higher Education. Depart of Education

The percentage rate of students who accessed NSFAS over those years was 13% at the highest, this compared with the levels of poverty and the black tax effect. It should be taken together with the criteria that was used for qualifying these students, the funding was largely a loan and therefore a form of guarantee was required (Fisher and Scott, 2011:54).

The current structure sponsors students with families earning zero (R0.00) to 350 000 as annual salary. Whilst this may be of tremendous help, it does not solve the “black tax” problem in relation to proceeding to postgraduate. When these factors are compounded together, they create a difficult and complex situation and may result in poor planning and implementation.

5.4 POSSIBLE REASONS FOR LOW DOCTORAL DEGREE THROUGHPUT

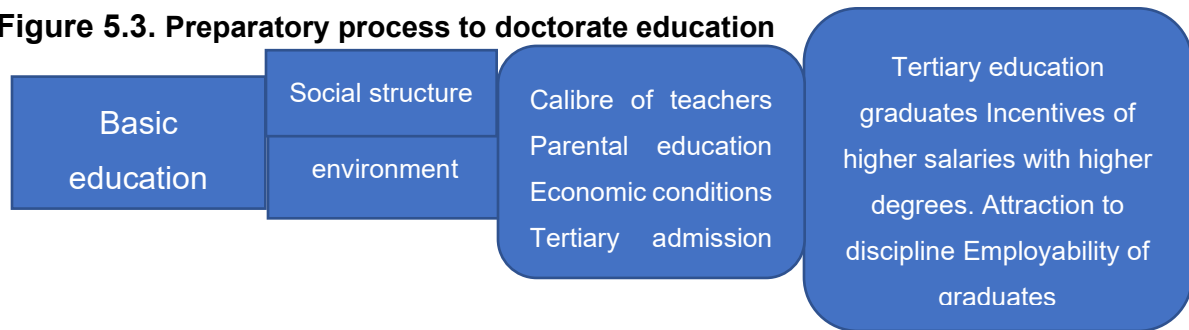
The researcher has identified probable depository factors that may be contributing to the low standard of basic education in the country. These factors are, primarily that,

1. South Africa does not have teacher's training colleges focusing on the training of teachers for primary and secondary school teaching.
2. South Africa has not improved on the quality of teacher education and by derivation, the standard of basic education offered
3. Evidenced by the increased employment of expatriate teachers from neighbouring countries to teach specifically mathematics and sciences
4. General support structures for basic education with a curriculum that is constantly referred to as colonised and yet has not been corrected since
5. The learner emerging from this elementary education structure may not be strong enough for further studies
6. The black tax syndrome continues to be a reason for student dropout thus they do not proceed beyond the basic education – Grade 12.
7. Poor family background with no focus on education as a meaningful process to a better life for the individual and family
8. Total absence of role models and examples of people considered successful in the community because of education
9. Social factors including *gangsterism*, criminal activities, drugs, pregnancies, and drinking amongst school going boys and girls.

Adam (2012:21-22) opines that part of the high dropout rate between first year entry into the schooling system (1.3 million) and the numbers at exit (700 000 writing matric) tells the story of a system with problems.

These dropouts are children who may not be exiting to look for employment as this will be against the constitution on the employment of children (Spaull, 2013:9-13).. This high dropout rate is on its own preparatory ground for future poor senior education (tertiary education) through put rates if so many, not employable, are lost in the 12 years of compulsory education. The basic education model for South Africa therefore has to start with adequate, context relevant education for the preparatory stages. The figure 5.3 below illustrates this as an ideal model.

Figure 5.3. Preparatory process to doctorate education



SOURCE; OWN CONSTRUCTION

Basic education should be the stage at which children get enlightened about what education is and the benefits associated with education. This feeds into the social structure which by definition is the foundation level of education (Teise, 2016:79). The socio-cultural conditions need to educate and prepare the child for what they want to be or what they may be through learning and socialisation, what they see. Thus, the educational environment explained by Spaull (2013:13) is the level that provides the learner with memorable experiences that helps them identify areas of interest are. This makes the learner the future student that we need to proceed to tertiary and eventually study for a doctorate degree. Spaull further says the average high school learner does not know the difference between a doctor (medicine) and doctor Ph. D., hence they may have no aspirations for that Ph. D. Just over 47% of the South African population has no matric (Teise et al, 2016:67-68). Consequently Ph.Ds. are least talked about, and there is little visibility to incentivised the learner to aspire to be one.

5.4.1. Education, employment levels and salaries as factors

In the school system; Within the school system, a school principal / deputy principal at a primary / secondary school with the qualification of a diploma or bachelor's degree may earn a better salary than a university lecturer with a masters' or doctorate (Wolhuter, 2015:17). Earning therefore ceases to be a matter of qualification, rather disposition and being at the right place, right time and with the right people. Whilst a basic qualification is required, it is not those who have higher qualifications in the discipline that necessarily have the better salary and position (Bokana et al, 2014:273). This removes the focus of aspirants from focusing on advancing their education to the politics of getting promotion

to those levels or quitting altogether (Teise et al, 2016:76).

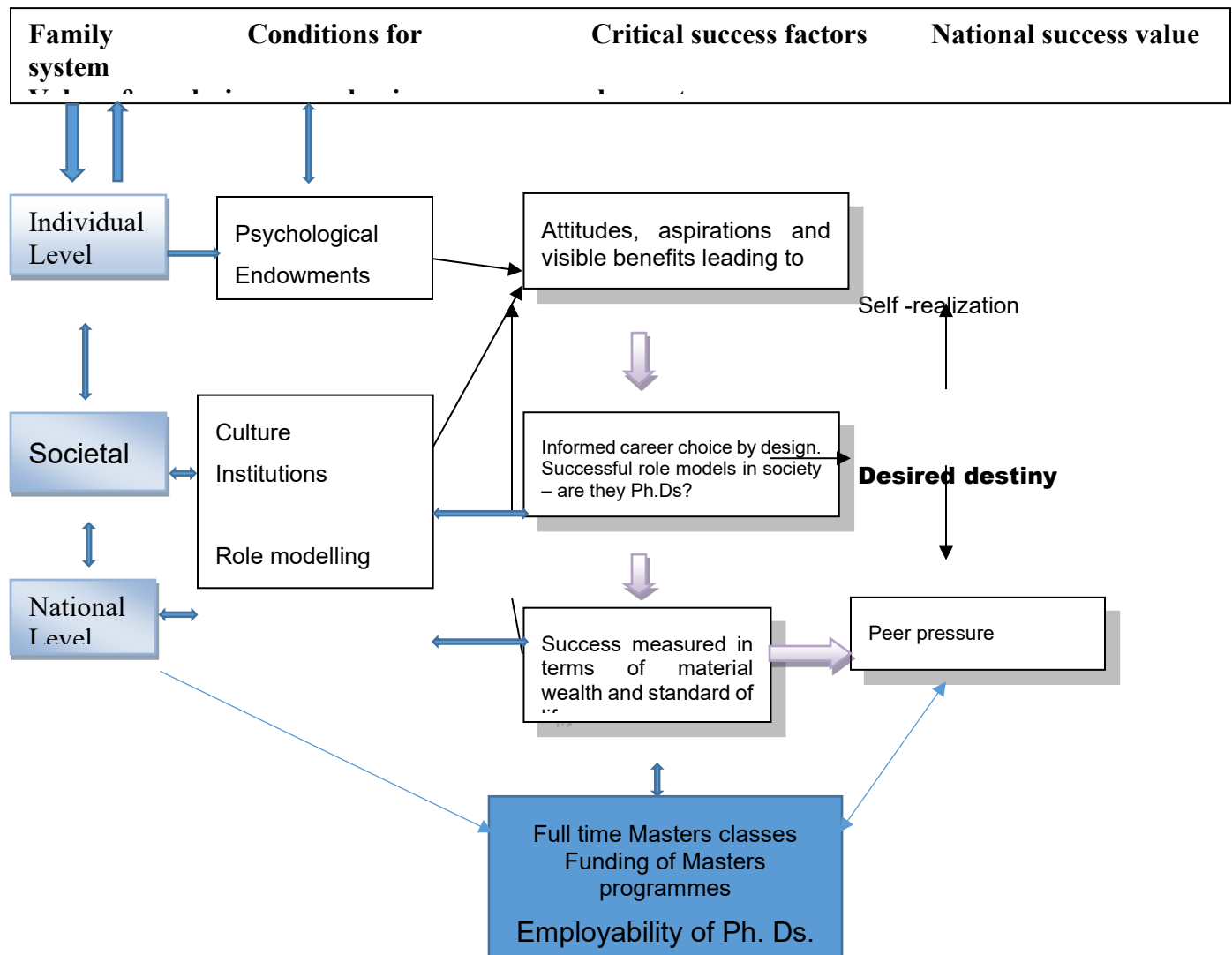
In universities; Backhouse (2013:12) observed that too often (in tertiary institutions), it happens that the heads of departments and units are less qualified than the people they manage. This nullifies the benefit of education and becomes a discouraging factor for most who would have preferred or wanted to proceed to senior degrees. Too often Ph.Ds are kept at lower job levels whilst less qualified people are employed and promoted to higher positions than the more educated in an institution of higher education (Teffera,2015,19).

That on its own is demotivating for those aspiring to acquire higher qualifications as there is no financial or material reward attached to the higher qualification by implication, if there was a direct relationship between earning potential and level of education, more people would aspire to study further. The potential to have a higher throughput of master's qualifications, becomes less by virtue of the earning potential at those levels, this impacts negatively on the remaining few. Teise *et al* (, 2016:76-77) posits that the structure of society and industry does not always promote the concept of "well educated equals well paid," thus most prospective masters and doctoral graduates may not be motivated.

Sixteen (16) years of schooling from Grade 1 up to Grade 12 and the four (4) years of tertiary education (basic degree and honours degree) is a life journey on its own. It is expected that there will be casualties along the way, but from the 1,300, 000 to 120 000 (9% of the original) entry into university is too much to accept for casualties. This implies that 91% of the learners in Grade 1 will not enter university, there is an urgent need to start with the primary and secondary schooling to boost the future doctorate hopefuls. Equally the dropout rate at undergraduate needs to be addressed, arguably, some of these factors are inherently embedded in the societal structures (Backhouse, 2009:6-7).

The doctoral qualification is not a stand-alone, it should be understood within the context of the educational values and expectations of the society. The model below, figure **5.3** seeks to illustrate the broader relationship between society, postgraduate education leading to the doctoral qualification.

Figure 5.4. Society and postgraduate qualifications



SOURCE: own construction (2007:6-19)

Most foreign African academics find it more convenient to come and study in South Africa and then take up lectureship (Backhouse, 2009:4). Very rarely do they study for doctoral degrees in their countries before they come over to South Africa, most African countries have extremely low Ph.D throughputs. The family values inform the type of child that is brought up, the aspirations and possibly the altitude within a given cultural context (Spaull, 2013:15). The cultural values, be they regional or national will also help in the creation of the critical success factors based on both the national system (educational and economic) and the individual make up (Adam, 2012:21). The environment may positively influence

the quest for higher education for an individual given the prospects and levels of intrinsic and extrinsic motivation. The big five personality traits (Fisher et al, 2011:1) may not be excluded in this as they play a role in the general behaviour of an individual. These personality traits are, namely;

1. **Agreeableness** –being kind, caring, trusting, working harmoniously, empathic, social orientated and good natured, too trusting and may not want to go outside of the “acceptable norms” or common practice.
2. **Conscientiousness** – these people are reliable, orderly, and dependable, have confidence in themselves and daring to take chances – may want to venture into the unknowns, such may opt for a doctorate even if it is not fashionable to do so.
3. **Emotional Stability** – calculative and strategic considering their emotions and equally aware of the feelings of others and the situation at hand – may decide to take the risk of doing that doctorate, emotionally secured, regardless.
4. **Extroversion** – outgoing, socialize and mix with people at any level, may gather too much information than they can handle, but association in correct places may expose them to the desire to study further.
5. **Openness to Experience** – have a general quest for knowledge and are considered to be creative and like to know the experience of other people. Considered to be curious, imaginative, and open to new learning and interventions.

The willingness to study for a doctorate will therefore differ from individual to individual depending on their personality traits and the societal structure. Response to the quest for doctoral studies is not uniform across all societies, nor is it generic amongst individuals. Of critical importance here is that the presence of factors conducive for the furtherance of education (benefits to be accrued) may encourage anyone of any personality trait.

5.5. THE CONCEPT OF DOCTORAL QUALIFICATIONS

Education involves the development of individual minds, societies and the country at large, the many factors need to be put together correct proportions. There is a need for relevant political, legal, social and cultural settings that will allow for the aspirations to achieve a doctoral degree. These factors are largely external to the institution that offers

the qualifications, since each institution will need to have its own factors put in the correct mix. An institution would therefore need to put in place factors that will effectively influence the attainment of those qualifications desired by the society. The levels of doctorate throughputs may therefore be a result of, namely;

1. “calibre” of leadership in the institutions more than it is because of the environment,
or
2. the environment into which the graduates are expected to move to after obtaining the qualification

For the individuals to aspire to be at a particular university, it is a result of many factors, but there are specific characteristics that may help. The researcher is of the view that, there is a need in the personality of the prospect to be, in a sense;

1. Enterprising – willingness to take chances or explore into the unknowns coming from self-confidence and risk-taking attitude.
2. Desire to achieve with the ability to stand alone, wanting to be unique and merely the deep desire to be an achiever
3. Willingness to scout around for information and adjust to changing situations – ability to manage change and circumstances

All successful people in whatever discipline or activity have succeeded against odds of one form or another, some of which may be at individual level. The ability to go against the odds (barriers) and succeed is in itself a heroic act, which too many people shy away from (Wolhuter, 2015:18). Though the desire to obtain a doctorate may be seen as an individual desire, it is a national imperative for the growth and development of the country. It is therefore prudent for the government to intervene in the form of policies and allow for an environment that encourages the output of the doctoral graduates.

5.5.1. The Impact of Government Policies

The government is responsible for the education of its own citizen as per constitutional mandate (Fisher et al, 2011:1-4).

Firstly; the government must establish policies and programs that should promote the development of education as an imperative for the development of the economy (Bokana et al, 2014:268).

Secondly; the government must develop the necessary social (economic, political, legal) environment that should be ideal for the intended goals for the citizens (Teise, 2016:66-67).

Thirdly; the government in its policy framework must take a more proactive policy arrangement and be involved directly in the offering of postgraduate studies (Fisher et al, 2011:4).

Since levels of entrepreneurial activities determine the difference between growing and stagnant economies (Spaull, 2013:3-5), education becomes the panacea through which economic development and growth are realized. The decision on appropriate, context relevant policies with support structures to enable effective implementation of the policies with the ability to monitor and evaluate progress, cannot be over emphasized. The South African context is always considered unique because of apartheid, the researcher is of the views that;

1. It cannot be that apartheid will continue to be blamed when democracy has been on for more that $\frac{1}{4}$ of a century
2. Education, which was the weapon of apartheid should have been the first to be changed, it still hasn't 28 years on.
3. Apartheid cannot be blamed for the closing down of teachers' training colleges and the current shortage of teachers
4. It took a violent strike by the students (fees must fall) for the government to extend on to more poor students getting funded

Based on this background information, the researcher proposes a model that will positively influence the direction of tertiary education. Educating of the citizens cannot be left exclusively in the hands of the university managers, most of whom merely maintain status quo. There is a need for a hands-on approach by the government, with possible partnerships with business and other organisations that may be

interested. The model presupposes that government promulgate policies that assist in the fulfilment of constitutional requirements (right to education) and national economic plan (economic development and growth) higher levels of education translate to improved entrepreneurship activities. The framework is illustrated below.

Table 5.6 Preparation of doctorate graduates begins at lower levels

BASIC EDUCATION Compulsory and free across the board		
▪ Provision of modern school facilities ▪ Eradication of pit-latrines rural schools ▪ Solar energy [for rural] schools where there is no access ▪ Reduction of teacher / learner ration - <40 ▪ On campus houses for all rural school teachers ▪ Accommodation rural– both in rural and city schools.		○ Opening of teacher training colleges country wide – 1-2 per province ○ Introduction of compulsory [2] technical subjects / learner Grade 10> ○ Introduction of compulsory maths and sciences – selected ○ Career guidance from Grade 11 as an examinable subject ○ Regular regional universities open days – including rural schools ○ Government exam Grade 9 and 12 as screening for furtherance
UNIVERSITY EDUCATION Undergraduate; Exclusively for those who qualify		
➤ Free education for those who qualify and are admitted ➤ Food and housing vouchers for a special poor group in residents ➤ Increase number of universities to minimum 2 per province ➤ No more than one failure will be allowed ➤ Any more than 1 failure, student will self-finance		✓ Academics below masters work only as junior lecturers ✓ These can't teach beyond 1st years – staff development programme ✓ Masters graduates teach up to final year undergraduate ✓ Doctorate graduates automatic transfer to senior lectureship – ✓ Support for attainment of professorship
UNIVERSITY EDUCATION		

Postgraduate; Exclusively for those who qualify		
Masters element		Ph. D -
✚ All masters courses will have coursework ✚ On the average 10 subjects in the duration of one year ✚ All masters courses will have a research part / dissertation ✚ Masters courses will be offered on Full Time and Part time basis ✚ Government will finance only full time courses / students ✚ No more than 1 failure will be financed by the government ✚ Failure to complete translates to a payable loan – student must pay		❖ Compulsory core 4 subjects aligned to field of interest ❖ Student must produce one [1] publishable paper from each core ❖ Thereafter take on a full thesis on subject / discipline of interest ❖ Research grants covering the costs of the full studies are offered ❖ Student will receive stipend for not more than 3 years duration ❖ The student must undertake another community research project ❖ If taken up for lecturing on completion, graduate will start as senior lecturer

SOURCE: Own construction

This model should be read and understood together with the social factors that impact on different individuals in different ways. The social factors are arguably the most difficult to attend to as they are complex and are generally the realities that the individuals live with and by. The model focuses on government intervention / role that may help to mitigate the social factors, by reducing some of the impediments (Matlala,2021:6)The research is under no illusion that this is a “one size fit all” panacea, but that much of the factors hinging on academic, economic and social may be taken care off from the early stages. The introduction of technical subjects at basic education is intended to provide another route (apprenticeship / artisans, technicians) for those who may not be academically inclined(Coates,2016:33).

The government should be involved in the processes leading to the production of both undergraduate (through NSFAS) and graduate funding, possibly an extension of NSFAS.

If the government offered funding for full time master's degree programmes, this would encourage more undergraduates to pursue the master's degree programme (fully funded) (SAIIR,2011:16).Currently very little assistance goes to assist postgraduate students, very few of those that qualify will go for postgraduate studies. Generally, working students may proceed to do postgraduate (masters) with very few aspiring for doctoral studies. The presence of funded full time masters studies will attract more students, thus providing pressure to the university (management) to make provisions for masters classes on a full time basis (Morrow,2010:184).

5.5.2. The social factors

The funding of the full time masters programmes, possibly coursework based for them to accommodate industry requirements for senior and more educated management, will attract many students.(Bailey,2011:55) Most students willing to study for the masters' qualification, who are not employed, do not get to apply even if they are qualified, because they cannot afford the fees. The levels of poverty in the country with approximately 70% of the population classified as poor. Fisher (2011:4-6) observed that, exclusively all who are non-whites, may therefore not have fees for further studies after the first degree.

5.6. CHAPTER SUMMARY

What is needed in the country is a deliberate approach to encourage tertiary education through the funding of higher education. The current funding (forced on the government by student strikes) should have been initiated as early as 1994, which would have prepared many citizens for higher education. The country has approximately 47% of it's citizens who do not have matric (Fisher et al, 2011:8-9) indicating high levels of illiteracy or semi-literacy in the country. To boost levels of literacy in the country, emphasis should be made from lower levels of schooling, possibly with the introduction and enforcement of compulsory education. This would inevitably push up the numbers of children passing to high school (more secondary schools needed) and students going through to university (more universities). Not all learner are meant for doctorate degrees, and provision should be made at high school level to introduce compulsory technical subjects from which learners may choose (carpentry, welding, building, agriculture, boiler making, etc). High

school learning may be made mandatory for all learners, and apprenticeship should be introduced to make the technically oriented learners artisans and or technicians. Learners who do not have technical orientation may proceed to universities for academic courses, preferably funded by the state up to graduate studies for those who qualify. This will provide enough stock of suitable prospective masters (funded full time) and doctorates funded through NRF or any other funds available for the students at that level. The number of students proceeding to doctorate or keen on doing so will inevitably increase if there are economic benefits to going further with education.

CHAPTER 6

RESEARCH DESIGN AND RESEARCH METHODOLOGY

6.1. INTRODUCTION

"Research is a well organised and objective information gathering process intended to provide specific information, knowledge or data about specific occurrences, casual factors or relationships between variables or phenomenon" (Jowah, 2011:6). Therefore, research is an enquiry of knowledge to discover new facts logically and systematically or verify the current facts. Research is broadly classified into qualitative and quantitative or just pure and applied research. Qualitative research is subjective and explorative, more as an insider's view of human behaviour. There are no control groups as the population is dynamic, changing with circumstances, conditions, or locations. Small samples provide for a holistic understanding of the phenomenon but may not be easy to replicate. Qualitative research was previously frowned upon because of its perceived subjectivity," Generally, in conducting a survey, it is always better and advantageous to rely upon or use both quantitative and qualitative research simultaneously to complement each other. Quantitative research focuses on the quantifiable objective data based on a hypothesis to be proved. Qualitative research is about putting much emphasis on the reliability and validity of the results. Using the other classification method, pure research does not have practical application beyond contributing to existing knowledge. In contrast, applied research is problem-focused and used to solve known and existing problems by identifying causal factors, relationships, or solutions to the existing phenomenon.

6.2. THE PURPOSE OF THE STUDY

The study aims to determine why the numbers at both masters and doctoral degrees are minimal and reducing continuously without showing an upward surge. Thus, the conveyer belt in both these degrees has not stopped, but it moves along at a snail's pace. Hence the undertaking of the study is trying to unearth the underlying or hidden reasons as to why be issues with these two degrees the way they are. This is a national concern and

needs to be thoroughly investigated to the benefit of the entire nation (Lam in Van der Berg et al, 2002:5).

Different writers are giving reasons why the production numbers with these two most senior degrees are slowing down. All this information still needs to be verified as to how far be the truth about them and how this problem can be arrested. Many reasons can be presented, but they all need to be supported by facts (Mouton ,2016:2).

6.2.1. The Primary Purpose of This Study

The primary purpose of this study is to come with solutions as to how the government can arrest this problem of low numbers in the two senior degrees in the end. Currently, it is very hopeless for the government to keep on pumping in much funding into the education system, but still, the numbers are very slow in the end. The best way to address this problem is to investigate and then identify the problems and then try as much as possible to address them. Irrespective of what might be said, problems in this regard are there, although they are still being hidden, and before they are unearthed, the government will keep on flocking a dead horse by pumping much funding but with no good results in the end (Crew, 2018:1-3).

Low numbers in the production of both masters and doctoral studies for a well-resourced country like South Africa is a shock. Compared to some of its smaller neighbours, it should be leading in this regard, but it is not: why? Reasons need to be investigated. There is something that is being done wrong by South Africa, which its BRICS members are doing correctly (Oketch & McCown, 2014:1).

6.2.2. Objectives of the research study.

The objectives of this research study are about trying to find out the reasons for the slow numbers of graduates from both masters and doctoral degrees.

6.2.3. Primary objective

The primary objective in this research study is all about the problems of the declining or slow numbers in both these two most senior degrees. What are the real problems, where

do they originate, and how can they be halted. In order to achieve the primary objective, one needs first to address the issue of the secondary objectives (Dell, 2010:1-4).

6.2.4. Secondary Objectives

- . To investigate the reasons for the declining numbers in both masters and doctoral degrees.
- . To embark on a survey from different people or students in this regard.
- . To investigate the other related reasons to this problem of slow numbers, e.g. dropping out.
- . To develop strategies for trying to stop the slow or declining numbers of both masters and doctoral degrees (Mouton, 2016:2-3).

N.B. Irrespective of what might be said or thought, the government must be steadfast and strict and put down measures intended to help and resuscitate the slow numbers in both the masters and doctoral degrees. The central aspect about all this is to try and produce the desired effects, and that is of improving the slow numbers in both degrees, especially doctorate, to the benefit of the nation at large and later.

6.2.5. Research Questions

These are all about the critical aspect of the research. It further guides the type of literature to be reviewed for the study. Research questions can be divided into two sections/categories—i.e. the main and the secondary question.

The main question focuses on the slow numbers of graduates in both masters and doctoral degrees and worse in this regard at the doctoral level.

Secondary questions are about whether the problem stays with the State or the candidates themselves? Finally, what is the role or the methods the universities are planning in combating this growing problem? (Kerliger,2006:578).

6.3. RESEARCH HYPOTHESIS

A hypothesis is a tentative assumption of a relationship between two or more examinable variables. This assumption must be put into a format that lends itself to testing by measuring the relationship between the different variables. A hypothesis is based on the results that preceded the literature review.

6.4. RESEARCH METHOD AND RESEARCH DESIGN

The research method and design are closely related but not synonymous as many people might think. The research design is the whole plan embarked upon on how to go about the research, and research methodology is the method used for the research. The research design is intended to provide an appropriate framework for a study. This is about choosing the research itself, and that involves the information on how relevant it is. Research design in this regard involves several interrelated decisions (Saunders 2019:3). This study, on its own, employs a good number of different methods, and the major methods in this regard are about giving the respondent's well-structured questionnaires to complete and hand them back for analysis. Another method being used in the research is directly interviewing the prospective respondents in knowing how they feel about the information being needed in this study. Thus, the study can involve descriptive research, which involves the raw information received from the respondents (Sileyew, 2019:2).

6.4.1..Research methodology

Research methodology is the specific procedures or techniques used to identify, select, process and analyse information about a topic. In a research paper, the methodology section allows the researcher to evaluate a study's overall validity and reliability critically. Research methodology is also about using quantitative and qualitative methods and combining primary and secondary sources to organise the research data. Therefore, research methodology can be divided into two sections, namely, methodology and methods (Makou &Wilkinson, 2016:2).

6.4.2. Methodology

Methodology refers to the overarching strategy and rationale of the research project. It involves the methods used in the subject discipline and the theories or principles behind them to develop an approach that matches the research objectives (Badat, 2010:8).

6.4.3..Methods

These are the specific tools and procedures used to collect and analyse data, e.g., experiments, surveys, and statistical tests (Makou and Wilkinson, 2016:1-3).

Difference between research design and research methodology

Research design	Research methodology
Answer to question: what is it?	Answer to how does it?
It looks at the complete product	It discusses how to reach the product
It paints the complete picture	It appears in parts summing to the whole
Is one-unit inseparable	Shows the detailed steps to be followed

Source: Jowah's Construction: 2011:66. TABLE: 6.1

6.5. RESEARCH METHOD

The primary goal for establishing a research process is to provide knowledge or increase the understanding of a subject or phenomenon. The three main methods that come to mind are:

- exploratory research (helps in the identification or definition of the problem and question)
- constructive research (helps with testing the theories and suggestion of solutions to problems)
- Empirical research (which tests the feasibility by use of empirical tests).

The difference amongst all these definitions is a very thin line that is very difficult to explain

The research method is a means by which research is executed, or way of collecting information required for the ongoing survey, the how part of the research project. Jowah

(2011:66). Indicated that, these methods may take the form of exploratory research, ex post facto research, correlation research, descriptive research, testing research, case studies, sociometric research, instrumental-nomological research or interpretative-theoretical research.

The most common way of gathering information for research is questionnaires being filled and returned on the spot to the interviewer then literature reviews or even groups as necessary, telephone interviews, or even internet surveys. Irrespective of whatever method embarked upon in gathering the information needed, the information must be analysed in accordance with the investigations. When conducting an interview, if the respondent is not clear about the question, it needs to be clarified to facilitate the session smoothly (Soria,2014:6).

6.5.1. Research design

This is based on different definitions, which in the end, are trying to explain the same aspect but each in its way. Several definitions have been advanced to explain the research design, and none of these encapsulates all the aspects of research design in one definition for this survey. Research design is a plan or blueprint explaining how the researcher intends to conduct the research. Mouton (2008:55) stated that the design provides information on the tasks, sample selection, sample size, data collection method, instrumentation, procedures, and ethical requirements. Blumberg (2008:69) in collaborating with Mouton, the research design helps in the planning and structuring of the research study in a way that may be financially viable and still maximise the validity of the research results. The success of any research depends on several aspects such as the availability of the information needed, the reliability of the respondents in responding to the questions being posed to them irrespective of whatever method or manner, and the validation of the information received out of those questions.

Soria (2014:6) posits that the research design is intended to provide an appropriate framework for the study. A very significant decision in the research design process is the choice regarding the research approach since it determines how relevant information for

a study will be obtained; however, the research design process involves many interrelated decisions.

6.5.2. Methods used for literature review

Different methods are being relied upon to organise the literature review, such as getting information from journals, textbooks, and papers from conferences, just to name a few sources. From these publications' ideas, information, data, and valuable inputs were being sourced to formulate the research questions and the writing of the literature review section of the thesis. Blumberg (2008:86) points out that the literature review mainly helps establish the context of the problem and the research topic. It further helps in understanding the structure of the problem, clarifying the variables, understanding different theories applied to the problem, and informed on which research design is best suited in providing an accurate understanding of the strategic issues effective in the research (Cooper,2002:113).

6.5.3. The survey.

The survey is the most appropriate method of conducting this research. It brings the researcher in close contact with the respondents. This method can be practised in two ways, i.e. by sending the questioners to the respondents or having the researcher administer and collect the survey personally. Thus (Sileyew, 2019:4) recommended the use of surveys as the most effective way to collect data and information in social sciences; the study was conducted using the survey method using an instrument (questionnaire), and the data was collected from a randomly selected sample using senior students in or about to get into the master's programme *en route* to a Doctorate. The usage of the survey method is the best method of getting information as if it is being done for the population (Blumberg,2008:89).

6.6. TARGET POPULATION

The target population is viewed as the dedicated group to supply the much-needed information for the survey. This is the population that is regarded as the first step of the research design. Thus, Mason and Lind (1996:8) define the population as a collection of

all possible individuals, objects or measurements of interest. This is the aggregate of all the elements with the same characteristics, which comprise academic interests and achievements intended by the very students in the survey.

6.6.1. Characteristics of the population.

The population to be included in the survey will strictly be university students, in their numbers. However, students will be in different categories, i.e., students in the last or senior year of their junior degree and students at Honours and even those at master's Level. The main targeted degree is the doctoral degree as it is the one where the number of graduates is diminishing, and that leads to the production conveyor belt being very slow in the end (Houseman,2016:5).

6.6.2. Types of people in the survey.

The type of people to be included in the survey will be strictly the university students who should be in the final stages of their studies just within reach of a senior degree. In this regard, most of our students come from impoverished backgrounds and can supply many different reasons for not being able to continue up to both master's and Doctoral degrees. The only problem here is how to identify these students from disadvantaged backgrounds. However, once identified, it is sure that reasons will be plenty for the survey expectations (Badat,2010:15).

6.6.3. The multi-cultural profile of the respondents/students.

The multi-cultural profile of respondents will be of great assistance and value to the survey. This will bring in more reasons why some students do not envy the prospects of going as far as masters and doctoral level. Students from different local racial groups have different reasons why they do not register for either masters or doctoral degrees. The most common reason, irrespective of cultural background, is expected to be financial as to more than any other and most probably followed by nepotism over employment opportunities after completion of studies. (*Forkiva, 2012:1-4*).

6.7. SAMPLING

A sample is a small representative portion that is studied to make inferences about the whole population. Unlike the census, sampling takes a small portion of the population and makes conclusions or generalisations based on the group's observations. Sampling is done for several reasons, some of which are:

- to limit the destructive nature of specific tests
 - it may be physically impossible to study every item in the population
 - the cost may be prohibitive
 - it may take too much time before the results are being known.
- (Mason and Lind; 1996:296).

However, a correctly chosen representative sample will adequately provide the necessary information for decision making. Churchill and Iacobucci (2000:575) proposed that sampling passes through six steps, definition of the population, identifying the sampling frame, selecting a sampling procedure, determining the sample size, selecting the sample elements and collecting the data from the designated elements.

The most critical step in this regard is to determine the sample size. According to both Burns and Bush (2000:423) four possible approaches can be used to determine the ideal size for a research sample. These are:

- the arbitrary approach
- conventional approach
- the cost basis approach, statistical analysis approach
- The confidence approaches.

In most instances, the sample size will give the researcher more options for getting the information he requires. In other words, the larger the sample, the better the chances of coming out with the desired information.

The larger the sample, the better the chances of the experiment succeeding. Thus, when conducting sampling, it is better to interview or talk to many prospective respondents. Another step that is very important in sampling is the selected sample elements. These are the essential properties of the sample itself and are being identified as the high or

main reasons that the respondents can or should be giving as the main reasons they cannot register either for masters or a doctoral degree (Bitzer, 2009:55). These are the people who will be able to give out, most possibly, first-hand information and might even be able to furnish reasons least expected as being possibly factors contributing to low numbers of both masters and doctoral degrees at the national level. These students might be holding the key to the information leading to the slow production of the senior degree at both masters and doctoral levels. The last step in sampling is the data collection method from the designated elements. In this regard, it is mostly easy to collect the data through structured questionnaires with sections of open-ended questions to be answered by the respondents (Churchill and Iacobucci (2002:449).

6.7.1. The different methods of sampling.

There are different methods of sampling in gathering data. All these methods are deemed reliable, but it all depends on which one the researcher decides. In this research, the categories of the students to be drawn into the sampling are students who are about to complete their junior level studies or students in the programme of masters but with no intention of proceeding to doctoral level (Ocampo, 2004:15). In addition, former students who have recently completed their junior qualifications are employed or still seeking employment rather than pursuing a higher level of their studies.

6.7.2. The sampling frame.

This is all about the students' information concerning the questions being posed to them in the questionnaires. They will have to answer the questions following the format that has been presented on the questionnaires. In this regard, with their failure to embark on the higher levels of their studies, they will have to give their reasons, more so for not continuing further with either the masters or the doctoral studies (Burns & Bush; 2000:424).

6.7.3. Sample-Research – fit for the study

In this case of education, especially at the tertiary level, academic research can only take place properly within an academic set-up to be able to produce the required information

or results. Therefore, it is preferable that the sampling be done within the proximity of the researcher so that in case the respondents might need the researcher to clarify something, it should be quick and nearer (Kerlinger,2006:577). However, sampling can still be safe by mailing the questions to the prospective respondents and having them mail them back. Then from what has been received, the response trend can be seen, furnishing the required data.

6.8. MEASURING INSTRUMENT

The main and most reliable instrument in this regard is the questionnaire, and it goes through several stages during its construction as it highlights the study's primary purpose. Hence Burns and Bush (2000:347) the researcher identified and determined the study's objectives and then decided on the data collection methods. In other words, the construction of the questionnaire has much work and needs to be pre-tested before it can be sent out finally.

6.8.1. Pre-testing questionnaire

Before being sent out, the questionnaire will finally have to be tested within a few selected respondents, which is referred to as pre-testing. The respondents should be somehow reliable, and the best way of embarking on that pre-testing is to give the respondents the questionnaire, have them fill it on the spot, after which they are analysed. This pre-testing creates the opportunity to be able to correct whatever needs to be corrected in the questionnaire. The main advantage of the pre-testing method is that it gives the researcher the chance to polish/reframe the questions to bring the best information out of the respondents (Colton and Covert; 2007:32).

6.8.2. The reliability of instrument used

The aspect of pre-testing the questionnaire is that it becomes the best instrument to be used in data collection for the research. It is most reliable as the researcher controls it and can change the question to obtain the intended information. Reliability is the ability of the instrument to solicit the same answer from the same person if asked differently. It has to do with the clarity of the questions asked and their relevance to the study objectives

(Bailey, 2011:58). If the instrument is not reliable, then obviously, the information cannot be trusted at all. The other issue that might cause the information not to be reliable might be that some respondents might have wrongly understood questions. In essence, the measuring procedure needs to produce the same results when the trials are being repeated. (Blumberg; 2008:311).

6.8.3. Instrument validity

Validity is the instrument's accuracy; an instrument can be reliable but not valid for the purpose. Validity is about the exactness or truthfulness of the responses to the question. In the same measure, a valid instrument should be relevant to the study objectives and should be in such a way as to extract the truth. The validity of an instrument then is then measured by whether the measure accomplishes its claims Blumberg (2008:313). There are two forms of validity: internal and external, and each of them has threats that must be avoided. Effort was put to pre-empt any possible validity problems resultant from the way the questionnaire is being constructed. The questions need to be very short and direct to the point, and this, on its own, can assist in improving the instrument's validity (Soria, 2014:10).

6.8.4. The Research Instrument Design

This is all about the quantitative study, which in the first place need to identify as well as define research questions that are testable theoretically and empirically. The questions need to be easily understood so that both the researcher and respondents should understand each other (Saunders et al, 2007:356). According to Colton and Covert (2007:30), the questionnaire should request the information amendable to organising logically, consistently, and replicable to improve reliability and validity. Finally, the questionnaire should be able to measure the importance of the study.

6.9. DATA COLLECTION/SOURCES

Data collection would not be a problematic aspect of the research, especially if proper preparations were made. However, the data collection needs to be done in a specified time frame not to halt the information analysis. The best way or method of collecting data

is to employ questionnaires that can be sent via email or distributed personally by the researcher to the respondents, which is referred to as the primary data collection method (Steyn, Smit, Du Toit and Strashem, 2007:3). Primary data is about getting information from the source of information that is still raw and not diluted. Primary data sources can be industries, even photographs that show the original set-up of events as they took place and cannot be altered, and tape-recorded interviews.

Sileyew (2019:5) indicated that data can still be collected through questionnaires or interviews with the intended respondents. Interviews in this regard should be conducted face to face, which is the best procedure. When coming to questionnaires, they should be constructed to attract the respondent to give the best answers to his ability.

In complementing the above writers, Malhotra (2009:405) proposes that several steps in the collection of data need to be followed. Primary data is collected by you the researcher then there are people who should help you, if necessary, how they should help you, how reliable themselves are they to the course and this is referred to as secondary data collection. This secondary data collection is about people who assist in collecting information and is not done by the researcher. The secondary data collection could also be internal and external data sources of information that may cover a wide range of areas. Questionnaires in this regard are still essential.

The number of questionnaires is significant in that it indicates how many incumbents are going to be interviewed. It is even better that each respondent should have two questionnaires to make corrections in the event of committing a mistake. It is better to have questionnaires that have been completed adequately with no scratches in their wake. By counting the questionnaires, the researcher can see how many people responded.

6.10. Ethical Considerations

The aspect of ethical consideration is all based on the information being given on the questionnaires as being independent and being voluntarily submitted. Hence in that regard, the anonymity of the respondents is preferred. The questionnaires are administered, trusting the integrity of the respondents as to how honest they are in

answering the questions. The most critical aspect of answering questions is about the voluntary basis of the respondents, i.e., they should not be coerced or influenced into answering in a particular manner. The questions being answered do not need to be diluted but just to be original / authentic (Morrow,2010:188).

6.11. DATA ANALYSIS AND INTERPRETATION

After the data has been collected, it needs to be analysed and interpreted and then it needs to be rechecked to correct any mistake still there on the questionnaires. In this regard, some steps need to be followed in preparing the data, i.e., editing, coding, and classification. In addition, several steps need to be followed very strictly in the data analysis to ensure that everything is done correctly (Bailey,2011:58).

6.11.1. Validation.

This is about trying to make sure that all which was done had been done ethically and professionally. Assurances must be given as to a formal interview has been done or not up to the required standards. If not, then the information, in the end, will not be valid but distrustful and will have to be discarded (Morrow,2010:177).

6.11.2. Editing

The most important aspect of editing is about the following

- . Check if the interviewer did not ask or record certain questions.
- . Check closely to see if skip questions all were observed.
- . Check on the responses to the open-ended questions.

Editing as it is, have two sections and are field editing and central editing.

Field editing deals explicitly with the work that has been done and the questionnaires where the questions were asked. Another critical aspect in the editing is compliance, i.e., has it been dealt with thoroughly and adequately following the standard requirements. For example, were all the questions well answered and the instructions, were they also

followed? Were all the questions answered per the stipulated language? (Burns& Bush, 2011:325).

6.11.3. Coding

This is the process of assigning a code or rather a symbol to a question being asked on the questionnaire to change the respondents' answers to symbols or numbers that can be read and analysed utilising the statistical tool for that interview (Houseman, 2016:14).

6.11.4. Data entry

This is all about entering the correct data into the soft package or disc to store it for safekeeping. Data entry, in brief, involves the entering of validated, edited, and coded data into an ideal software package (Ocampo, 2004:14).

6.11.5. Data cleaning

This is about the process that takes place after the data has been entered. It is also about seeing if the data was entered correctly or not. This data cleaning also verifies whether the number of respondents matches the questionnaires being captured or not. Again, it involves checking whether there are no double markings of the answers/questions as only one item must be marked following the Likert scale (Hague, 2002:39-40).

6.12. DATA VERIFICATION METHODS

According to Hague (2002:37), verification is concerned with establishing whether a research plan is fully translated into practice and may require the working practices to build in various types of checking. This is also about proper methods of data entry being used; were they used or not? There are four very reliable ways of dealing with and re-entering data, using a database structure, a data entry form design, or the output analysis method. The two most essential methods in this regard are:

6.12.1. Re-entry of data

This is all about the intelligent data entry system being programmed to take only the codes that have been recorded in the software package. In return, this can detect wrongly

entered codes/information, and that will have to be re-entered, or else they will be rejected.

6.12.2. Output analysis

This is about the aftermath of the information analysis; the researcher needs to recheck if the aspect of compliance had been adhered to, as all the questions are based on education, notably higher education. (Teffera, 2015:16).

6.13. DATA RELIABILITY AND VALIDITY

Reliability is about checking whether an individual will give the same answer on education if asked the same question twice at different times. Alternatively, if two people in the same category concerning the construct under evaluation will give the same answer. Each set of data in this regard can be split in several ways, and the result will be a product of how the data was split (Zikmund, and Babin 2007:606).

In dealing with data reliability and validity, it is better to rely on the Cronbach alpha scale as it is the most used scale in educational matters. This alpha scale is very reliable, and it is very consistent in its results.

Further on, the reliability of the data measurements is being done without bias, and it ensures consistency in measurement across a particular time. Again, in reliability analysis, the stability and consistency of the data are being checked. The researcher, in this regard, is checking the accuracy and precision of the procedure of measurement. This reliability, as it is, has several definitions attached to it and from different sections, but it ends up being that consistent measurements in this regard have the chance of producing very consistent results (Sileyew (2019:7).

6.14. FACTOR ANALYSIS

Factor analysis is a statistical technique being used to identify a reduced number of factors from many variables that may be measured. Zikmund and Babin (2007:608) indicated that the method describes variability among correlated variables that will be observed in relation to lower numbers of unobserved variables. It searches for joint

variations to respond to unobserved variables, which have been applied to explore the content areas of the variables and classify data by defining their relationships. Kerlinger (2006:574) suggested that a loading of 0,35 was sufficient for authentic research results, but a minimum loading of 0,40 can still be used in research.

Bloomberg (2008:505) outlines that validity is a characteristic of measuring precisely what the researcher wants to measure. From the different types of validity that can be used (construct, convergent, and discriminant), discriminant validity was the best of them all.

6.15. Correlation Analysis of the Hypothesis

Correlation measures the association or the strength of a relationship that prevails between two phenomena (Williman, 2001:92; 2005:218). This measures the extent to which one dependent is affected by the changes in the other independent variable brings specificity to the study of the relationships; a group of statistical techniques is used to measure the strength of the relationship (correlation) between the variables under study (Mason and Lind, 1996:479). A correlational analysis uses the statistical correlation to determine the strength of the relations between the variables under the same study. The result of a correlation becomes the correlation coefficient (or "r"; this ranges from -1.0 to +1.0. The closer the value of "r" is to -1.0 or +1, the more closely the variables under study are related. The dependent variables were evaluated against the independent variables in the study, and the result and the result details are recorded and discussed aside in a subsequent chapter.

6.16. CHAPTER SUMMARY

This is the chapter that deals with data after being captured needs to be analysed and then how it is being interpretation in accordance to the study itself. Another strong point of this data aspect is about validation which is about everything being done properly in accordance with the information needed. In this chapter, there is also the issue of editing which is about checking whether the information is being placed according to the structure of the research/chapter as it is supposed to be.

It is in this chapter that data being collected needs to be entered in a correct manner as

it is supposed to be. Thus, after entry, then the data needs to be cleaned and that is about seeing to it that the information entered, is correct and mistakes needs to be corrected. The aspect of verification also needs to be considered in that it should have a plan and that plan needs to be fully followed to the latter end. Then there is also the aspect of factor analysis which needs to be followed in content areas of variables in determining the strength between the variables. This is one of the most important chapters of the research.

CHAPTER 7

7. DATA RECORDING, ANALYSIS AND INTERPRETATION

7.1. INTRODUCTION

The whole research only serves its purpose and has meaning if the data collected is analysed and interpreted into usable information. In this chapter, the literature reviewed provided information on what was necessary for constructing the research instrument. The research instrument (the questionnaire) was then taken into the field to collect the data based on the theoretical reviews that guided the research. This research instrument was (all the questionnaires) brought together, cleaned, edited, coded, and the data was captured onto an Excel Spread Sheet from whence the illustrations were constructed. The illustrations are comprised of pie charts, bar charts, histograms, tables, and frequency polygons where it was seen to aid in the analysis.

The purpose of the illustrations was to compare the data, and the relationships between the variables under study easy to compare. This chapter, therefore, discusses the illustrations constructed from the data collected, including their analysis and interpretation, the details thereof are recorded. The recording format is deliberate, intended to focus on every item asked for in the research instrument. These are recorded and explained item by item in their chronological order, and this is to enable a complete understanding of different aspects of these questions. This starts with the first section, Section A – biography, second Section B – Likert scale and the third, which is section C – Open-ended questions.

The last section was meant to allow for extra discussion around the topic in the event that some important aspects of this study may have been omitted during the construction of the research instrument. The objectives of the research (the expectations of the researcher) were, from the beginning of the study, namely:

- To identify if many relevantly qualified people are not in high positions as per their qualifications.
- To identify the likely situation they find themselves in, in the form of discrimination during promotions just because they are contract workers/teaching staff.

- To identify personal limiting factors, they experience not being fully employed and having less or no benefits.
- To identify why most of them are not motivated to enrol for the doctoral degree.
- Why do most of the staff leave the institution once they get a new and better job?

The research questions were derived from the research objectives as these were developed from the problem statement, thereby allowing for alignment. The research questions and statements (for the Likert scale) are thus a conversion of these objectives into questions, and these follow in the section of the findings.

7.2. FINDINGS

The questionnaire was divided into three sections. The findings are provided in detail in the following sections, but the summarised edition will be in the closing chapter when the summary of the findings, the conclusions and recommendations are discussed.

7.3. SECTION A: BIOGRAPHICAL INFORMATION

The biographical information was considered important as it is necessary and helpful for the reader to know or have some information on the respondents. This will assist in evaluating both the relevance of the interviewees and what they said, considering that they belong to a particular group. This section specifically dealt with the biographical details of the respondents for the study, mainly to identify whether they were suitable to participate in the survey.

7.4. QUESTIONNAIRE

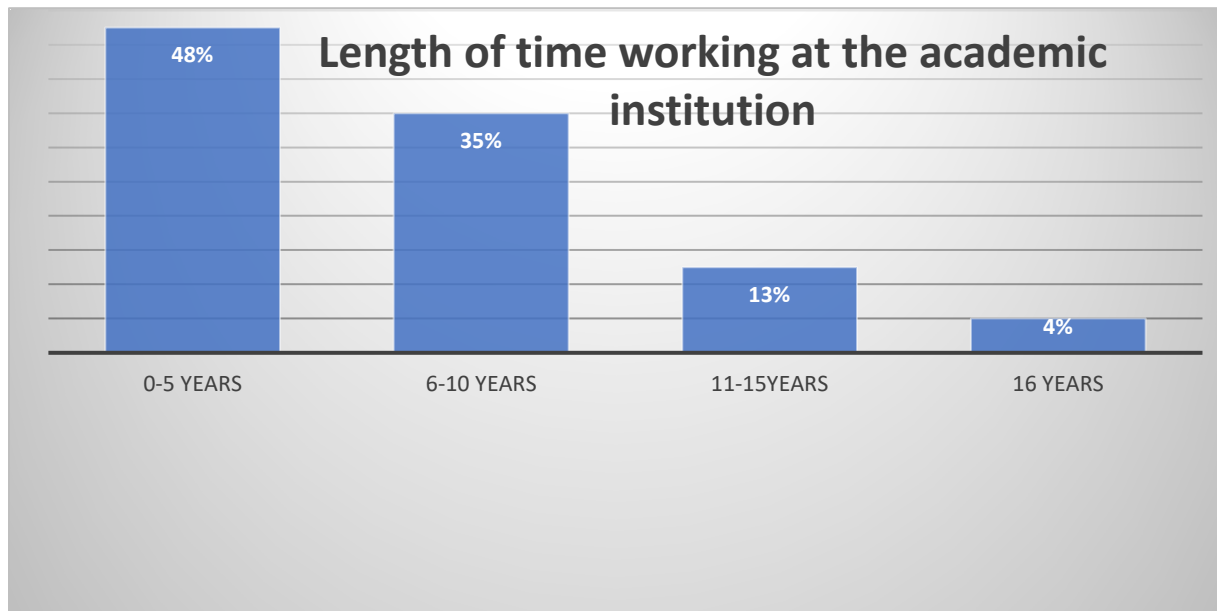
N.B. It has some sections A, B, C and they have figures in the entire chapter.

7.4.1. SECTION A: BIOGRAPHY

Question 1: How long have you been working in an academic institution?

Response: The purpose of this question is primarily to establish if the individuals had been in the system long enough to have reason to have studied further. The focus of the study was on possible reasons or causes for an individual not developing themselves academically when they are themselves working in an academic environment. The responses to this are illustrated in the figure below.

Figure 7.1 Length of time working at the academic institution.



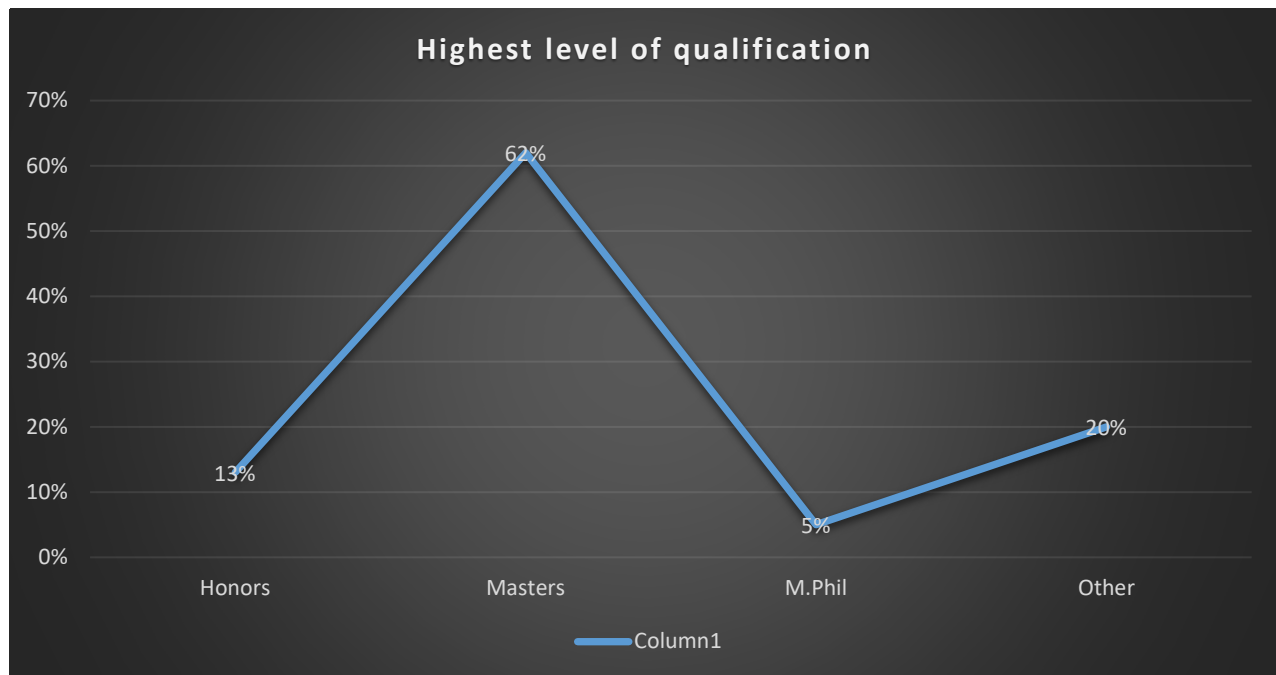
Source: own construction

Most of the people who responded (48%) had not worked for the university in an academic environment for a period exceeding five years. This was not the targeted population for the study as the focus was on people who had been long in the system without developing themselves. Those 6-10 years were 35%, 11-15 years at 13%, with those 16 years and above accounting for the remaining 5%. This percentage has been in the system, and it could be that they are satisfied with their positions or even that they satisfied with the incentives over their positions.

QUESTION 2: What is your current / highest qualification to date?

RESPONSE: The individual's qualification at that moment was essential to assist in identifying and realising the possible impact of the environment or the individual's attitudes towards studying for a doctoral degree. Therefore, it was assumed that those who were close to the level of pursuing a doctorate might have been able to do so or be planning to do so. The responses are illustrated in figure 7.2 below.

Figure 7.2 Highest level of qualification.



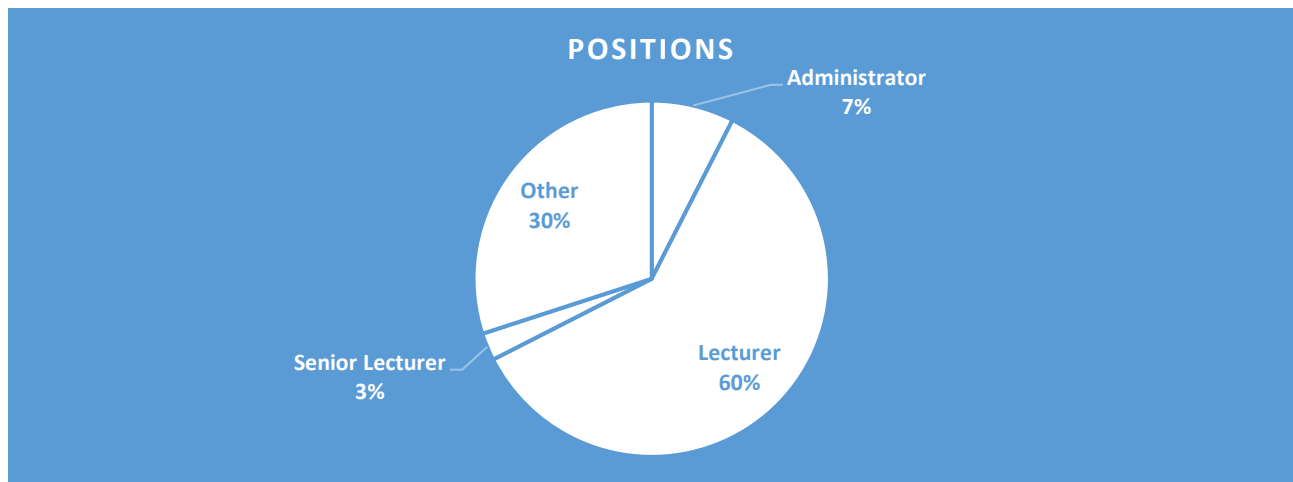
Source: *own construction*

The current qualification assisted in enabling the researcher to identify those who may have been more likely to study for the doctoral degree. However, most of the respondents indicated that they had a master's (62%), and only 5% had a Master of Philosophy (MPhil) qualification, which is a qualification between the doctoral degree and the master's?

QUESTION 3: What is your current position in the institution? Please by marking in the relevant box to you.

RESPONSE: The operational level also assisted in identifying the type of position and what would be deemed as encouraging to make people aim for a doctoral degree. The assumption was that the closer an individual is to colleagues with a terminal degree (a doctorate), the more likely they would aspire for a doctorate in the hierarchy of education. The responses are in figure D.3 below.

Figure 7.3. Positions.



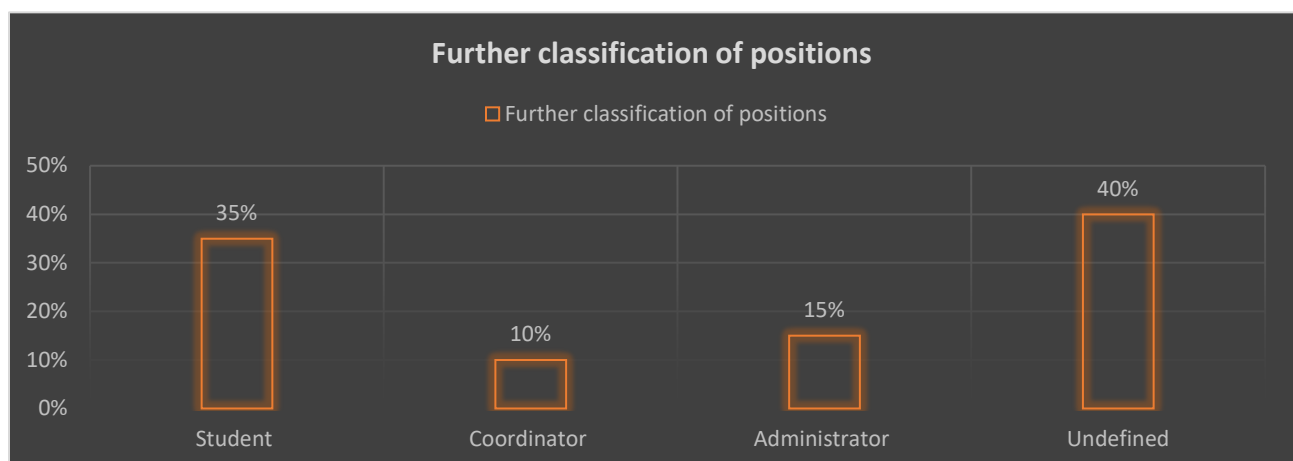
Source: own construction

The majority of respondents were lecturers (60%) with an added 3% who indicated that they senior lecturers, presumably both had at least a master's degree for them to lecture.

Question 4: How would you classify your position at the university?

Response: The majority of respondents were lecturers (60%), with an added 3% who indicated that they were senior lecturers. Presumably, both had at least a master's degree for them to lecture.

Figure 7.4. Further classification of positions.



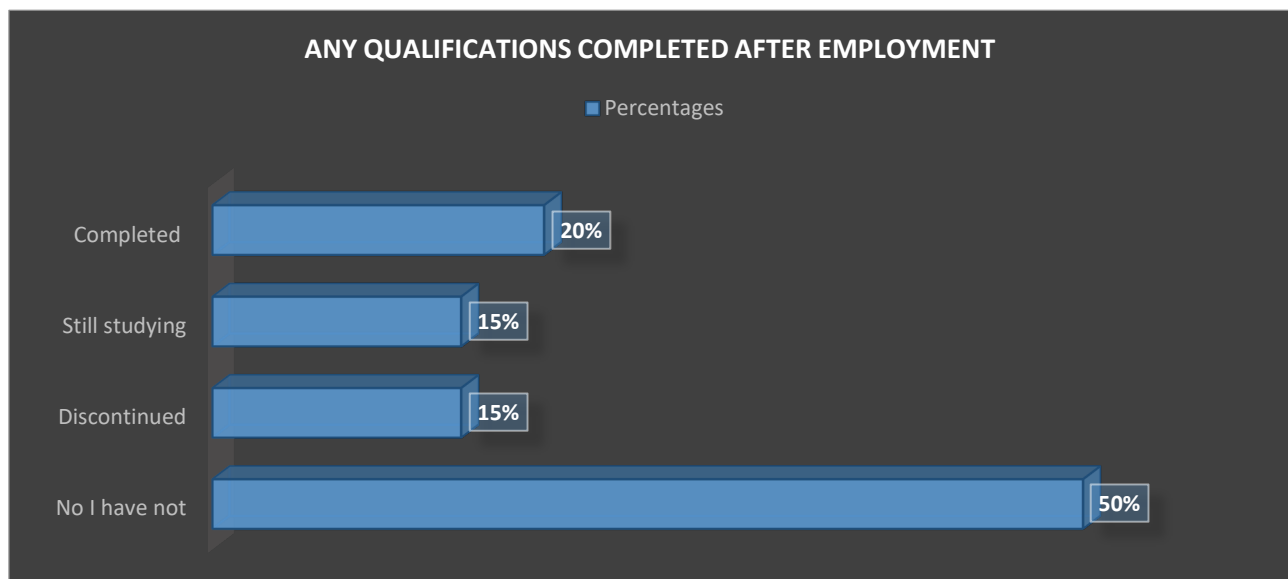
Source: own construction

Positions in any institutions, are different and are being occupied by different personnel and they all have different responsibilities in that regard. These employees, range from students who might be working for the institution on part-time basis. Others might be coordinators or even administrators and they all differ in positions and responsibilities. It is very rare to find undefined employees in an institution.

QUESTION 5. Did you attain any degree since you were employed at this institution – please indicate in the box below.

RESPONSE: This question is all about what has the respondent achieved in academic terms since joining the institution. It is also about trying to see if the respondent did try to make an effort or attempt to improve himself since joining this institution's workforce. In the event of the respondent still studying, what level is she/he studying?

Figure 7.5.Any qualifications completed after employment.



Source: own construction

The issue of qualifications attained whilst in the institution's employment is a yardstick in showing whether the respondent improved academically since joining the institution's employment. The highest percentage (53%) indicates that the majority have not gained any additional qualifications since joining the institution. However, very few other respondents have achieved a further since joining the institution qualification (20%).

QUESTION 6: Any issues you may want to discuss around your situation in the institution regarding what you would have had to do to develop your career further.

RESPONSE: This open-ended section was meant to test the levels of interest and ambition concerning obtaining a doctoral qualification as part of their career progression. In this instance, people come out to discuss whatever they think is necessary about their position or plight since joining the university/institution. This section makes it easy to see those serious about their studies and those who are not.

There are several reasons put forward by some respondents as most did not respond at all to the questions and not giving any reason for that:

Not enough support system as to the staff development.

Not sufficient time to study.

Not easy to work and study at the same time.

Some supervisors not having enough time for their students

Salary discrepancies.

Lack of qualification recognition by the university.

Funding only favours a few permanently employed staff.

Highly qualified people are not given credit for their accomplishments.

Less qualified people, leading the highly qualified group.

Contract lecturing staff unfairly treated.

7.5. SECTION B – This section measures attitudes or beliefs that the respondents have, which are not quantifiable.

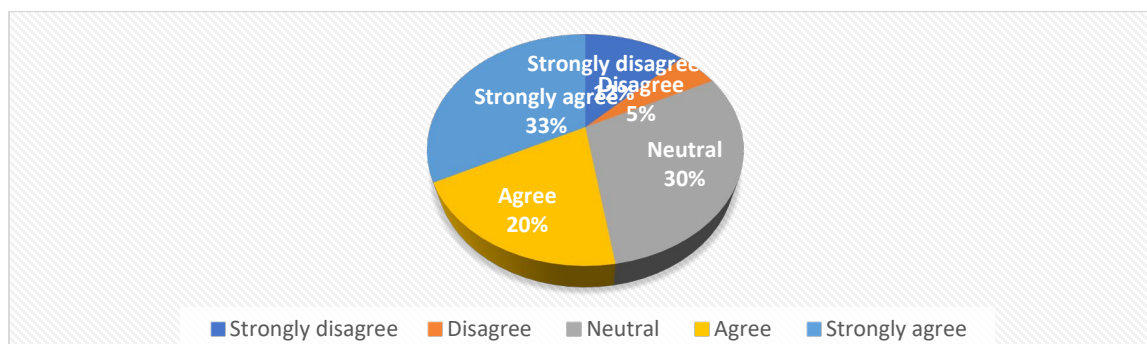
The Likert scale therefore seeks to assist on a sliding scale of 1-5, 1 = strongly disagree, 2 = disagree, 3 =neutral, 4 = agree and 5 = strongly agree

STRUCTURAL IMPEDIMENTS FOR DOCTORAL STUDIES

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Funding for doctoral degrees is not easily available	1 (5)	2 (2)	3 (12)	4 (8)	5 (13)

RESPONSE: This question seeks to deal with the issue of funding of doctoral degrees in that is it easy to come by or is it difficult to get, lest the latter can discourage candidates from pursuing a Doctoral degree. If you know that you want to study but do not have financial support, it becomes problematic

Figure 7.6."Funding for doctoral degrees is not easily available."

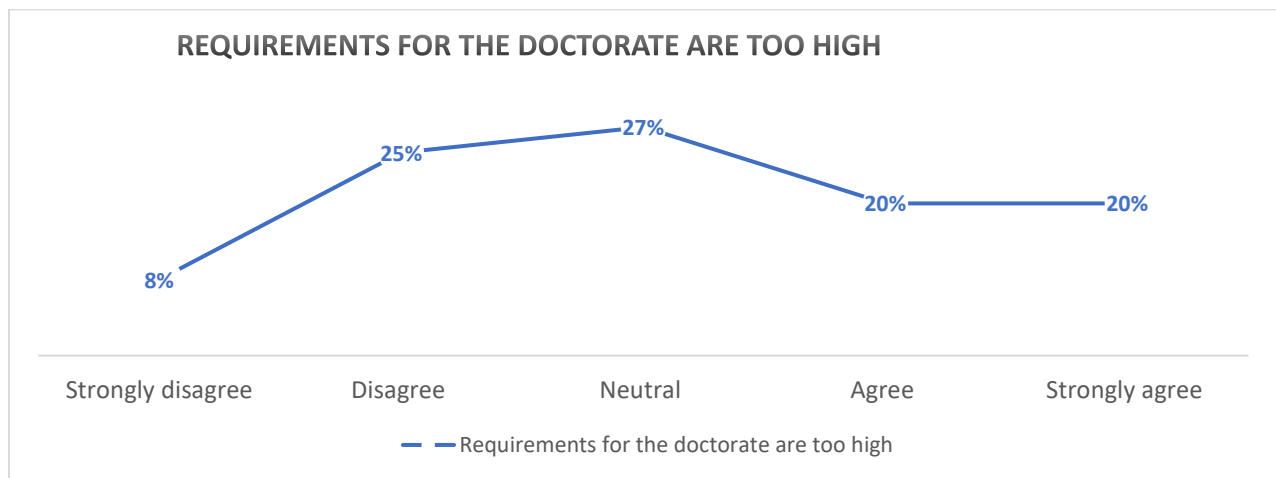


Source: own construction: People will differ when it comes to their opinions or reasons. In this regard, the largest proportion (33%) agree that funding this degree is not easy. The second highest response (30%) is of the neutrals who seem not to know what to say. Finally, the last of the lot is the 5% which disagree with the unavailability of funding for doctoral studies.

Requirements for the doctorate are too high	1 (1)	2 (8)	3 (11)	4 (10)	5(10)
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RESPONSE: It is not that easy for many people to go to university, especially doctoral studies. In this regard, the main requirement is that a master's degree is considered for admission into a doctor's degree. On the other hand, there is nothing less than a master's degree to enrol for a doctoral degree.

Figure 7.7.

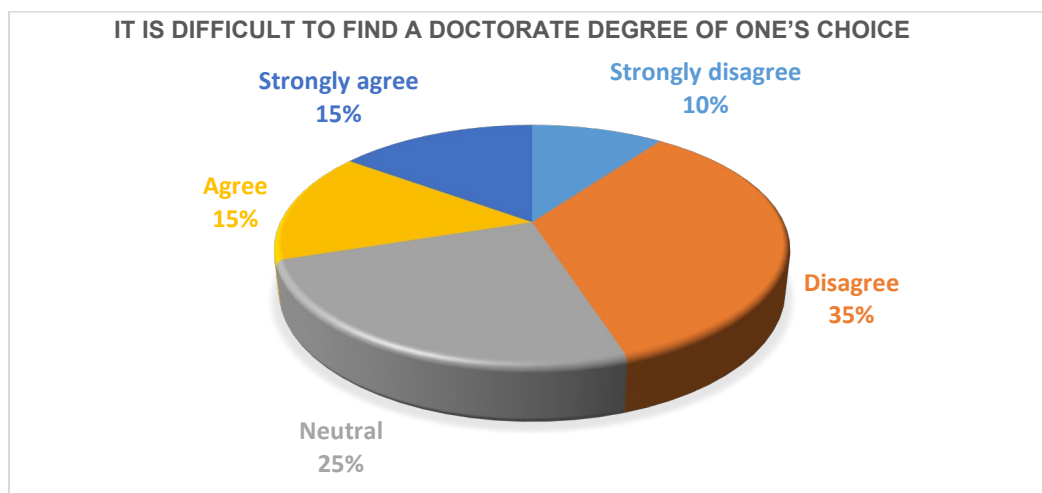


Source: own construction: This degree is the last on the list of a university degree. Hence strict admission policies should be maintained. The requirements cannot be lowered below a master's degree. The main aspect of this degree is the financial aspect which is very expensive. In the above most respondents are neutral (23%), and the least are those who disagree with the aspect of requirements being too high (8%). In agreeing with both levels, i.e. agree and strongly agree, both are at (15%) apiece, and both combined takes the majority spot.

It is difficult to find a doctorate of one's choice	1 (4)	2 (14)	3 (10)	4 (6)	5(6)
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RESPONSE: This is about some of the academic difficulties candidates claim to encounter in finding the degree of their choice. This is also about whether that institution offers that degree or not. Again, it can be about just an excuse or even laziness of not attempting to study for a Doctoral degree.

Figure 7.8.

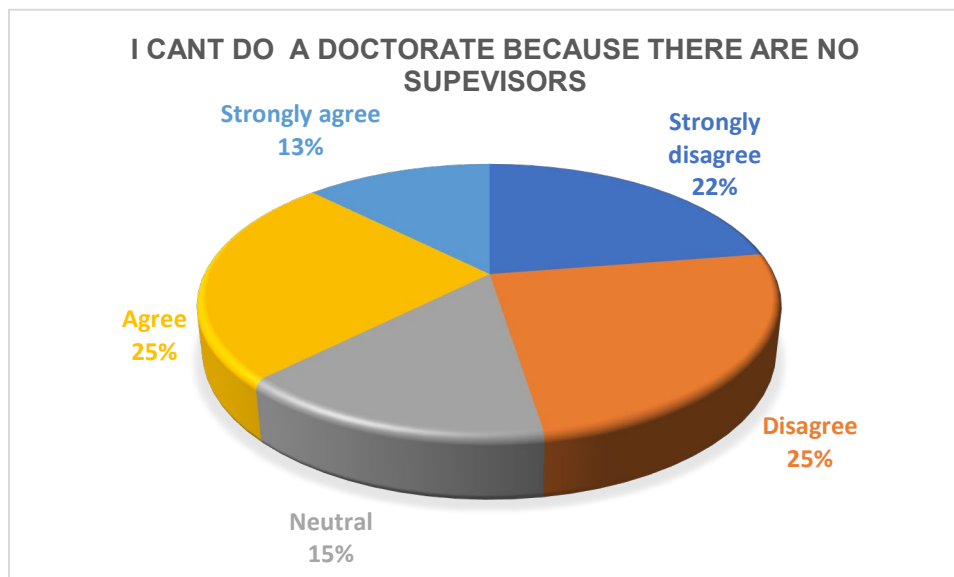


Source: own construction: It is not difficult to find the programme of choice as in most institutions, there is choice one, two, and three. So, the excuse above does not hold any reason for not doing a doctoral degree. Thus, most respondents (35%) disagree with the statement of unavailability of the degree of one's choice. The neutrals, as usual, are the second-highest with 25%, and this number indicates that they do not know where they stand.

I cannot do a doctorate because there are no supervisors	1 (9)	2 (10)	3 (6)	4 (10)	5 (5)
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RESPONSE: This is an assumption based on groundless facts in trying to avoid doing a doctorate. Supervision is not a problem at all, especially if one has applied earlier. When you apply earlier, it is much easier by then to be allocated a supervisor. The issue of poor supervision is common complaint from students in many universities.

Figure 7.9.



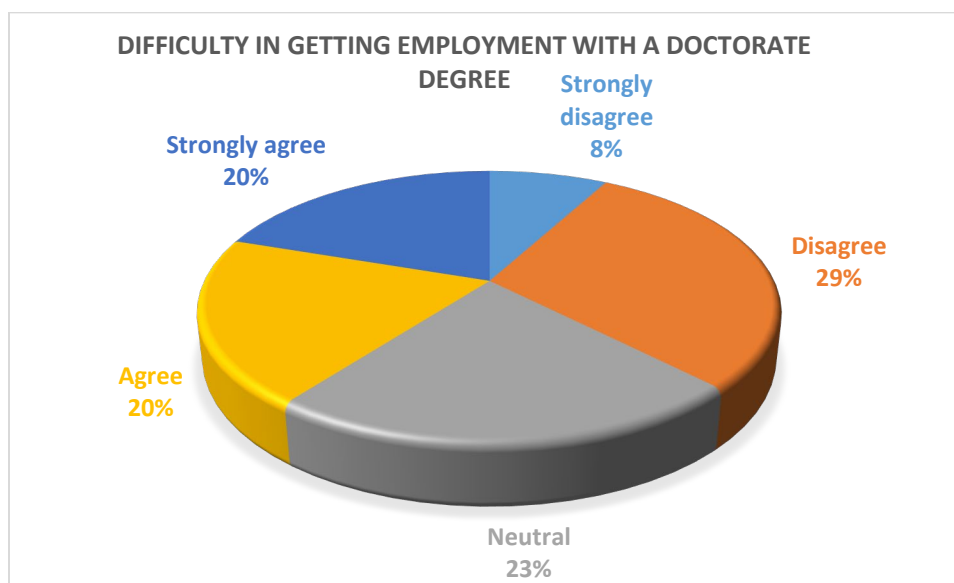
SOURCE: OWN CONSTRUCTION:

The issue in this regard is about trying to coin a reason for not doing a doctorate. As it can be seen, the respondents who agree and those who disagree register 25% each and is an indication that there is no proof of what the truth is about this statement. There is also a vast difference with the rest of the responses.

Difficulty in getting employment with a doctorate	1 (3)	2 (12)	3 (9)	4 (8)	5 (8)
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RESPONSE: This is a statement or, even more so, an assumption which still needs to be proved. The country has many doctors that are employed in one way or another. So, how did they get employed? The focus is whether a Doctoral degree is employed or not employed. This is just one of the reasons for not wanting or intending to do a doctorate. The chances of getting employed with a doctorate are higher than being employed without a doctorate.

Figure 7.10

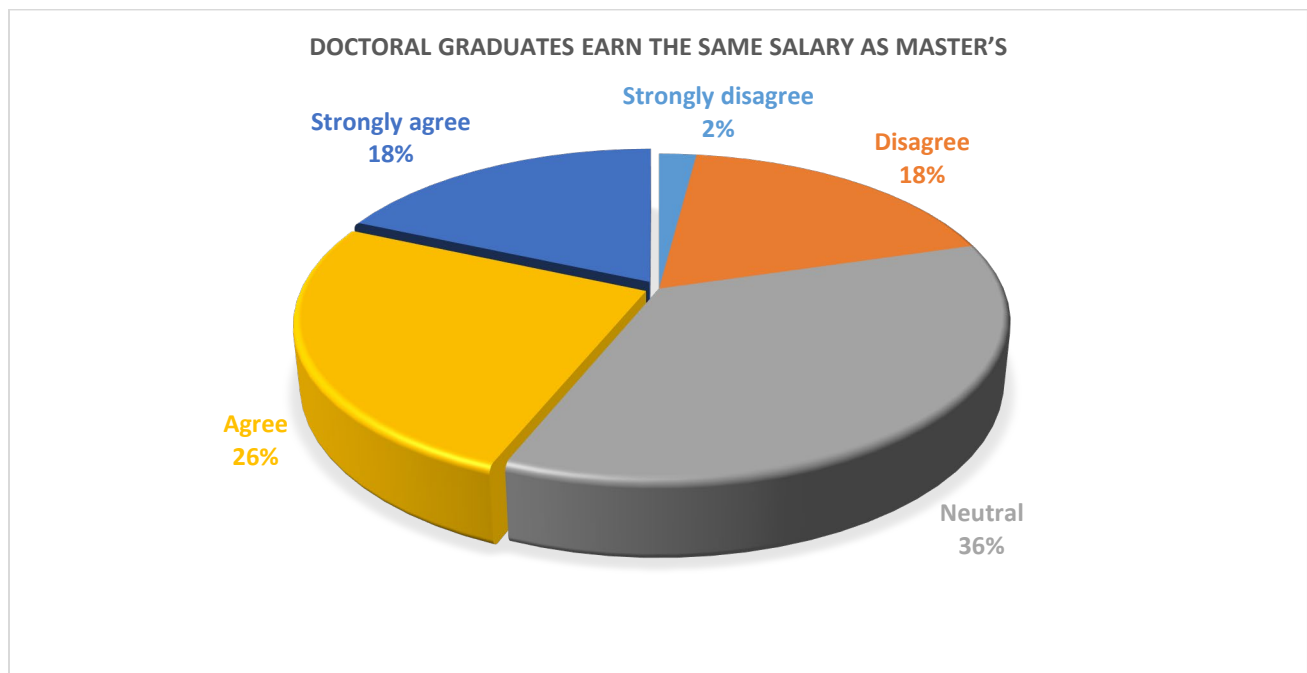


SOURCE: OWN CONSTRUCTION: An assumption, as employment can still be found anywhere depending on who offers employment at that time, even at the universities. In this regard, most respondents, 29%, disagree with the statement, whereas only 20% strongly agree on both instances—another way of avoiding doing a doctorate.

Doctoral graduates earn the same salaries with master's					
	1(2)	2(7)	3(14)	4(10)	5(7)

RESPONSE: There should be a clear-cut difference between the salary scale of a master's and doctoral graduate to attract more candidates to enrol for a doctoral degree. It does not serve the purpose of having a doctorate and still earn the same salary as a master's candidate. This is a demotivation on its own and an academic insult to these high-level degrees.

Figure 7.11

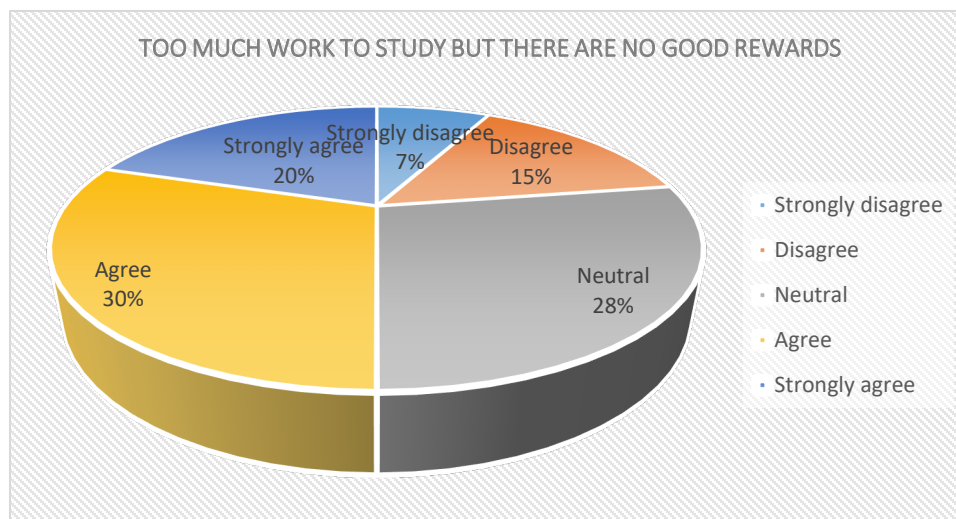


SOURCE: OWN CONSTRUCTION: The issue of remuneration, is very important when it comes to qualifications. People with higher qualifications need to be remunerated higher than those who are less qualified. High qualifications have to correspond with a high salary. The salary of a doctorate needs to be higher than that of a Master's. The neutrals, 36% are in the majority and do not know what to say. 2, 6%, which is the next highest, entirely agrees with the statement.

Too much work to study, but there are no good rewards	1(3)	2 (6)	3 (11)	4 (12)	5 (8)
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RESPONSE: The level of study is very high and need more effort as the outcomes thereof should also be encouraging. Too much work, do need in return good results. Encouragement in this regard can come through good work and salary. The good part of a doctoral degree is that it will open doors you never thought would be opened once you have acquired it.

Figure 7.12

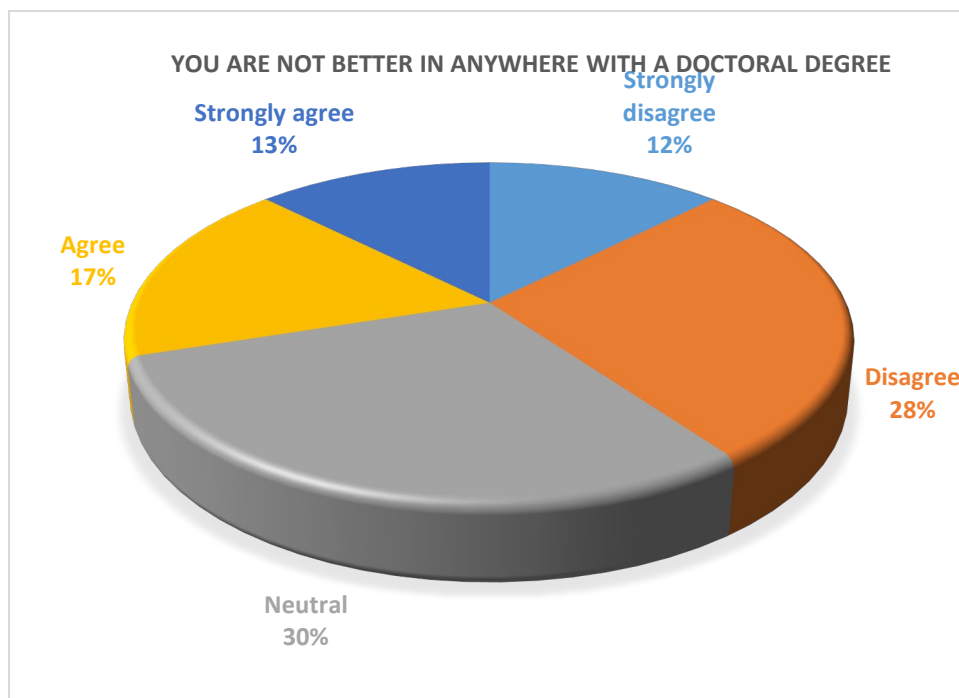


SOURCE: OWN CONSTRUCTION: The problem, in this instance, is about putting much effort into your work, but when it comes to reward, which is employment the rewards are very little. Still, people with lower qualifications are holding better positions than those with Doctorates. Those who agree with the statement (30%) are the highest; then second is Neutrals (28%) and the least being 7% who strongly disagree with the message.

You are not better off with a doctoral degree	1 (5)	2 (11)	3 (12)	4 (7)	5 (5)
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RESPONSE: Having done or doing a doctorate does not mean that you need to use it sooner after its completion, but you can still rely on it at a later stage. It is a long-term investment for an individual. You do not study for tomorrow but the future. A doctorate will put you in the top echelons of society forever; no one can remove that from you.

Figure 7.13.

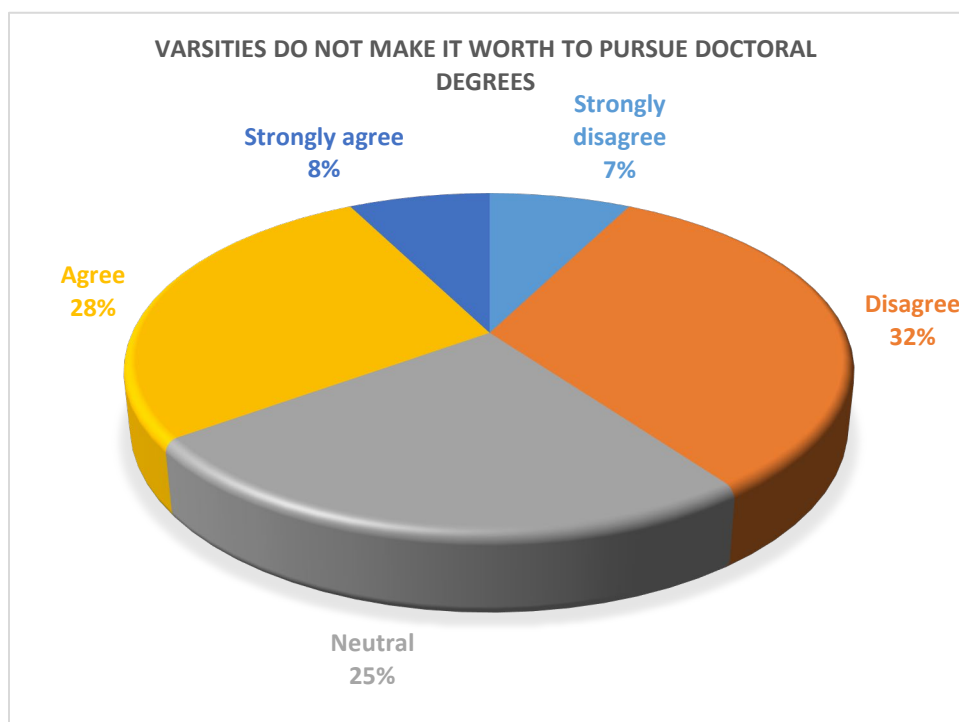


SOURCE: OWN CONSTRUCTION: The majority who are unsure about what to say was 30% allowed by 28% who disagree with the statement and are aware that it is a long-term investment. Those who agree with the statement (17%) as cored to strongly disagree (12%). The majority in this regard were people with a master's degree and speaking from practical experience and having seen those who came before them not considered even if they had a doctorate.

Varsities do not make it worth pursuing a doctoral degree	1 (3)	2 (13)	3 (10)	4 (11)	5 (3)
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RESPONSE: This is about varsities not doing much to promote doctoral enrolment. This is also about the unavailability of programmes that can help promote enrolment into the doctoral programme. This is also about the effort the varsities need to embark upon for doctoral degree enrolment. It should be clear that not everyone with a master's level intends to do a doctoral degree.

Figure 7.14.

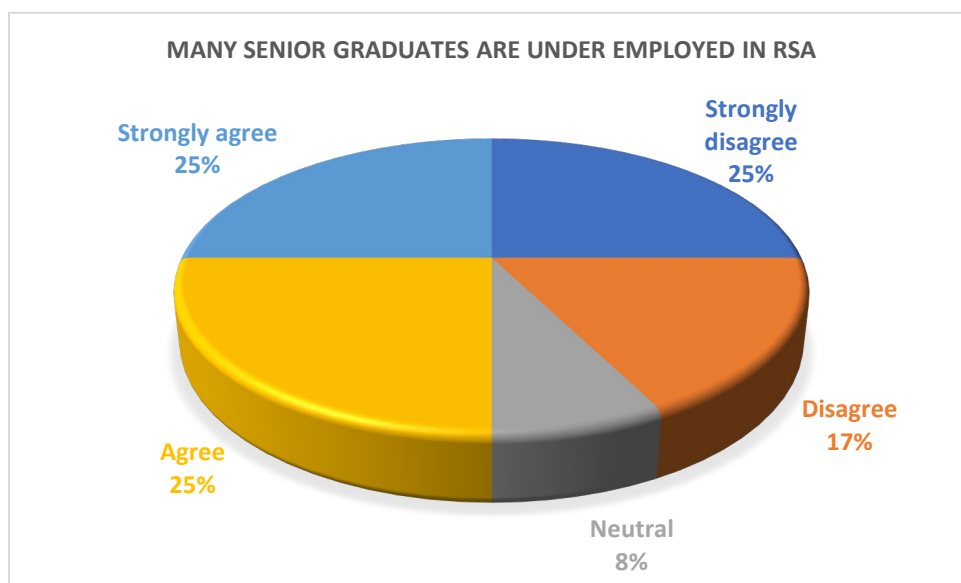


SOURCE: OWN CONSTRUCTION: The varsities need to play their part concerning what they offer to post-honours degrees. They should market their higher degrees to be very appealing to prospective candidates. In most instances, we find that the major % agree with the statement (28%). Of those in disagreement, in this case, 32% want the varsities to stick to their current method of attracting candidates for the doctoral degree. The neutrals also include a bigger percentage of 25% in this instance. The response was from people who have been lecturing for some time at university.

JOB OPPORTUNITIES DOCTORAL QUALIFICATIONS					
Many senior graduates are underemployed in RSA	1(10)	2 (7)	3 (3)	4 (10)	5 (10)

RESPONSE: The issue of employment and higher education are intertwined. People expect you to be easily employable if you are highly qualified, but other notions are about the higher being educated, the more you become underemployed. This has to do with the state of the economy as unemployment is on the rise from all sectors of society.

Figure 7.15.

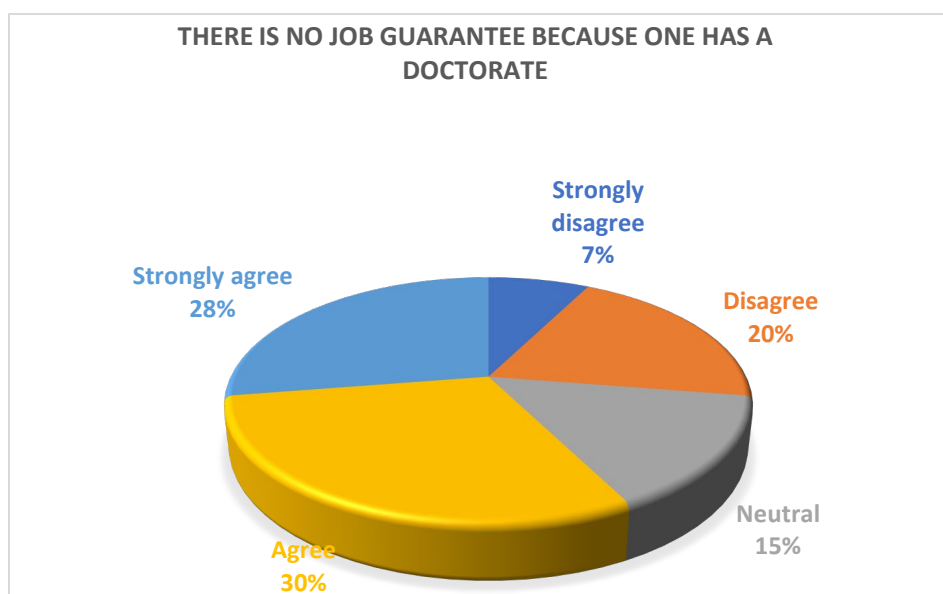


SOURCE: OWN CONSTRUCTION: Employment is a serious problem in the country at present. It affects mainly the highly qualified who spend a lot of time and resources to get educated. There are many debates in this regard. The margin between those who agree with the statement and those who do not agree is very similar. 25% in each case, the only lower ones are those who disagree (17%) and the Neutrals (8%). However, there are still a lot of senior graduates who are still employed in the country.

There is no job guarantee because one has a doctorate	1 (3)	2 (8)	3 (6)	4 (12)	5 (11)
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RESPONSE: A doctorate has no relationship with a job guarantee at all. One can still be unemployed being illiterate, or undereducated. No qualification is related to a job guarantee at all. A doctorate can bring you a better job if there is work available. Thus, with a doctorate, you stand a better chance of getting a job and, for that matter, a good job. The issue of jobs depends upon the jobs being advertised looking for certain qualifications.

Figure 7.16.



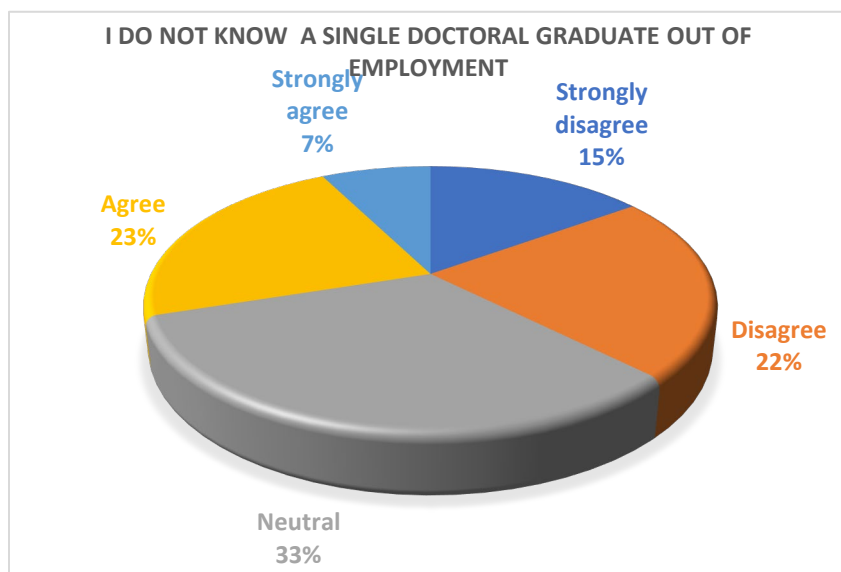
Source: own construction

In this regard, the stakes are higher in both agreeing levels, i.e., 28% and 30% respectively. On the other hand, the level of disagreeing in both instances is very low and is about 20% and 7%, respectively. Thus, the issue of job guarantee does not have that much to do with the higher qualifications. It is just the issue of whether you get the job or not. Even with low qualifications, there is no job guarantee.

I do not know a single doctoral graduate out of employment	1 (6)	2 (9)	3 (13)	4 (9)	5 (3)
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RESPONSE: This is about the employment chances on having a doctorate. This clarifies that it is on very rare occasions that doctorates are without work. The higher you are educated, the better your chances of having a job. Most places of employment do prefer to employ highly qualified people as they regard them as very innovative and accountable.

Figure 7.17.

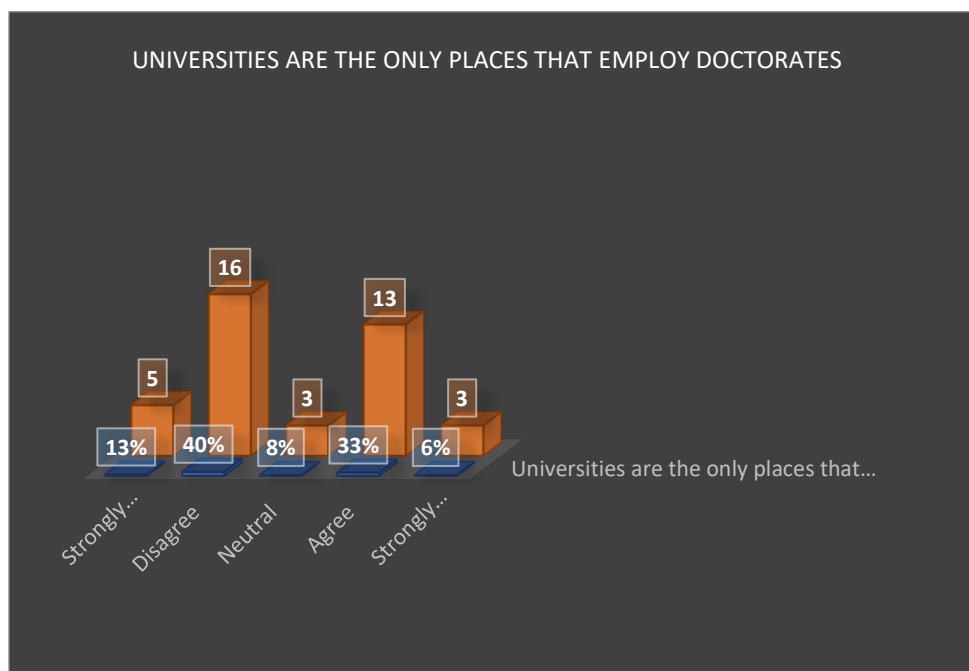


SOURCE: OWN CONSTRUCTION. This is about the highest university degree, and it can keep any holder afloat from the job scarcity levels. The majority (23%) fully agree that getting a doctorate out of employment is not easy. Opposition to the agreeing group is 22%. The largest % is the neutrals (33%), which shows that most respondents are unsure of where they stand.

Universities are the only places that employ doctorates	1 (5)	2 (16)	3 (3)	4 (13)	5 (3)
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RESPONSE: The doctorate is always associated with the university. It is only at university where one can enrol for that degree. The issue of doctoral employment can occur at any place and not only at university, but all also depends on who offers employment opportunities.

Figure 7.18

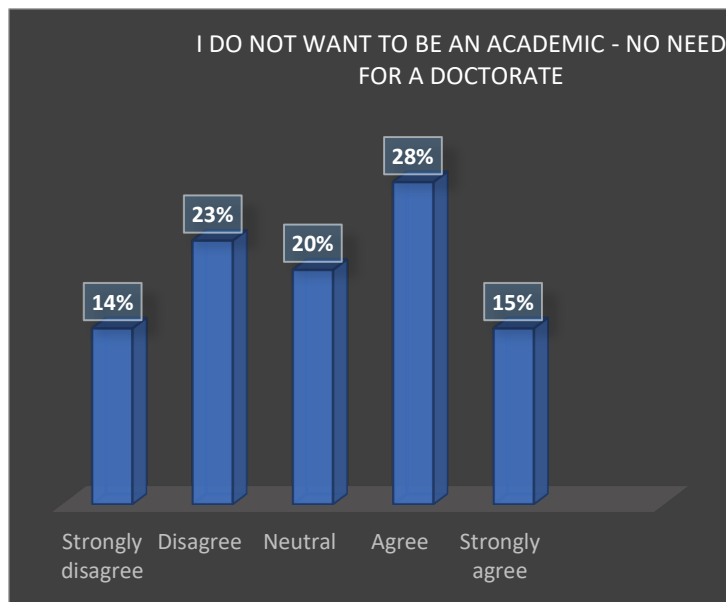


SOURCE: OWN CONSTRUCTION: Employment of doctorate can take place anywhere, albeit not being a university. University is a public entity, and private entities can still attract and employ doctoral candidates/graduates. In this instance, there are two high % levels, 40% disagree and 33% agree, indicating that employment can be found at any other place except the university.

I do not want to be an academic - no need for a doctorate	1 (6)	2 (9)	3 (8)	4 (11)	5 (6)
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RESPONSE: It is not a matter of being forced to be an academic, but optional. A doctorate is not a must but just an additional qualification. One can have a doctorate just to boost his social standing. Nevertheless, it is better to have it than not to have it. The interests on qualifications differ according to individuals and what they want to be in future.

Figure 7.19.

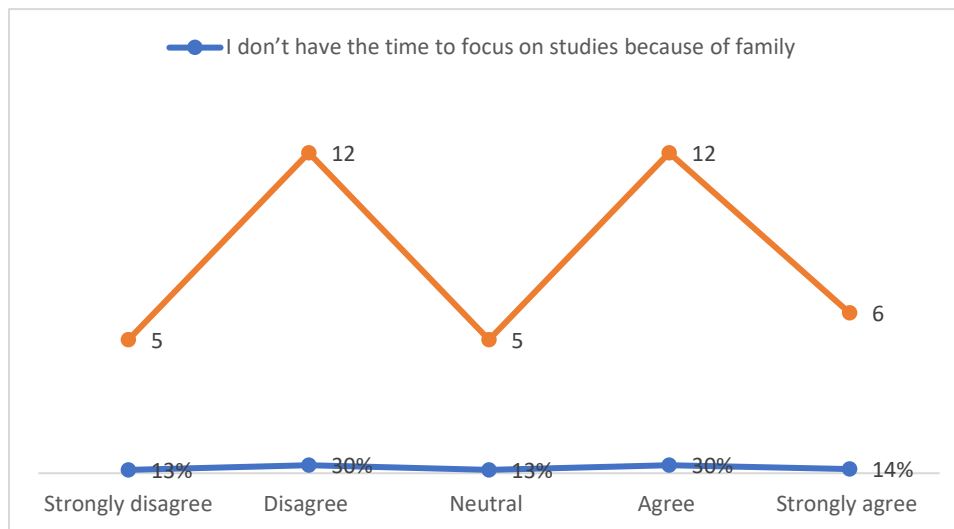


SOURCE: OWN CONSTRUCTION: No individual can be forced to do a doctorate, but that is just optional. People might feel comfortable about qualifications they have even if they are far below a doctorate. The highest percentage that proves that an individual decides to have or not to have a doctorate is 28%, where respondents agree that there is no need for a doctorate. Those who disagree are second in the standings (23%)

FAMILY RESPONSIBILITIES DISTRACT FROM STUDYING					
I do not have the time to focus on my studies because of family	1 (5)	2 (12)	3 (5)	4 (12)	5 (6)

RESPONSE: Family does not have that much to do with the academic interests of an individual. Again, we all come from different family entities where circumstances differ. Family can either support you or pull you down on your academic intentions. The academic issues depend upon the individual as it is they who study.

Figure 7.20.

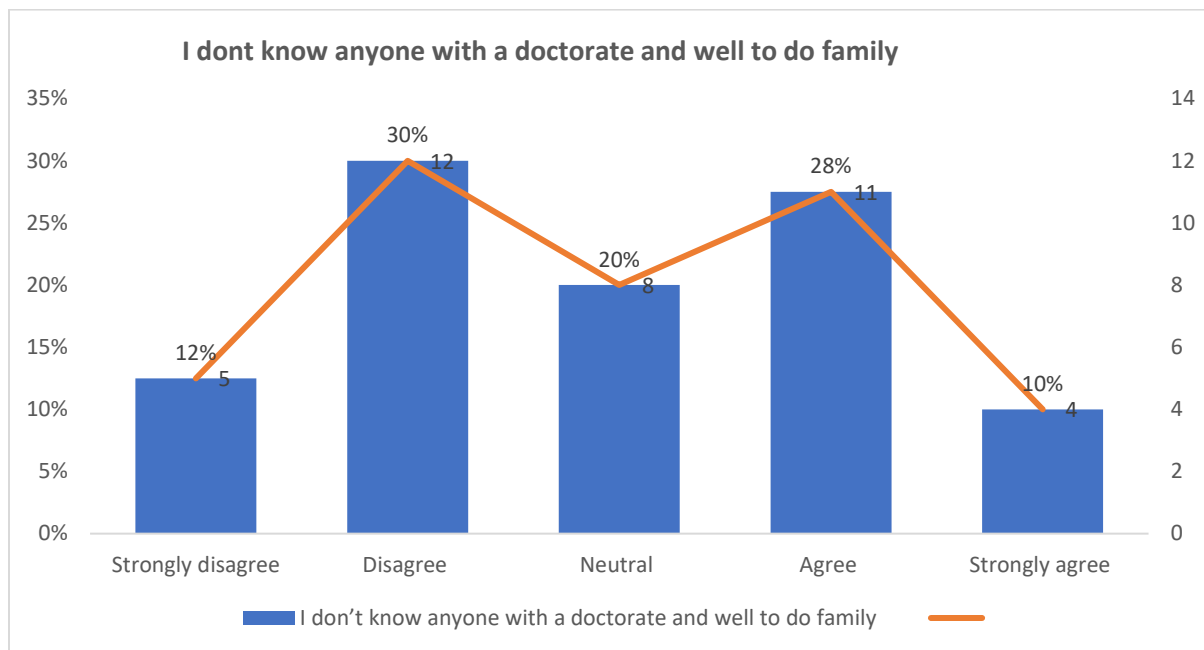


SOURCE: OWN CONSTRUCTION: The issue of time for studies depends upon the individual _if they make time for studies or not. Time does not make itself, but you must make it as an individual. The higher qualifications, once achieved, will benefit the entire family. In this case, most of the percentages are on the same level, e.g., 30% agree and 30% disagree and 13% strongly disagree, and the same percentage neutral.

I do not know anyone with a doctorate and well to do family	1 (5)	2 (12)	3 (8)	4 (11)	5 (4)
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RESPONSE: Having a doctorate is not a guarantee that one will be wealthy or well to do. A degree is not a mechanism of becoming rich but just a social safety valve. The family can have many well-educated individuals but remain just above the average income earner. Doctoral studies seem to be closely linked with being wealthy, and that is wrong.

Figure 7.21.

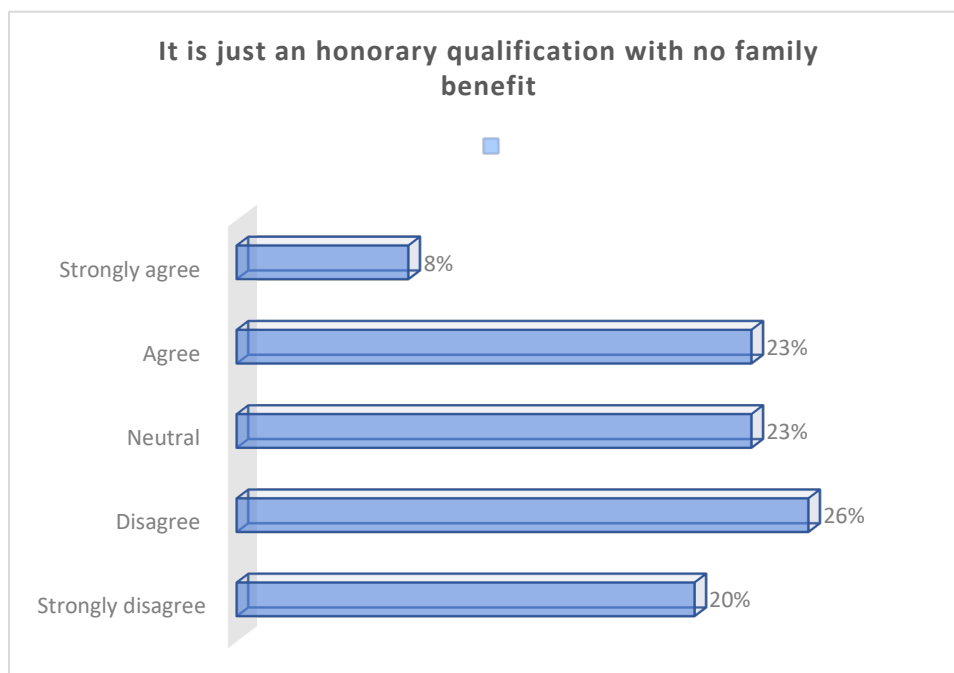


SOURCE: OWN CONSTRUCTION: It is common knowledge for many people to associate high education with being well to do. In this case, most respondents disagree (30%), and the nearest to that do agree (28%), which is a close call to both opposing groups. It all depends on the perception of the majority of people. Many families are wealthy but do not have a single graduate in their midst.

It is just an honorary qualification with no family benefit	1 (8)	2 (10)	3 (9)	4 (9)	5 (4)
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RESPONSE: The weight of having a doctorate can be viewed from different angles by different people. Families differ accordingly, and they take the issue of doctorate differently. The issue of benefitting depends on what the doctor gets out of the degree—having a doctorate in your family helps boost social status.

Figure 7.22

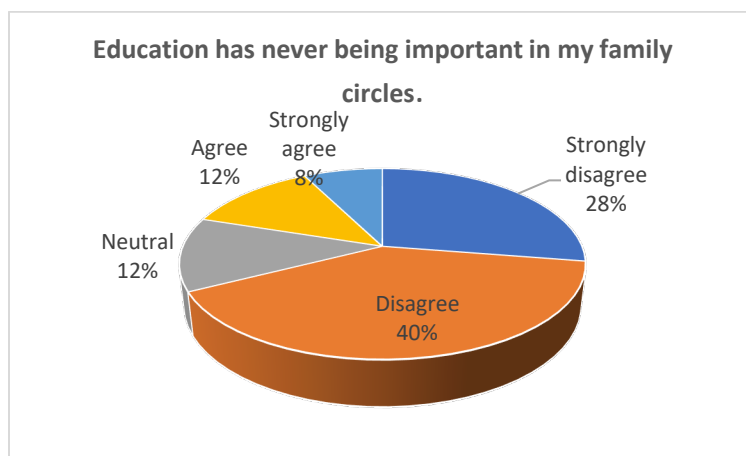


SOURCE: OWN CONSTRUCTION: The benefits of having a doctorate depend on what happens after getting it, as all depends on what the owner does and gets out of it and then the family follow. The percentages above on the chart explain it all as the difference is not that much. It might not benefit the family immediately, but at any given time, once the opportunity arises, then the benefits will start rolling in.

Education has never been important in my family circles.	1 (11)	2 (16)	3 (5)	4 (5)	5 (3)
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RESPONSE: Family do view the importance of education differently. Some view it as the way forward to future success and out of poverty. Other families have generations of uneducated people in their midst and do not try to improve their qualifications. It needs just one person in the family to change the attitude towards the importance of education.

Figure 7.23

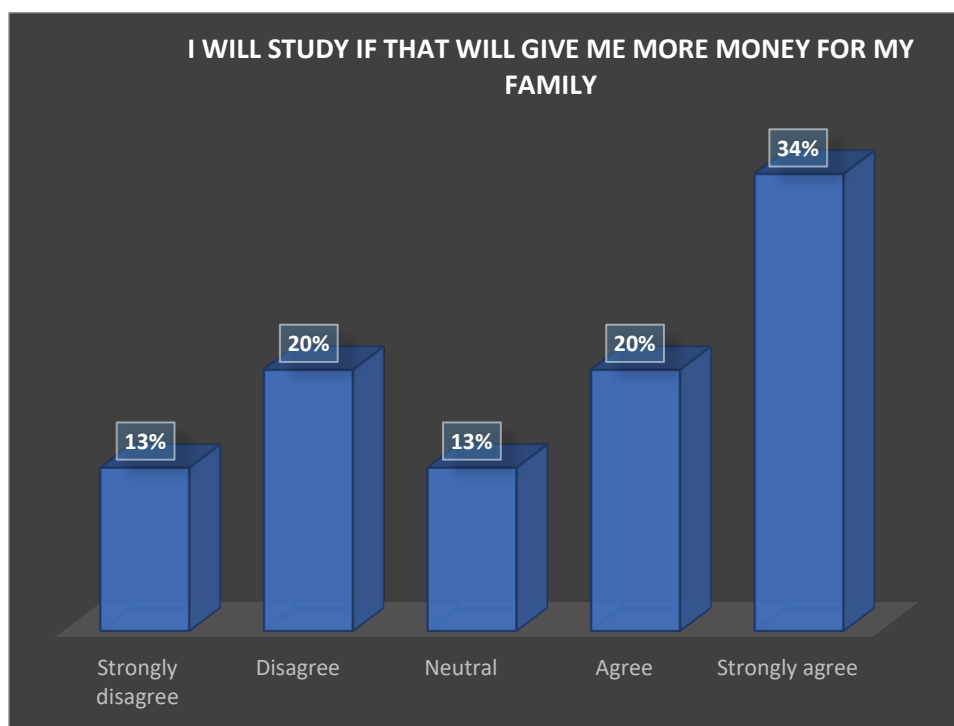


SOURCE: OWN CONSTRUCTION: In this instance, many respondents who have been highly educated disagree (40%) and strongly disagree (28%) do think that education is an asset to any family. The neutrals and those who agree are very few compared to the rest, which shows that education is vital for every family. Higher education is a long-term social investment. In addition, education with people agreeing or not is critical to everyone.

I will study if that gives me more money for my family	1 (5)	2 (8)	3 (5)	4 (8)	5 (14)
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RESPONSE: Higher education is not a final solution to get more money in life. Some uneducated people still do have more money than educated ones. Riches do not necessarily originate with higher education. Higher education is just a safety valve for having money. It is an investment that does not perish. People should study in order to try and secure their future and not for the riches.

Figure 7.24

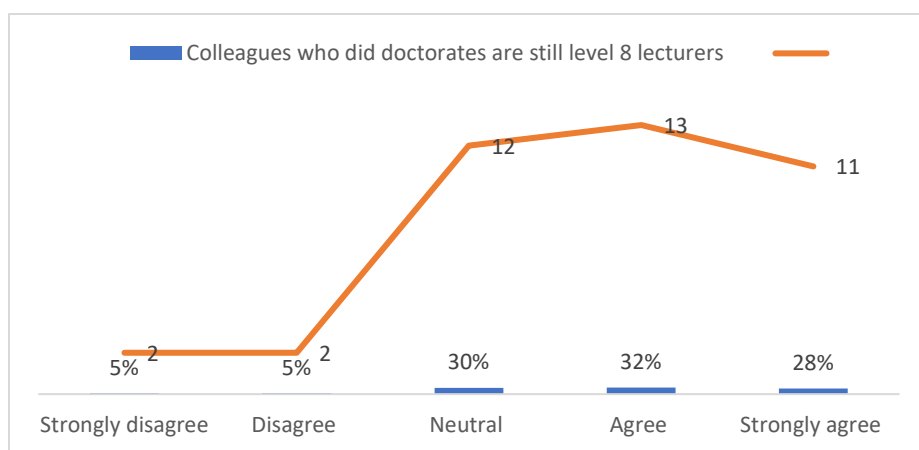


SOURCE: OWN CONSTRUCTION: People do believe differently in education and its expected benefits. It is evident that once you are well educated, you will earn a reasonable salary. The majority in this graph (35%) agree that the more educated you are, the more money you will get. The rest of the respondents are equally divided in their response, i.e. 13% and 20% on each lower %. There are still some people who are not highly educated but still earn much money in salaries. A doctorate is a safety valve that can still be used at any time when needed.

KNOWN PROMOTIONS FOR DOCTORAL GRADUATES					
Colleagues who did doctorates are still level 8 lecturers	1(2)	2 (2)	3 (12)	4 (13)	5 (11)

RESPONSE: The issue of lecturing has its own dynamics that cause some problems in the academic world. In other instances, it is found that lowly qualified staff do get remunerated better than those who are in the doctoral group. This it is a discouraging factor.

Figure 7.25



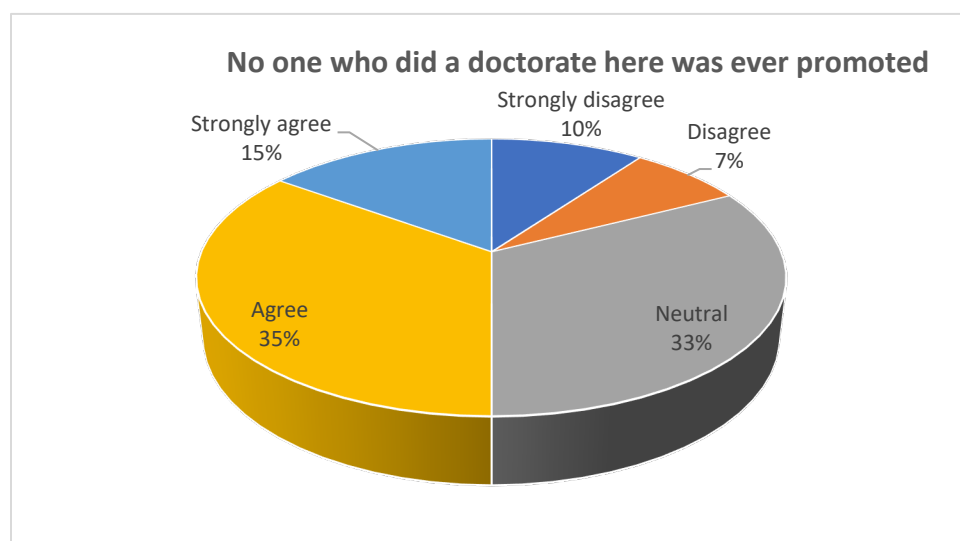
Source: own construction

This is a very sensitive issue that might cause discontent among the very staff members. The staff who agree (33%) and strongly agree (28%) are the majority of the rest on the graph. The neutrals follow suit with their 30%. This is a very prickly issue among most academics. Although, in other instances, it is true that people with the possibility of giving education a significant boost are being paid very little salary compared to their qualifications. This needs to be attended to as it might lead to animosity amongst many academics.

No one who did a doctorate here and was ever promoted	1 (4)	2 (3)	3 (13)	4 (14)	5 (6)
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RESPONSE: Doctorate is not a guarantee for promotion, but it opens the way to that. People expect to be fully recognised when having a doctorate, but it is not always the case. Thus, many respondents get discouraged by that. Promotion does not just come out of the blue, but it all depends on if there is a position that needs to be filled up on the upper structures of the employment organogram.

Figure 7.26



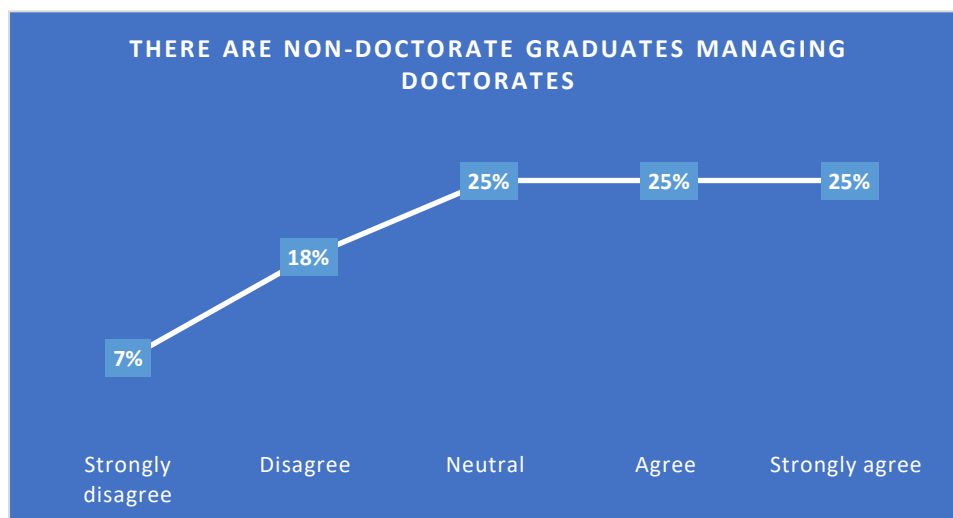
SOURCE: OWN CONSTRUCTION

The higher percentage (35%) does tip the scale on to the side of the group that agrees with the statement; next to that is the neutrals with (33%). For the rest, the margin is very narrow/thin. It is an indication that no one is completely certain in what they said about promotion with a doctoral degree. Promotion depends upon the individual and the employer, especially for a very high position in the institution.

There are non-doctorate graduates managing doctorates	1 (3)	2 (7)	3 (10)	4 (10)	5 (10)
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RESPONSE: It is found that in many instances, less qualified people do manage more qualified people. This, in itself, is a significant demotivating factor for one to try and improve their current position in the institution. Seniors should be managed by other seniors. In this regard, the institutions are to blame and need to fix the problem before it is too late.

Figure 7.27

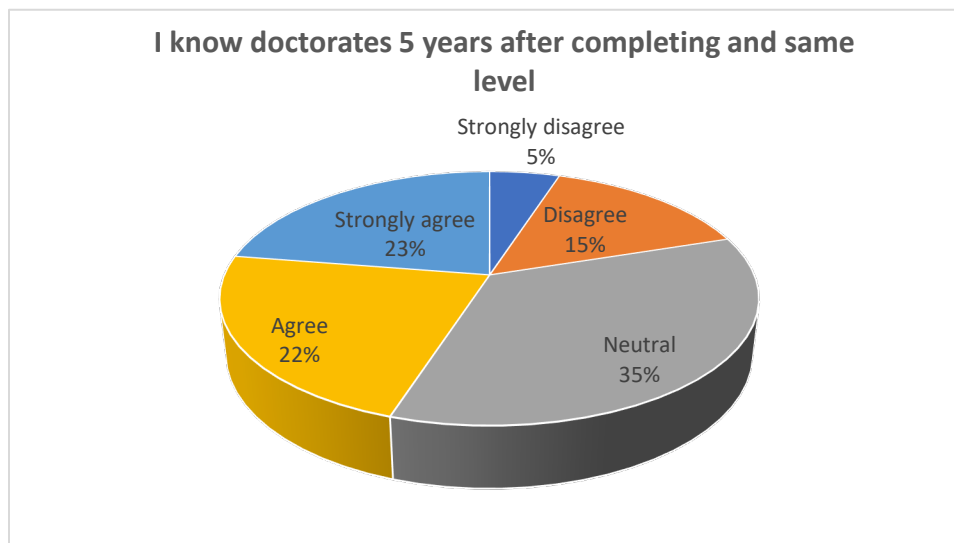


SOURCE: OWN CONSTRUCTION: The management issue of juniors promoted to oversee seniors leads to incompatibility in all instances. The table above from the neutrals and the agreeing and strongly agree to stand at 25% each, which shows that this is a serious problem that needs attention. However, this needs not to be discussed but just to be corrected as soon as possible before doing more damage.

I know doctorates five years after completing and are at the same level	1 (2)	2 (6)	3 (14)	4 (9)	5 (9)
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RESPONSE: it is well known that some doctors, long after completing their studies, are still at the same level they began with; promotion is not there for them at all, and that is demotivating for them. A doctorate is the highest degree, and it needs respect and appreciation. Therefore, promotion and salary increment should result as soon as possible.

Figure 7.28

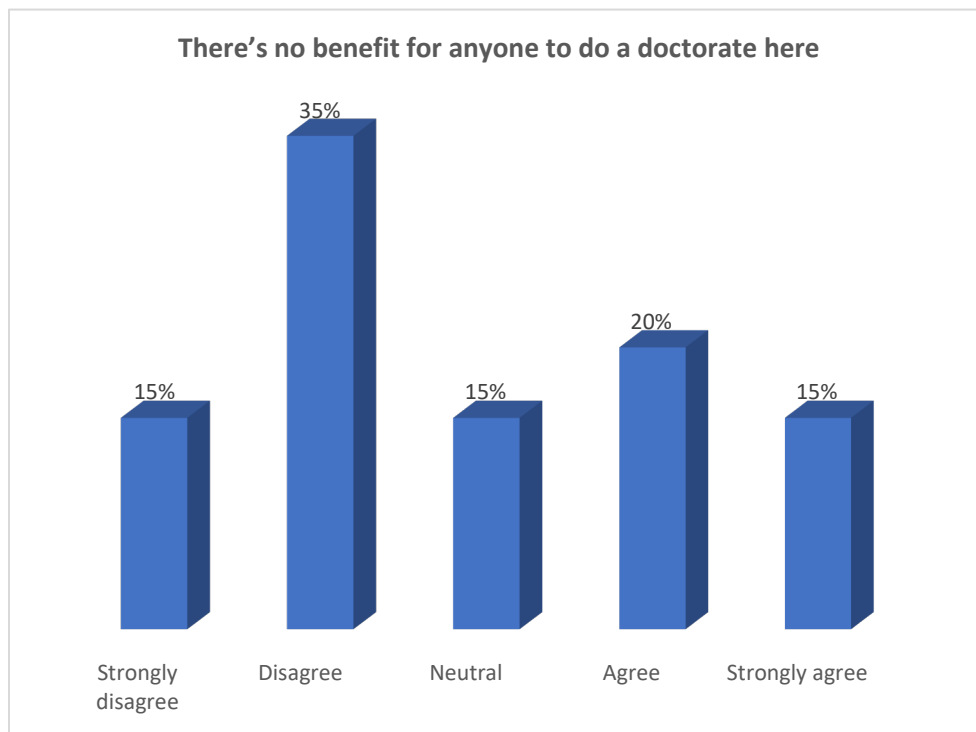


SOURCE: OWN CONSTRUCTION: In this regard, the main % is the neutral who appear to be undecided about where they stand (35%). Those who agree (22%) and strongly agree (23%) are followed by lesser percentages. This indicates that some of the reasons people do not want to study further are real and factual.

There is no benefit for anyone to do a doctorate here	1 (6)	2 (14)	3 (6)	4(8)	5(6)
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RESPONSE: Many people associate study improvement with some significant benefits. Demotivation sets in where there are no benefits or incentives. You will always embark on something you know you will benefit from it irrespective of the level of those benefits. High education benefits do not just come immediately but with time/patience.

Figure 7.29

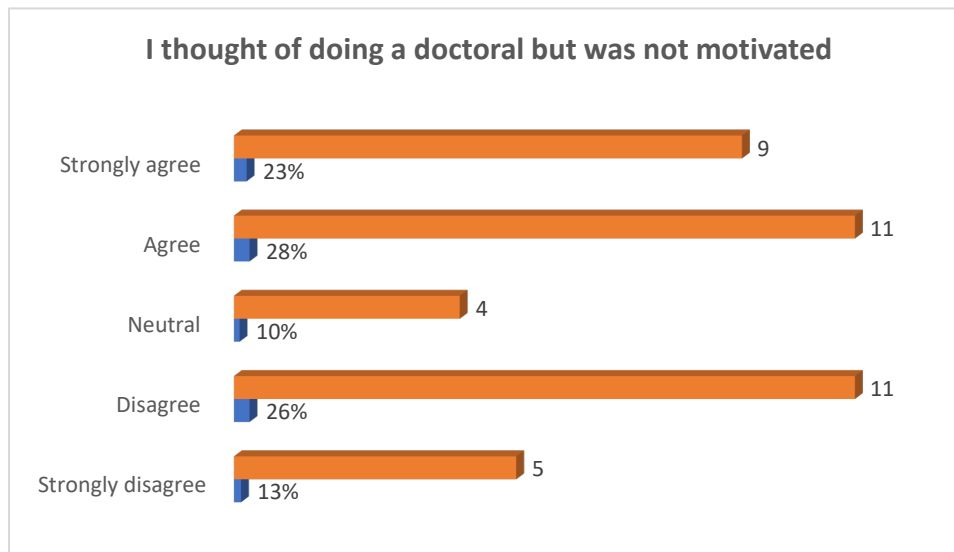


Source: own construction

What needs to be realised is that benefits with a doctorate do not come immediately after completion but take time. Once they start rolling, then they do not stop. Those respondents in disagreement (35%) indicate that patience is needed in attaining those benefits.

BENEFITS FACTORS FOR OR AGAINST					
I thought of doing a doctoral study but was not motivated	1(5)	2(11)	3(4)	4(11)	5(9)

RESPONSE: Many reasons can lead to one's demotivation in improving ones' education. Reasons differ according to people/respondents who already have or are about to complete their master's degree. Although some of the reasons are easy to follow, salary and promotion are other reasons. No matter what could be said, the more qualifications one attains, the number one aspect is promotion, which goes hand in hand with a higher salary. **Figure 7.30**



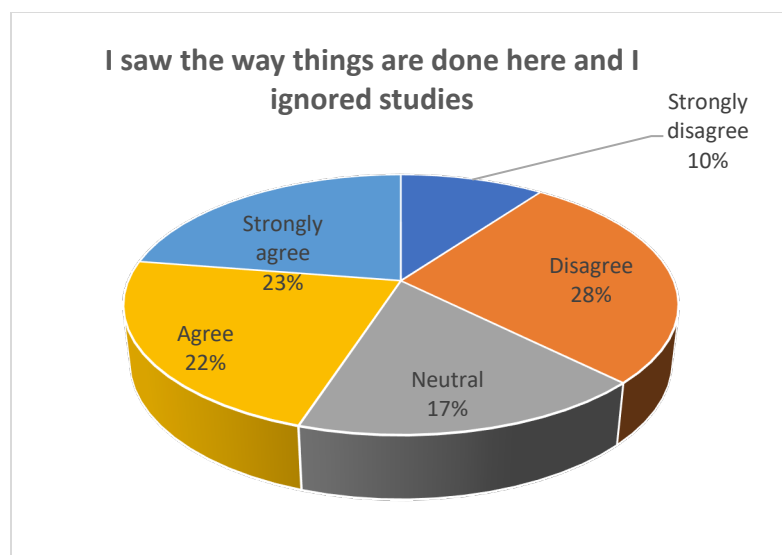
Source: own construction

Doing a doctorate is not that easy as it needs a lot of courage and organisation. If you are not motivated and incentivised, some disagree that this does not demotivate them. However, 28% who disagree are followed by the same % of those who agree that not being motivated prevented them from pursuing a doctorate. These two seem to outweigh the rest of the percentages in their interpretation equally that needs to be noticed and very seriously, is the 'agree' and 'strongly agree': it demonstrates that once one passes a doctorate, then the issue of rewards, benefits and incentives immediately kicks in.

I saw the way things are done here, and I ignored studies	1 (4)	2 (11)	3 (7)	4 (9)	5(9)
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RESPONSE: Certain things in different institutions are being done differently but on most occasions to the dissatisfaction of the many staff members. The issue of aspiring for higher degrees is thus very demotivating to improve your studies, based on personal perception of., favouritism, where lesser qualified people are favoured the most as they will do anything their seniors want them to, albeit how wrong it can be; all they need is to stay in the job they do not qualify for, and they know it themselves.

Figure 7.31



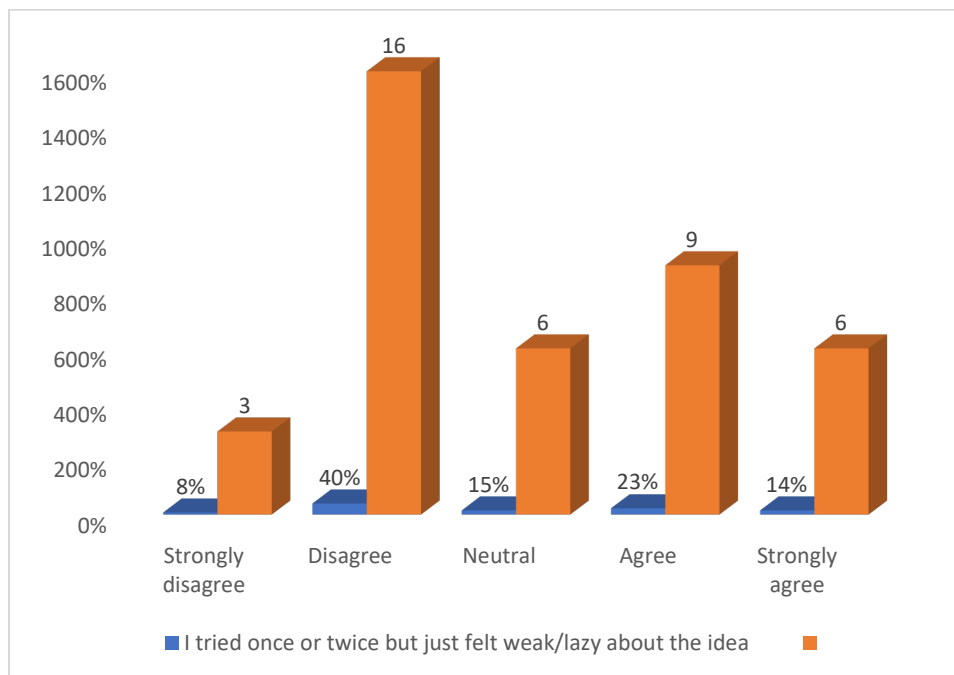
Source: own construction

As long as favouritism or issues are not appropriately handled, no staff member will be satisfied. In those who agree (22%) and (23%) agree strongly, and the highest (28%) disagree, this is the indication is that problems are there to be sorted out. To have happy staff, you need to treat them equally at all times. Nepotism and co-optation can wreck well-planned intentions, and shortcuts can be disastrous too. Highly qualified people need to be on top of the working environment/positions.

I tried once or twice but just felt weak/lazy about the idea	1 (3)	2 (16)	3 (6)	4 (9)	5 (6)
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RESPONSE: In studying, one must be serious, especially at the doctoral level, which is not as difficult as many think. The issue of chance-taking coupled with laziness is a good recipe for academic disaster. It is either you study or not to start if lazy. There is nowhere that laziness can take you in life, including the academic world.

Figure 7.32



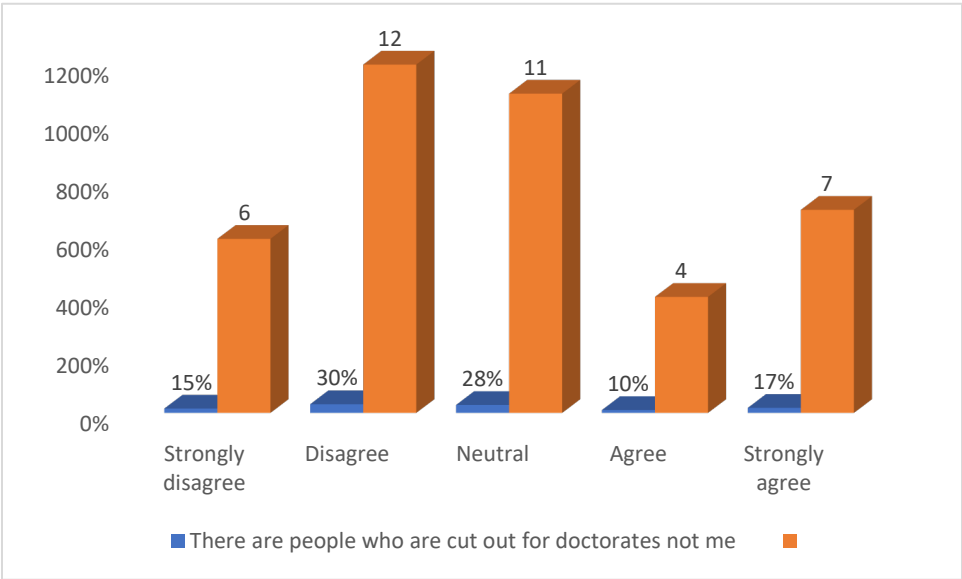
Source: own construction

Studying for a doctorate, in particular, is a very serious one, and laziness is not accommodated. Thus, the majority of the respondents (40%) who were all with a master's degree disagreed with the issue of laziness. However, compared to those who agreed (23%), the indications are that laziness in doctorate is not accommodated at all, and you will not survive.

Some people are cut out for doctorates, not me	1 (6)	2 (12)	3 (11)	4 (4)	5 (7)
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RESPONSE: In this regard, people must stop hiding behind unfounded reasons for not improving their studies. No one is tailor-made for the doctorate. We can all strive to get a doctorate. No one was born with qualifications; we all have to strive for that. A doctorate is not reserved for certain people but for anyone interested and willing to study.

Figure 7.33



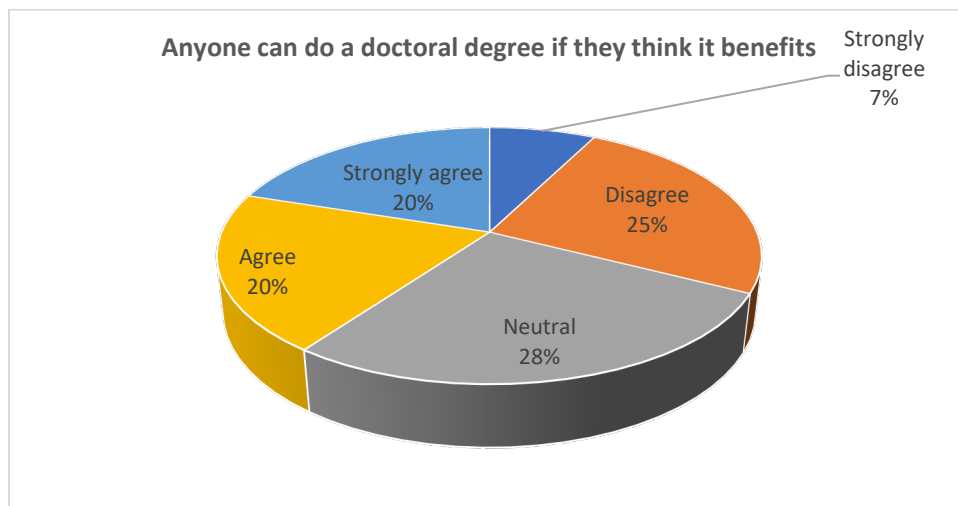
Source: own construction

In this confusing statement, the majority of the respondents, 30%, disagree with this statement and nullify it as unfounded. The neutrals, as usual, are the next in the majority, but their case does not weigh that much as they are in the middle and have no direct stand. No one is cut out for a doctorate; we all have to work very hard to have one.

Anyone can do a doctoral degree if they think it benefits	1 (3)	2 (10)	3 (11)	4 (8)	5 (8)
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RESPONSE: It is an individual's choice that one can improve his academic standing. The doctoral degree needs people who are very serious in their studies and is not difficult at all. It is like either going in or not going in. The benefits of a doctorate might take time to come, but they will finally come.

Figure 7.34.



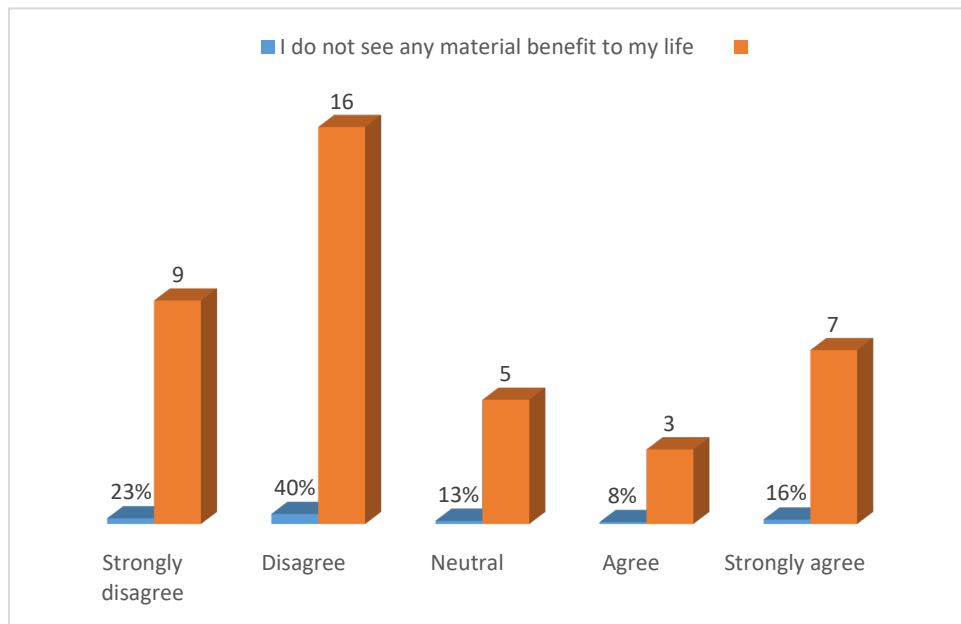
Source: own construction

The choice of doctorate depends upon the individual, but anyone can be able to do it. The problem in this regard is about people who do not want to take a stand: neutrals (28%) and followed by those who disagree (25%) in that they will come with all sorts of reasons for not doing the doctorate, but anyone can be capable of doing it. So, anyone can do a doctorate but depending on how serious they are.

SOCIAL FACTORS AGAINST GETTING A DOCTORATE.					
I do not see any material benefit to my life	1 (9)	2 (16)	3 (5)	4 (3)	5 (7)

RESPONSE: Many people have different academic interests. People follow their own line of education, and to the level they think that they are okay. A doctorate is not for short/quick benefits but long term benefits. It will take a very long time before those benefits show up, and once there, they will never be removed for a very long term.

Figure 7.35



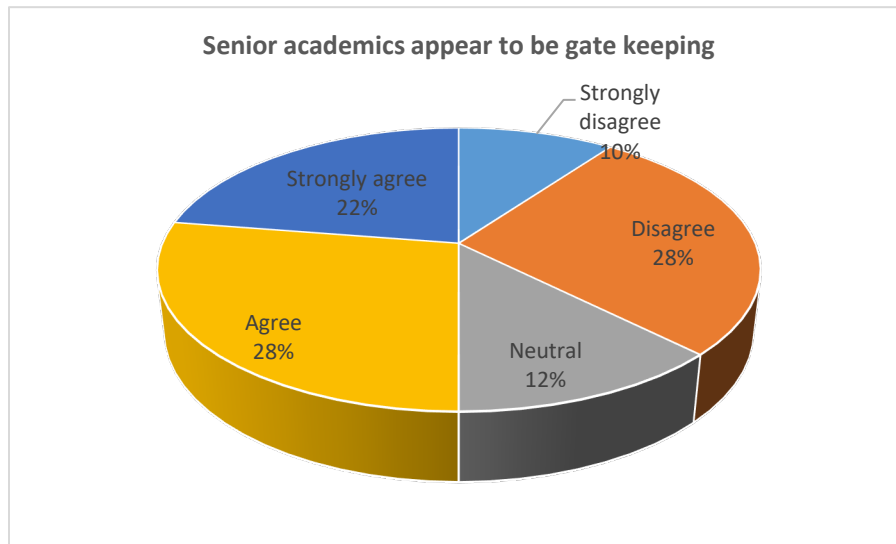
Source: own construction

In all instances, there will be agreements as well as disagreements. In this regard, the majority (40%) disagree with the statement and the agreeing group (8% and 18%) in both instances, and the finality of the matter clearly shows where the scale is tipping to. This might be yet another escape route of avoiding doing a doctorate.

Senior academics appear to be gatekeeping	1 (4)	2 (11)	3 (5)	4 (11)	5 (9)
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RESPONSE: Seniority at times at university is more of a bad omen. In this regard, there is educational incompatibility amongst the staff component: seniors and juniors. However, in other circumstances, juniors do run the show instead of vice versa.

Figure 7.36



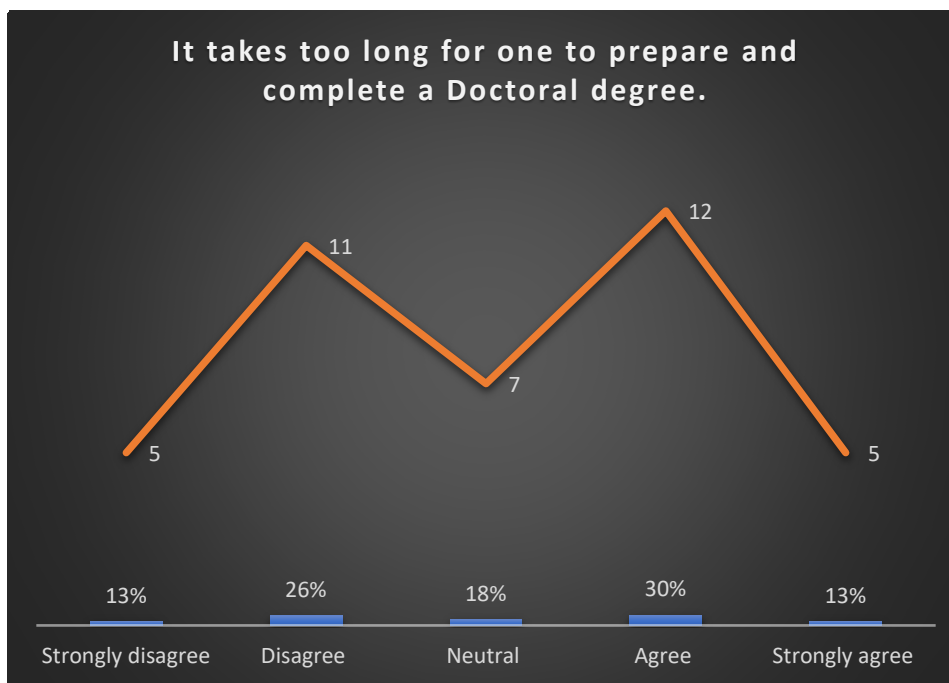
Source: own construction

The percentages on both the Agreeing and the disagreeing are the same (28%) in both instances, which shows how divided the staff is. This is another reason that may discourage people from wanting to be doctorates. The issue here is whether the senior academics are being well and fairly treated or not?

It takes too long for one to prepare and complete a Doctoral degree	1(5)	2 (11)	3 (7)	4 (12)	5 (5)
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RESPONSE: A doctoral degree is the most senior degree, and it will take longer to prepare for and complete. To many candidates, it is time-consuming. However, there is no way of doing or shortening the period of doing a doctorate. It is a degree for sober-minded people/candidates.

Figure 7.37



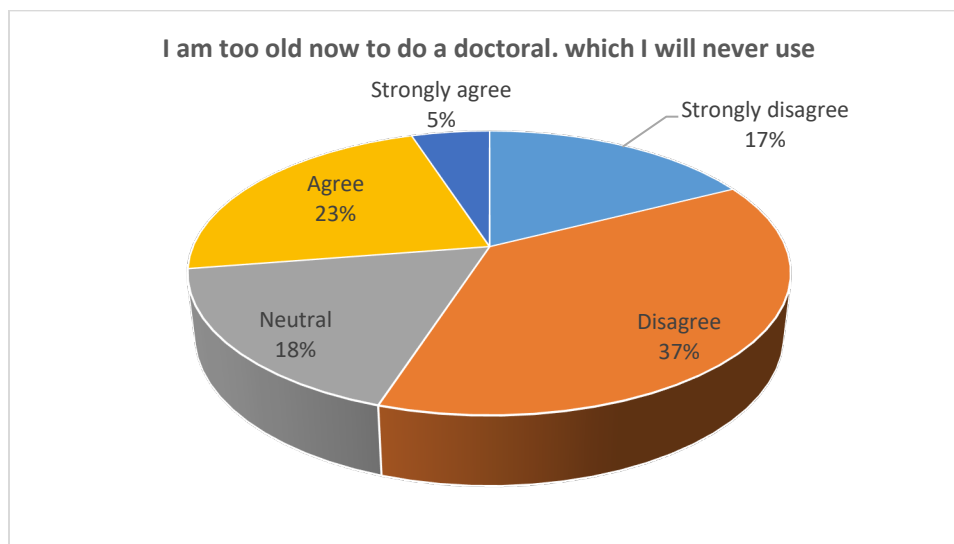
Source: own construction

Most respondents (30%) agree with the statement in this graph, but just short of two levels/percentages, 28% disagree. The margin between the two is very thin, and it makes it somehow difficult to reach a conclusion. When seeking a qualification, the issue of time comes last as some impediments can crop up at any time to disrupt the study process.

I am too old now to do a doctoral. which I will never use	1 (7)	2 (7)	3 (7)	4 (9)	5(10)
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RESPONSE: Academic achievement has nothing to do with age; it all depends upon the interests of the individual. The more mature you are, the more focused and organised you become. No one can predict what the future holds for him/her at a more advanced age.

Figure 7.38



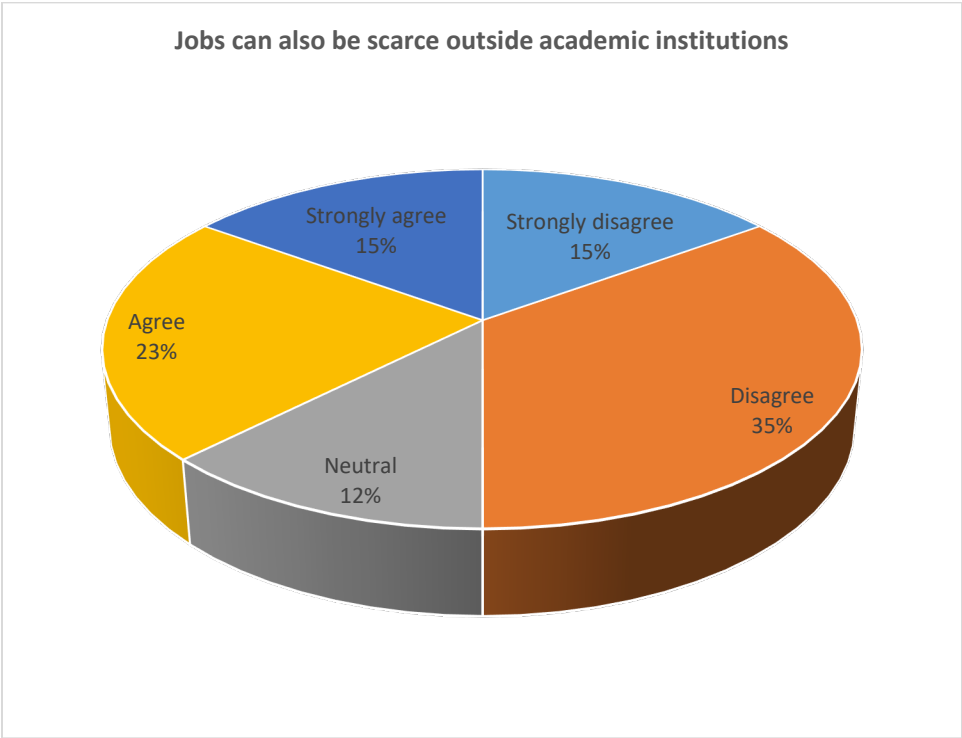
Source: own construction

In this regard, a majority of 37% disagree with the statement, and it demonstrates that being in the senior-age category is not a handicap in doing and passing a doctoral degree. The whole issue of being older should not be made an excuse for being lazy and afraid to study. Many people have achieved the top levels of education at an advanced stage of their career and life.

Jobs can also be scarce outside academic institutions	1(6)	2 (14)	3 (5)	4 (9)	5 (6)
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RESPONSE: The job aspect depends on its availability and the people with the needed qualifications. At any institution, it all depends on who qualifies to get the job. The only snag at many institutions is the issue of nepotism and co-optation. However, the private sector does also offer jobs for highly qualified people.

Figure 7.39



Source: own construction

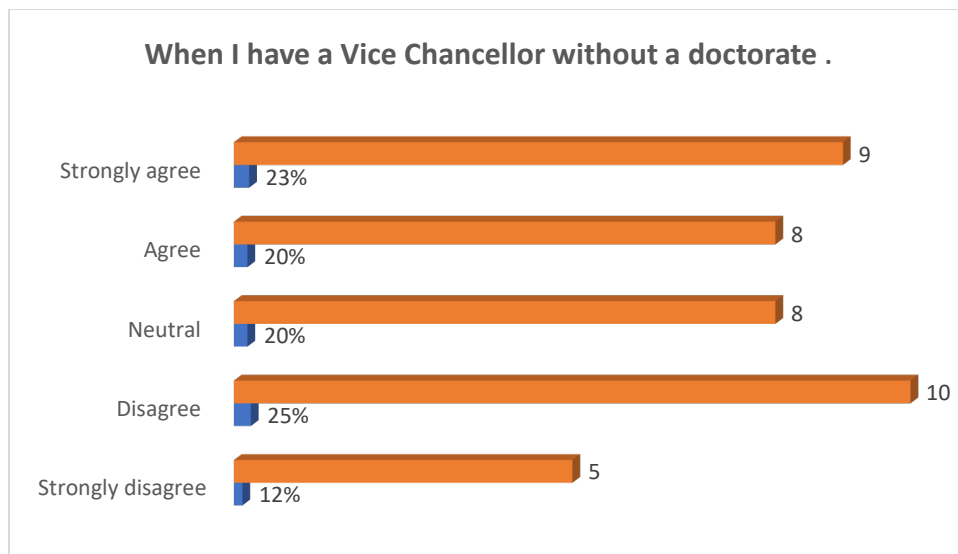
In this case, the respondents who dispute the statement are 35%, which easily shows no truth in the essence of this statement. Those who agree are in the minority of 23% of the count. How do people outside the academic institutions get that job? Whether public or private, the issue of jobs depends on the availability of jobs; both the private sector and institutions can offer jobs, and all depend on the availability.

DEMOTIVATORS FOR DOCTORAL DEGREES; I am demotivated;					
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When I have a Vice-Chancellor without a doctorate	1 (5)	2 (10)	3 (8)	4 (8)	5 (9)
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RESPONSE: The issue of high positions at the compromise of the academic qualifications is an academic disaster in the making. The top official in this regard should have the highest and necessary qualification to draw inspiration and instil motivation on the junior staff and not the other way around.

Figure 7.40



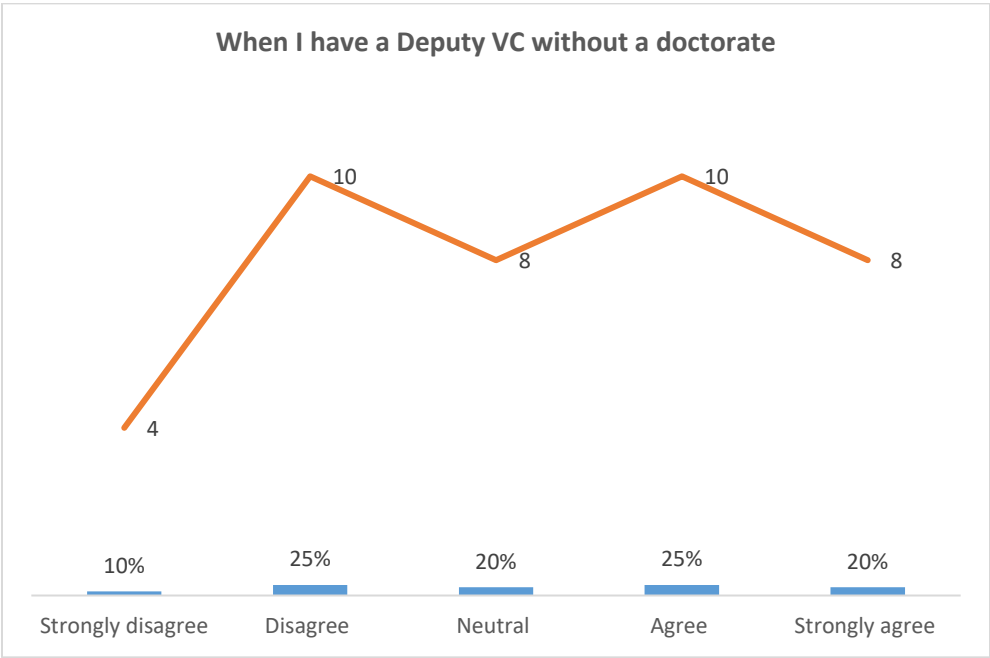
Source: own construction

The issue is about the people who say they cannot study because their boss is underqualified. Nevertheless, the majority individual percentage in this regard is against the statement (25%), based on the fact that you do not study for someone but for your own sake. On the other hand, the highest of those who agree with the statement were 23% and 25%, respectively.

When I have a Deputy VC without a doctorate	1 (4)	2 (10)	3 (8)	4 (10)	5 (8)
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RESPONSE: The problem in this statement is almost similar to the above as they both hold the positions that are alleged not to be qualifying. This raises many questions from their alleged junior staff.

Figure 7.41



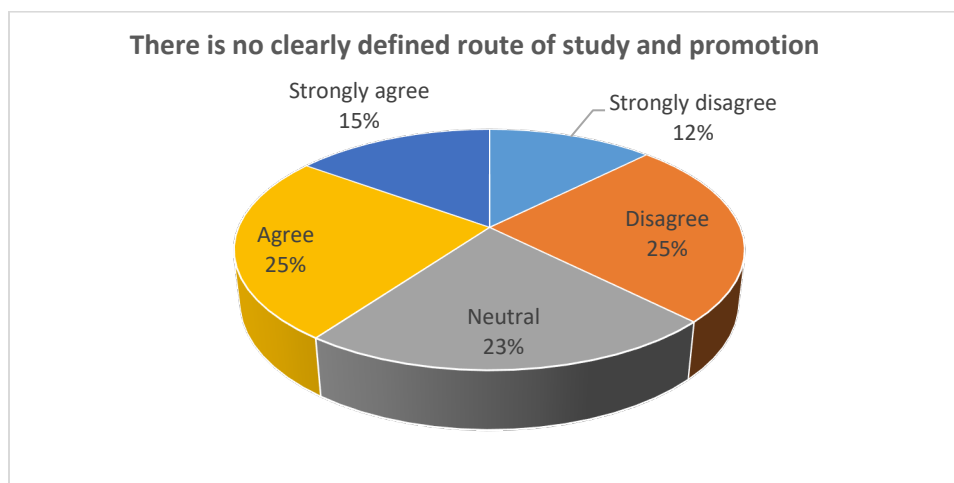
Source: own construction

In this regard, the percentages are almost the same, just only the strongly disagree (10%) is the lowest of the lot. It is a very dicey situation that raises questions as to how they got those topmost positions. But all in all, you do not improve yourself for someone else, but only for yourself.

There is no clearly defined route of study and promotion	1 (5)	2 (10)	3 (9)	4 (10)	5 (6)
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RESPONSE: the situation is somehow messy concerning the line of study and how do people get promoted. When people get more educated, then they expect promotion in the end. That on its own will motivate the staff to gun for a doctoral degree. So proper channels should be followed for both employing as well as the promotions.

Figure 7.42



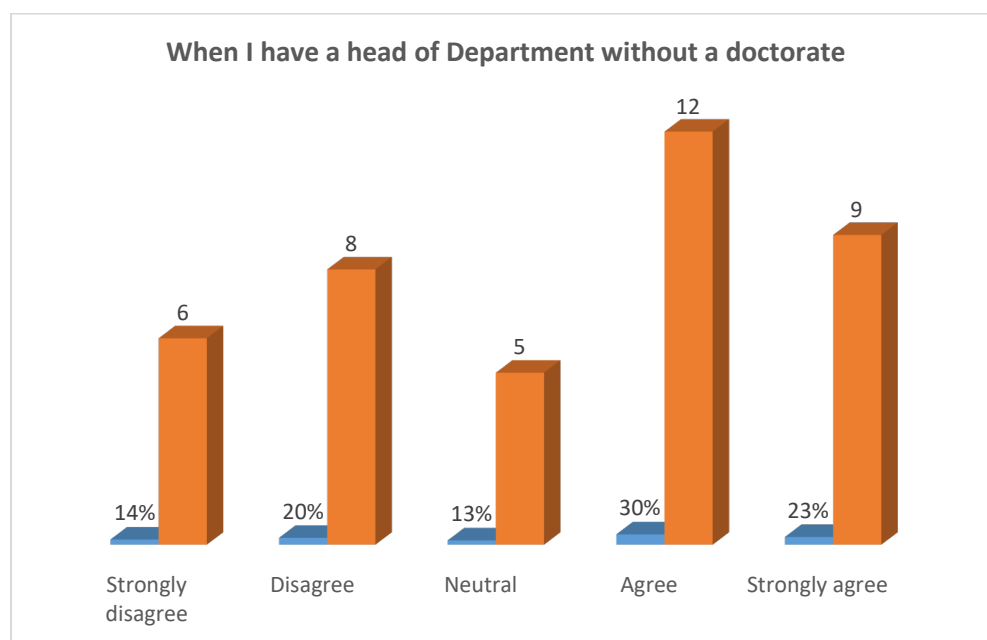
Source: own construction

In this regard, both agree and disagree are on the same level of 25% on each account. Strongly agree tips the scales with 15%. This in itself indicates that promotion and study are a colossal mess and need to be attended to before losing more senior staff. Promotion can turn the staff to be more honest or not honest to the institution or leave at the earliest opportunity.

When I have a Head of Department without a doctorate	1 (6)	2 (8)	3 (5)	4 (12)	5 (9)
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RESPONSE: The issue of the less qualified seniors is still a big thorn in the flesh of many qualified people. There is no good productivity that can come out of the senior who is less qualified than the juniors. It will always be the question of incompatibility. At the least, a HoD with a doctorate can easily harmonise the boiling situation.

Figure 7.43.



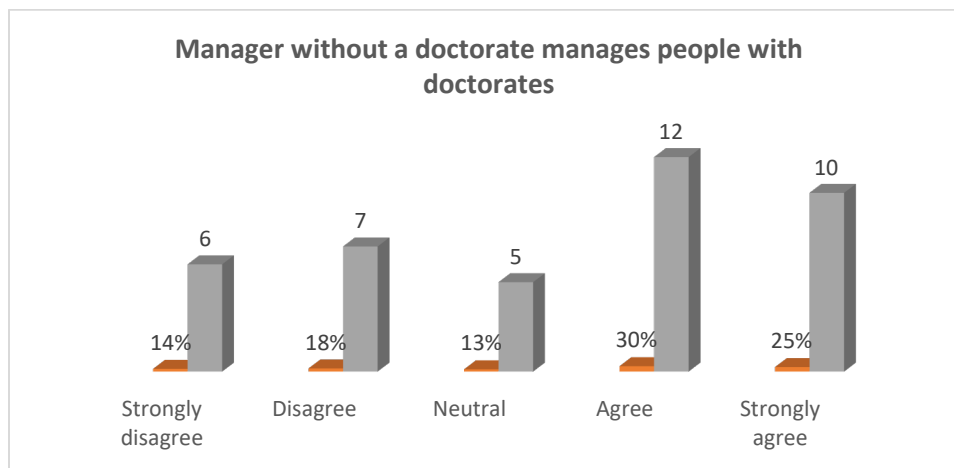
Source: own construction

Those who say that the HoD needs to have at least a doctorate (30%) is the majority, and the rest are far below that number. Neutral in this regard, 13%, is least under this statement. Higher academic degrees in this regard are valued as they can help turn things around.

A manager without a doctorate manages people with doctorates	1 (6)	2 (7)	3 (5)	4 (12)	5 (10)

RESPONSE: Academic qualifications are a thorn to many underqualified bosses at university. How do you lead without a doctorate? How do you lead people who are more qualified than you? This is a problem which destroys the whole staff/component you are supposed to lead—a good recipe for academic chaos at its best.

Figure 7.44.



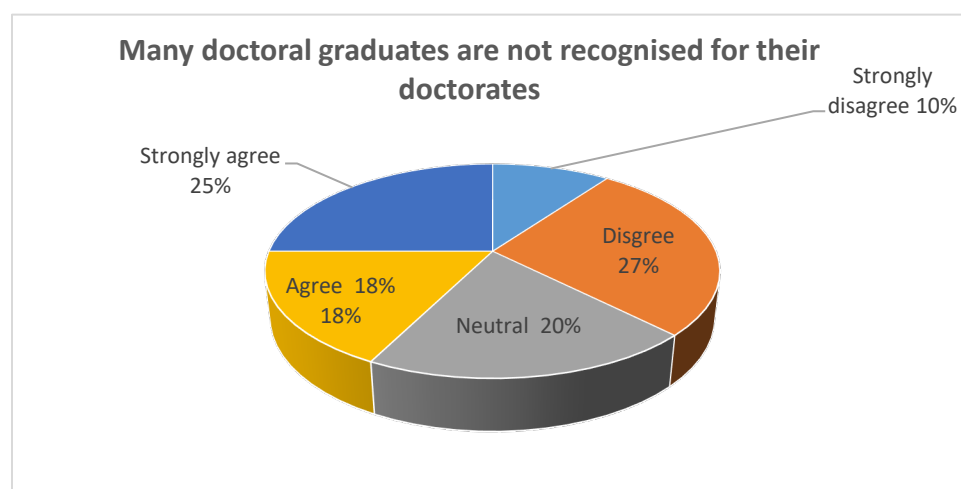
Source: own construction

This is an apparent act of unfair management. There is no way that a less qualified person can manage more educated personnel than himself/herself. The highest % in this regard is 30%, where people say that people with more minor degrees are managing highly qualified staff. The result in this regard is a mess of incompatibility. 25% also indicated that they strongly agree that there will not be any advancement in this regard; senior graduates need to be managed by other senior graduates.

PROCESSES TO RECOGNISE DOCTORAL DEGREES					
Many doctoral. graduates are not recognised for their doctorates	1 (4)	2 (11)	3 (8)	4 (7)	5 (10)

RESPONSE: It is common knowledge that the higher education one has, the more one is easily recognisable in society in general. However, in other instances, at institutions, that is not the case. It needs to be looked at as this degree is the highest of all degrees, and it is a milestone to get it. Recognition of this degree might help to motivate others to enrol for it.

Figure 7.45



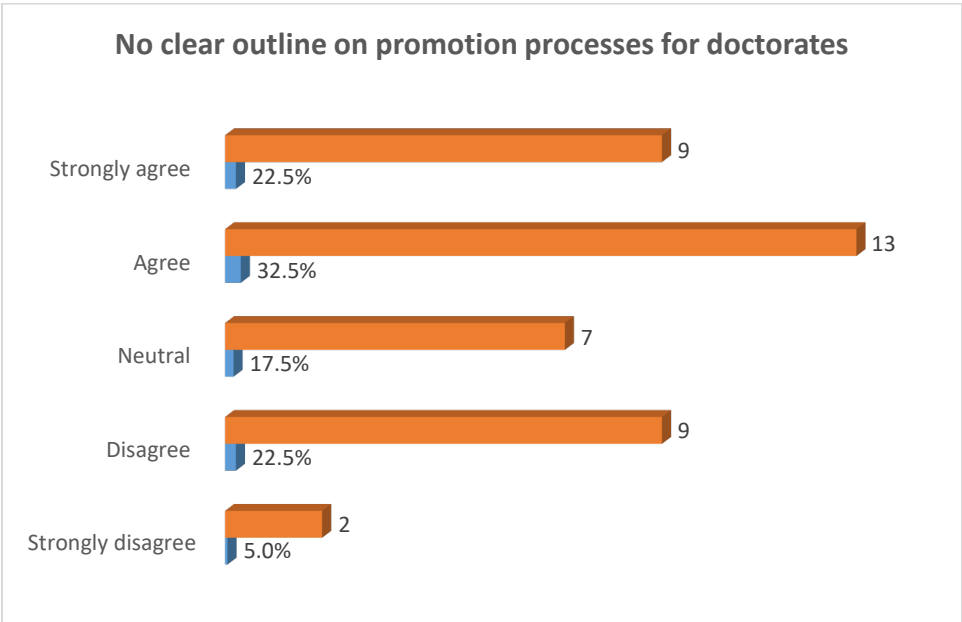
Source: own construction

The issue of academic advancement is becoming a severe problem and need to be attended to before it discourages more people from enrolling for the doctorate. However, the majority agree that in many cases, a doctoral degree is not fully recognised (25%) and is only preceded by 28% of those who disagree. So, this is an indication that the non-recognition depends upon the environment these graduates find themselves in.

No clear outline on promotion processes for doctorates	1 (2)	2 (9)	3 (7)	4 (13)	5 (9)
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RESPONSE: In every place of employment, there should be a clear line of promotion that will motivate the rest of the employees to improve their academic standing. It should be made clear that promotion goes hand in hand with improving one's qualifications.

Figure 7.46



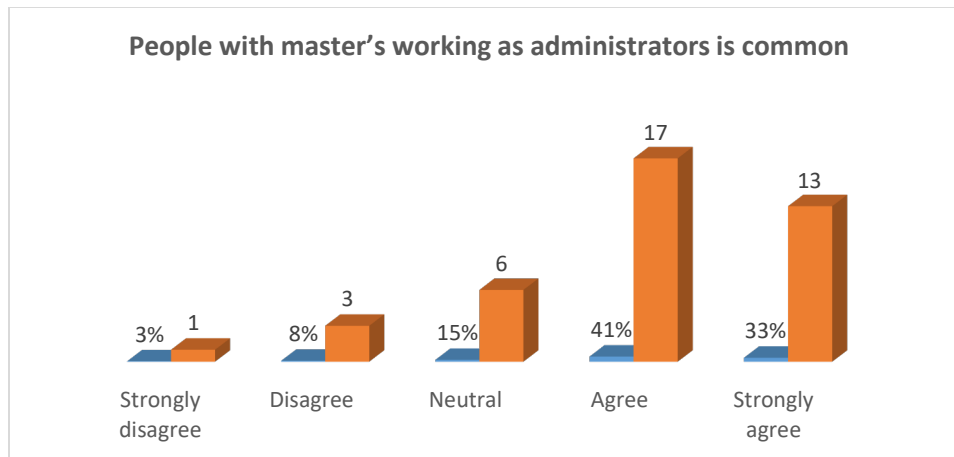
Source: own construction

In this case, the highest percentage is 32%, and it aligned with those respondents who agree with the chart title and followed by the strongly agree, and the disagree, which are both equal in number at 22% each. This shows that those who agree are correct in their statement. The promotion lines must be apparent in all work instances and should not have any grey lines or areas of doubt.

People with master's degrees working as administrators are common	1 (1)	2 (3)	3 (6)	4 (17)	5 (13)
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RESPONSE: It is common knowledge that people with higher education have to do high-level jobs they qualify for. Someone with a master's degree needs to be respected and be allocated or given the job that befits the qualification and not allocated to work as an administrator. That level of education and that type of work are demotivating factors for enrolling for a doctoral degree. A Master's degree is the last degree before a doctorate and needs to be given that respect.

Figure 7.47



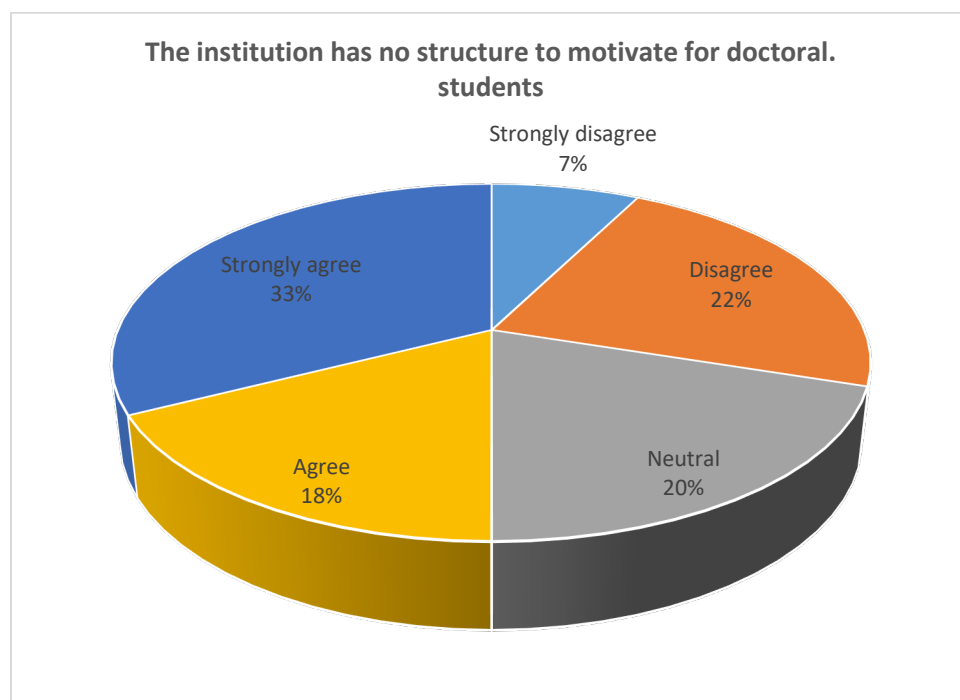
Source: own construction

The respondents are employees of a university and perform administrative roles daily. In this regard, the highest % is those who agree with the statement, 43% agreeing and 33% strongly agreeing. These two levels, on their own, make up to 76% of the entire responses in this regard. The rest of the percentages play a minimal role in the interpretation of this chart.

The institution has no structure to motivate doctoral students	1 (3)	2 (9)	3 (8)	4 (7)	5 (13)
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RESPONSE: For the mere fact that one is a university employee, there has to be a way to motivate staff to get a doctorate. If there is no structure in place, once the staff embark on self-development on their own, then they will leave after completing their self-development. The development structures are the backbone of staff development, and a well-settled staff leads to loyalty to the institution.

Figure 7.48



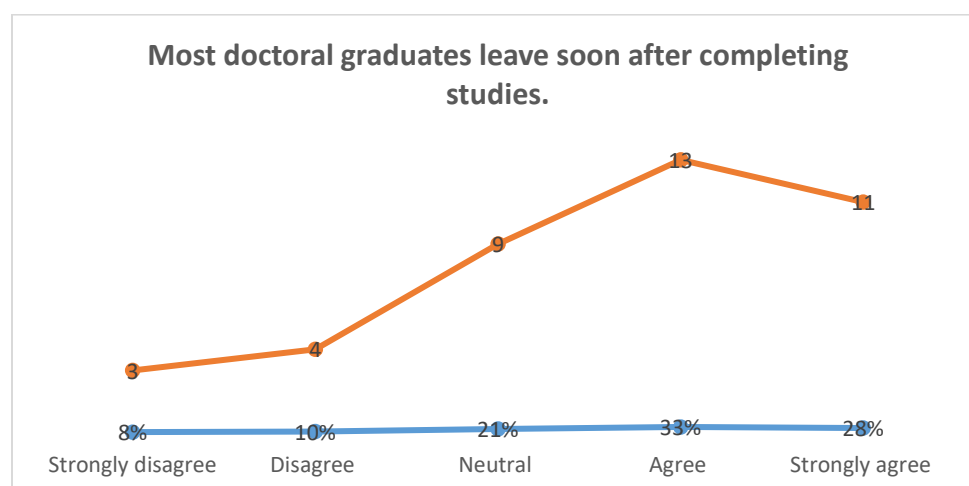
Source: own construction

The majority of the respondents, who are also staff members, strongly agreed with the statement (33%) and those who posed the notion of not agreeing, just 22% at the most. However, all in all, what the majority said, is the truth, and the institution needs to halt that before it loses the cream of its academic staff who will go and blossom at other institutions.

Most doctoral graduates leave soon after completing studies	1 (3)	2 (4)	3 (9)	4 (13)	5 (11)
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RESPONSE: Just as the above statement, if the institution is not well organised, it stands to lose the best staff to other well-organised institutions. No academic can ill afford the aspect of being stuck at one point without moving forward. Once greener opportunities open somewhere, then they will simply leave. First, get what you want and with no one to take it from you, then you leave.

Figure 7.49



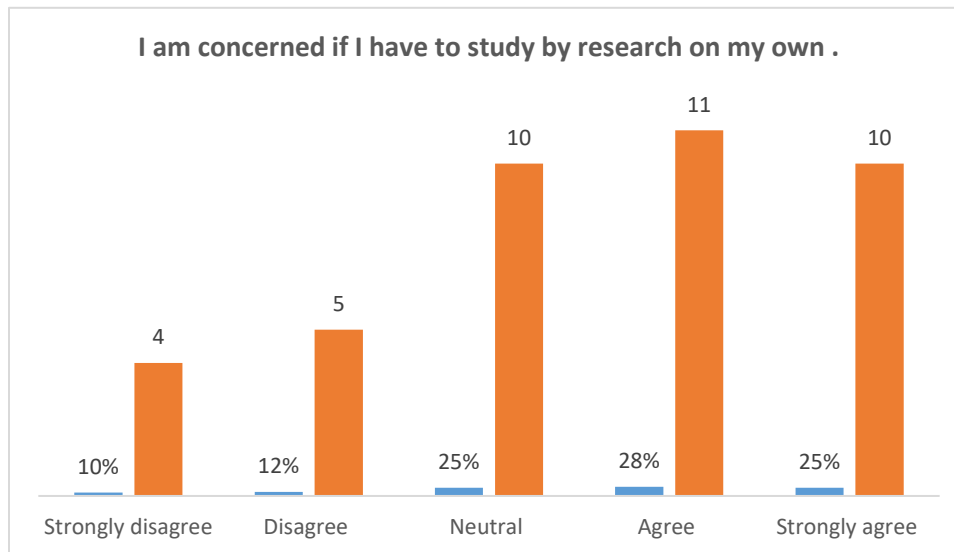
Source: own construction

In this regard, the truth is easily seen by two percentage formats both from the same direction: agree 33% and strongly agree 28%. Both these two formats take up the bulk of the information about the above statement. The rest of the percentages do take or play the smaller parts of the chart. Neutral, in this case, is slightly bigger than the remaining percentages (23%) and is an indication that this group does not know where they stand. After attaining high qualifications, the affected institutions losing well-qualified staff need to attend to that to avoid academic embarrassment sooner than later.

DOCTORATE BY COURSEWORK, NOT BY RESEARCH					
I am concerned if I have to study by research on my own	1 (4)	2 (5)	3 (10)	4 (11)	5 (10)

RESPONSE: Studying, especially at the doctorate level, is an individual effort that cannot be shared. It is a field of speciality that need a dedicated individual that. It is straightforward to study by research as long as you follow your supervisor's instructions. In studying, there are two aspects one need to be aware of: be organised, or you fail and dismally too. Again, studying by research is a speciality that any dedicated individual can acquire. It all depends on how serious you are.

Figure 7.50



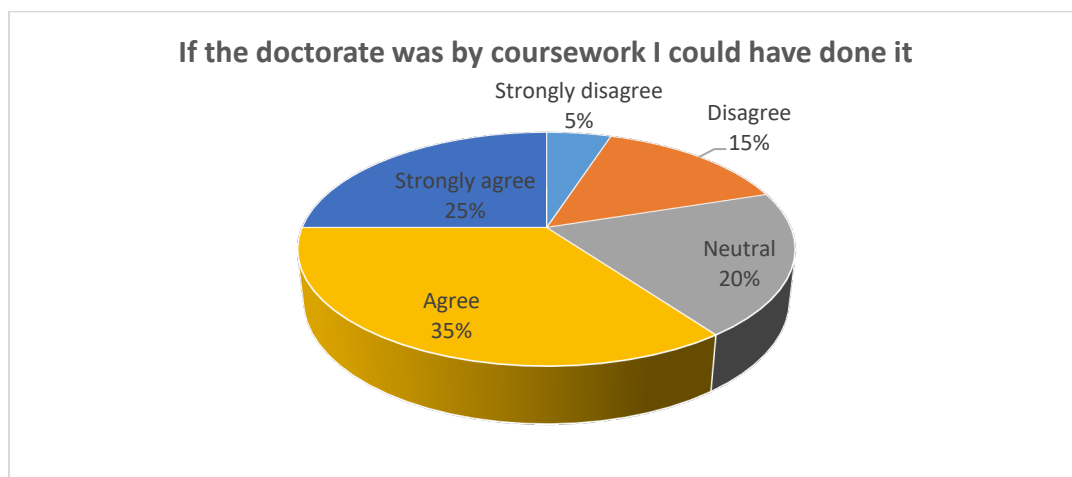
Source: own construction The issue of studying by research is just like any other method. It is regarded as a more prolonged, serious and effective method of studying. To those who know it, it is the best method at that higher level of study. The chart itself is clearly showing that very few people disagree with this method of research—those who agree with the method (28%) and strongly agree (25%). The respondents, in this regard, have a master's degree as a qualification. The issue of studying has nothing to do with

who you are or how you study as long as the method you use is effective for you. Research helps to broaden your knowledge.

If the doctorate was by coursework, I could have done it	1 (2)	2 (6)	3 (8)	4 (14)	5 (10)

RESPONSE: It is not about the format of the doctorate, but it is all about completing it. It is common knowledge that people will make many excuses if they fail or cannot complete something. One of the reasons coming out of this statement is laziness. The aspect of coursework is another format of a doctorate that has never been put into practice, and I think it would not produce the desired outcomes. The doctorate is done at its best by research as it is done to test the individual's research ability and to the capacity to make an original contribution to the body of knowledge in the desired field of study.

Figure 7.51



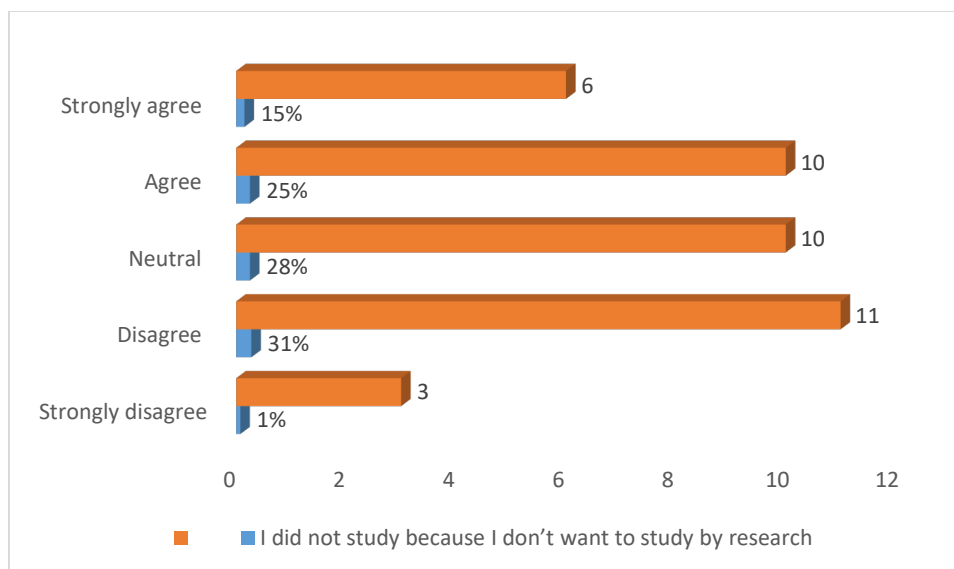
Source: own construction

Because it takes a long period for doing a doctorate, many candidates would prefer to do it by coursework, but unfortunately, it is only done by research. Doing a doctorate by coursework is just like taking a shortcut, and it is wrong. However, people prefer shortcuts to reach their goals. The respondents who prefer, if possible, coursework, were 35% agree and followed by 25% strongly agree. The neutrals (20%) and are not sure about themselves.

I did not study because I do not want to study by research	1 (3)	2 (11)	3 (10)	4 (10)	5 (6)
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RESPONSE: Excuses are always there when people are avoiding reality. A doctorate has never been done by coursework anywhere. It is done by thesis/research only. It is to test the thinking ability of an individual and how far can you go in researching. There are two things in education irrespective of the level: you study, and you pass, and you do not study, and you fail. No shortcuts at all.

Figure 7.52



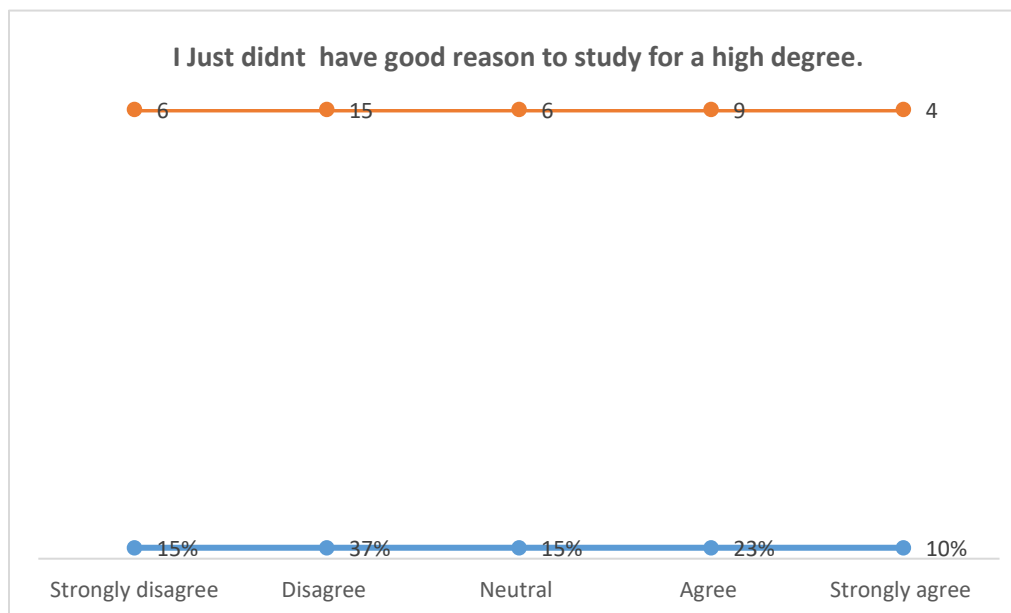
SOURCE; OWN CONSTRUCTION

The 28% who disagree with the statement are all about people who do not agree with it as they know that it is either you study the correct way and pass, or else you fail. The 25% who agree with the statement is a group who do not want to do research as it involves much reading and it is time-consuming, as they state. However, research is the best way of broadening the level of thinking and reasoning. So, research is the best way of doing a doctorate.

I just did not have good reason to study for that higher degree	1 (6)	2 (15)	3 (6)	4 (9)	5 (4)
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RESPONSE: It takes determination in a person to study for a doctorate, an earnest person. It is better to be honest with yourself rather than lie and formulate stories of why you could not study. It is better to try rather than to think that you would not make it. If you do not have good reasons, you will not make good decisions for yourself or anyone else.

Figure 7.53



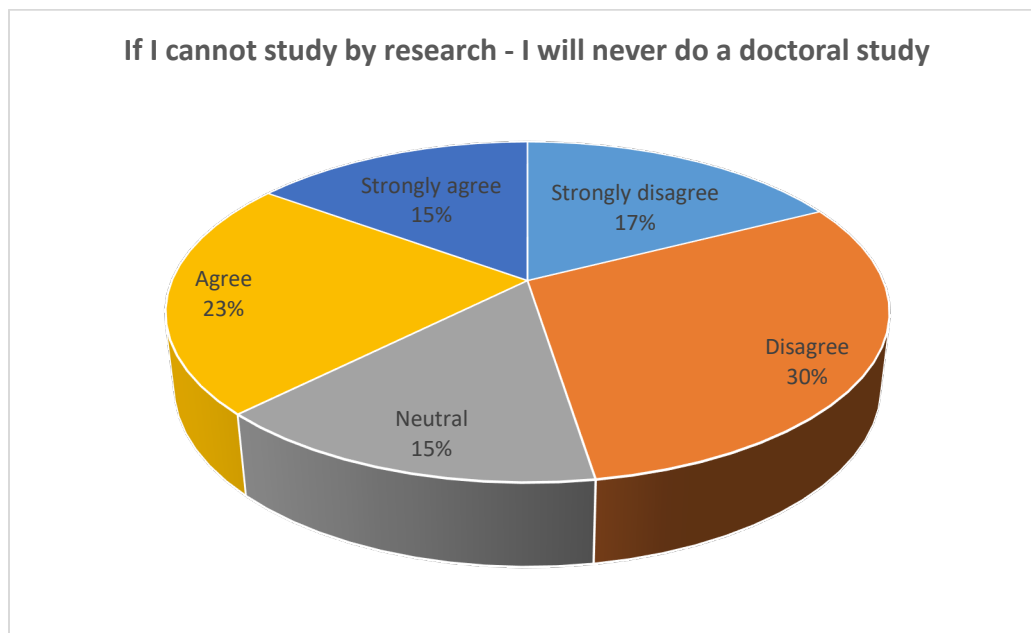
Source: own construction

For every aspect of life, there is a reason that can be given. You cannot just do things at the study level for fun. Thus, the majority in this regard disagree with the statement (38%). Thus, the majority know that there might be some hidden reasons behind this excuse. The main issue I think that it might either be just laziness and lack of interest in studying. The highest percentage to agree is just 23%

If I cannot study by research - I will never do a doctoral study	1 (7)	2 (12)	3 (6)	4 (9)	5 (6)
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RESPONSE: This is a total refusal to do a doctorate. It is an individual decision that needs to be taken seriously. The aspect of research is all about perseverance. There is nothing wrong with coming out with the truth about your intentions. Research is the only way to go at the doctoral level.

Figure 7.54



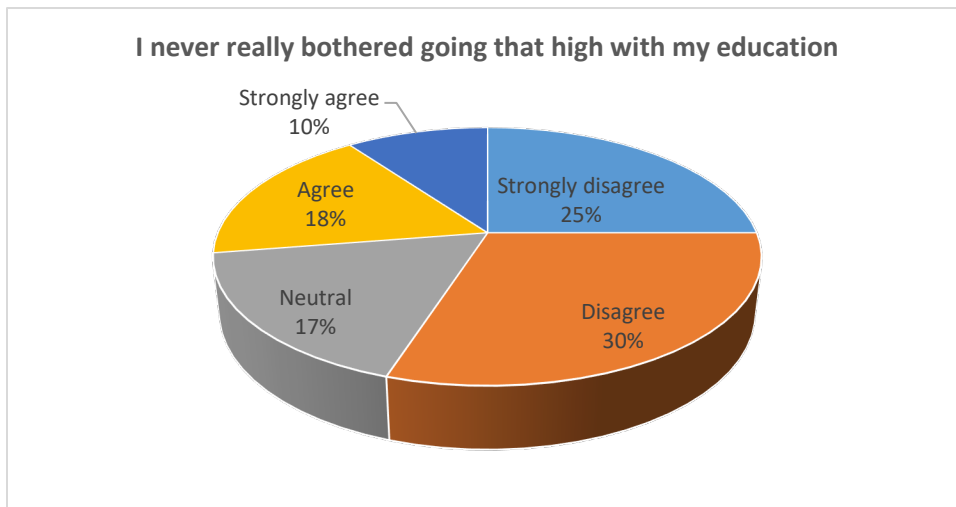
Source: own construction

The highest percentage in this regard is 30%, and it disagrees with the statement as it is clear that you do not know what might make you change your mind in the future. In this regard, 17% strongly disagree as they know that the only way to a doctorate is research. The weight and dignity of the doctorate lies in research.

SATISFACTION WITH WHAT I HAVE ACHIEVED					
I never really bothered going that high with my education	1 (10)	2 (12)	3 (7)	4 (7)	5 (4)

RESPONSE: Interest in education can propel you to go higher than expected in the world of academia. A doctoral degree for most people is a huge milestone they do not even dream of achieving. On the other hand, some people do just become satisfied with the qualifications they have at the moment, e.g., master's degree. Once people reach a particular level, they just do not dare to continue further.

Figure 7.55



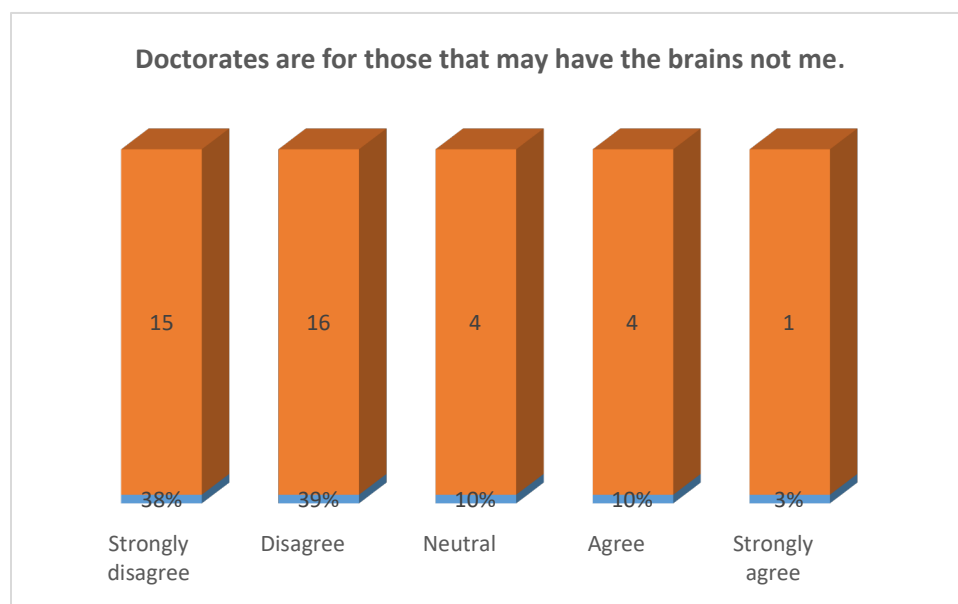
Source: own construction

The issue of furthering ones' studies is an individual choice that rests with the person. Once they arrive at a particular level, some people hang up their boots and do not go further for different reasons. The majority of the respondents—all the respondents were master's degree holders—did not agree with the statement: 30% disagreeing and 25% strongly disagreeing. You cannot just not bother doing something for no apparent reason, as appears to be the case with some respondents.

Doctorates are for those that may have the brains, not me	1 (15)	2 (16)	3 (4)	4 (4)	5 (1)
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RESPONSE: The issue of studying has nothing to do with brainy people. Any person can study as high as possible it all depends on the individual. We all have brains but tend to use that differently. Thus, anybody has the possibility of doing and completing a doctorate, irrespective of whoever it is. Thus, we all can qualify to do a doctorate, and it all depends upon the individual.

Figure 7.56



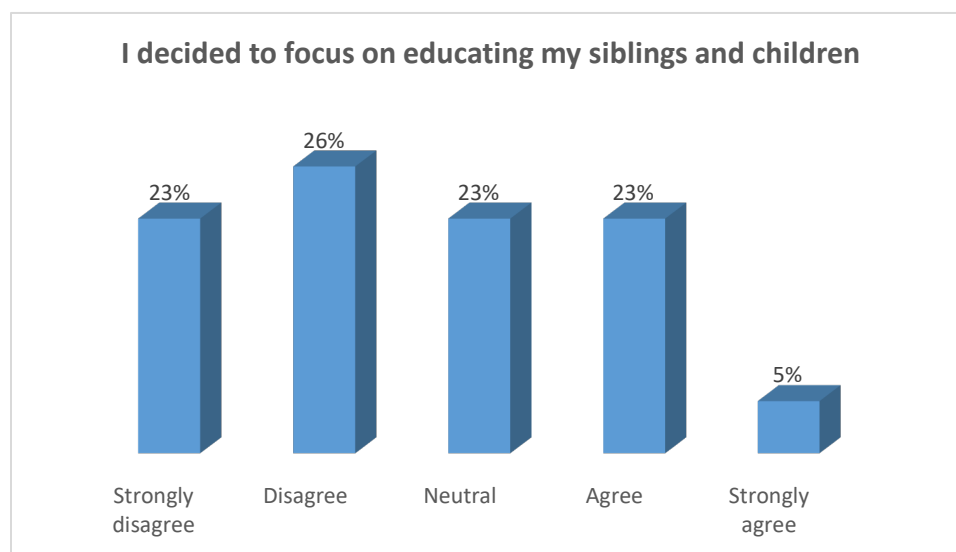
Source: own construction

A doctorate can be achieved by anybody as long as they are serious. That a doctorate is for only certain people is not valid. The higher percentages in this regard are all pointing in the direction of not agreeing with the statement. The largest % is 40% disagree and followed by 38% strongly disagree, and then the rest of the percentages do not hold any weight at all. People do come up with a flimsy reason for not doing something, as is the case in this regard.

I decided to focus on educating my siblings and children	1 (9)	2 (11)	3 (9)	4 (9)	5 (2)
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RESPONSE: Family responsibility is one of the reasons to make one not further one's studies. It is even worse when it involves siblings who still need to go further in their schooling. Of course, such a decision is good, but it should not come at your expense. In education, you need to take decisive decisions that will still be good after a long time for you.

Figure 7.57



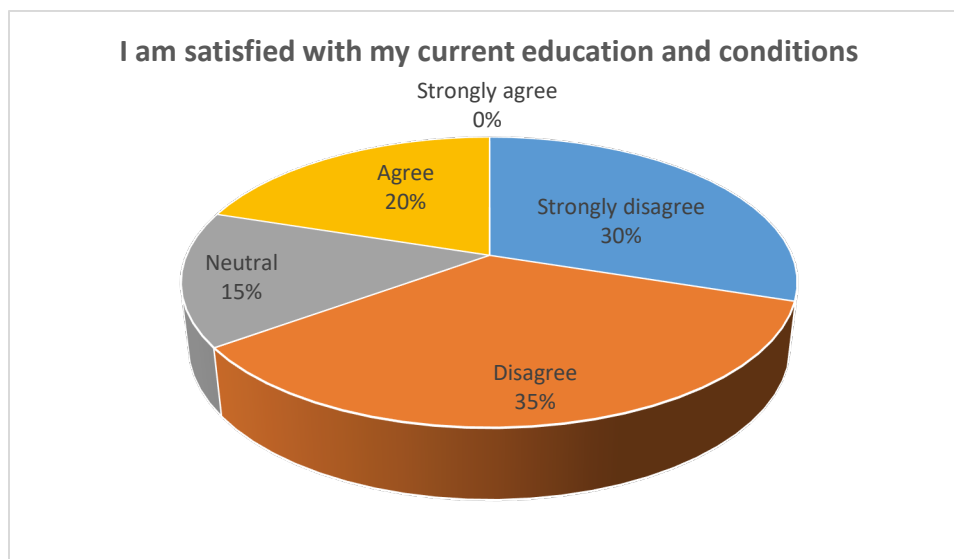
Source: own construction

In this regard, the decision or response is quite simple in that the majority of the respondents is disputing the statement; 28% disagreeing and 23% strongly disagreeing. The neutrals and those who agree with the statement are equal in percentage; 23% to each. The issue in this regard equals an excuse for not furthering ones' studies and hiding behind the siblings.

I am satisfied with my current education and conditions	1 (12)	2 (14)	3 (6)	4 (8)	5 (0)
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RESPONSE: Academic satisfaction differs according to individuals and depending on the conditions at that particular period. Some people prefer to go just above the water level with their education whereas others prefer to go very high. No one should be content with ones' achievements in this regard. The conditions in this regard might be including employment and salary, so to say. This, in itself, is a very shaky statement.

Figure 7.58



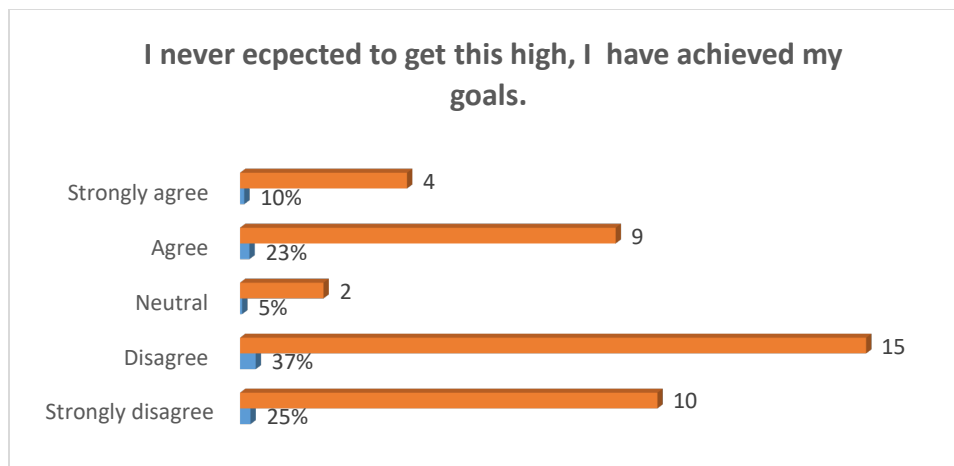
Source: own construction

The answer is direct in that those who agree and disagree with the statement are in the majority. 35% disagree, and 30% strongly disagree. No one strongly agrees, indicating that this is just the manufacturing of a reason not to study further. Even those who agree (20%) are in the minority and do not hold any ground. The issue here is just how long the incumbent will be satisfied with such conditions?

I never expected to get this high, I have achieved my goals	1 (10)	2 (15)	3 (2)	4 (9)	5 (4)
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RESPONSE: One can still surprise themselves by achieving the academic standard they never thought was possible. In education, the more person who continues to study becomes more motivated as the studies progress. Where the student aims higher than expected, the chances of progressing to the terminal degree are higher than those who aim for the minimum levels. However, goals are not achieved over a short period and thus requires persistence.

Figure 7.59



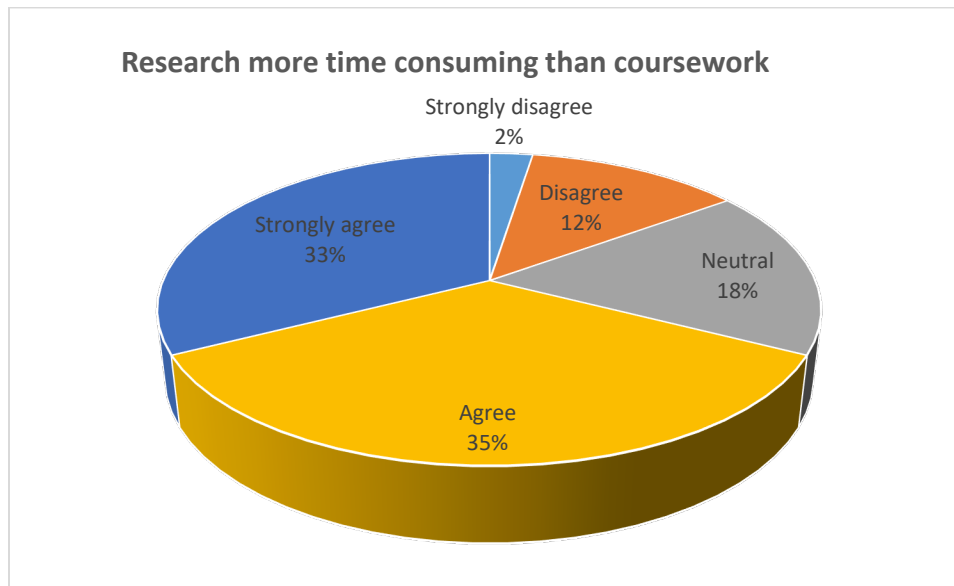
Source: own construction

In education, never limit your capabilities as you do not know what the future holds for you. Therefore, you must always aim very high in life even if you know it is above your capability. In this account, the trend is about those who disagree and hold the sway: those who strongly disagree: 25% and disagree 38%. This also indicates that it is premature to limit your expectations as you do not know what might bring them back later and gain more interest in education. Therefore, never say never with education irrespective of the level.

COMPLICATIONS OF STUDYING BY RESEARCH					
Research is more time consuming than coursework	1 (1)	2 (5)	3 (7)	4 (14)	5 (13)

RESPONSE: Many prospective researchers complain that research is more time consuming than coursework, and it is true. Nevertheless, there is a difference in that research helps broaden your knowledge at all levels, and it helps to be innovative. Now with coursework, it is information on the surface and not in-depth. Moreover, it takes less time to grasp than when you do research because someone should stand in front of you to guide you daily, unlike research is almost that you are on your own.

Figure 7.60

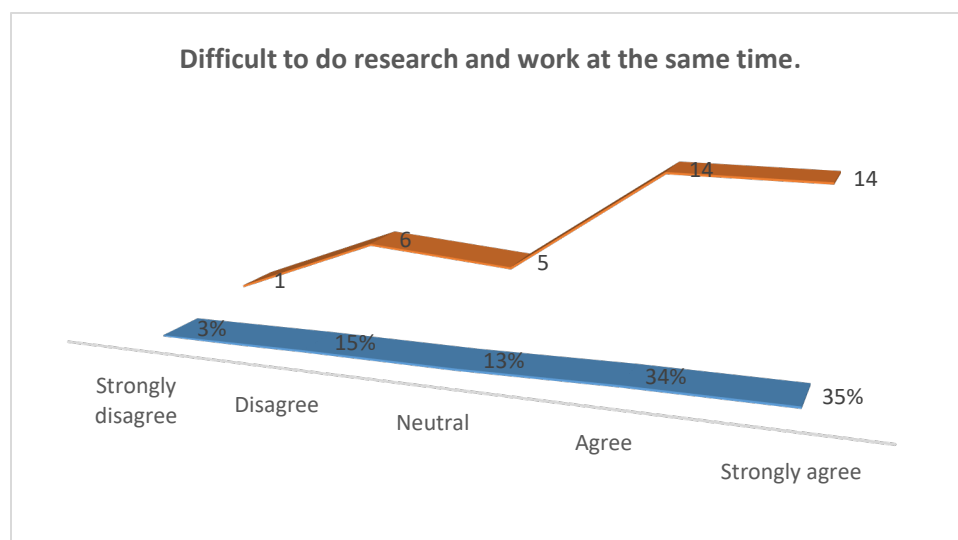


Source: own construction Academic complaints will always be there if people do not want to study the right way but take shortcuts. However, people should be aware that a doctoral degree is the most prestigious degree in all countries and need to be respected, and its standards need to be kept intact. The truth is that research consumes more time in that you need to be well organised and know what you are doing. Thus, those who are as I think, 35% agree and 33% strongly agree. I agree that research is time-consuming, but it builds your mental capacity, and coursework is for junior degrees and partially up to master's level.

Challenging to do research and work at the same time	1 (1)	2 (6)	3 (5)	4(14)	5 (14)
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RESPONSE: This is a very tricky and demanding situation for most of us but must not be used as an excuse to hold or stop us from doing a doctorate. Studying by research and full-time employment is very demanding in all instances and needs extra committed people. In this regard, one needs to control and manage one's time strictly. It is only about good time management that one can succeed in this venture.

Figure 7.61



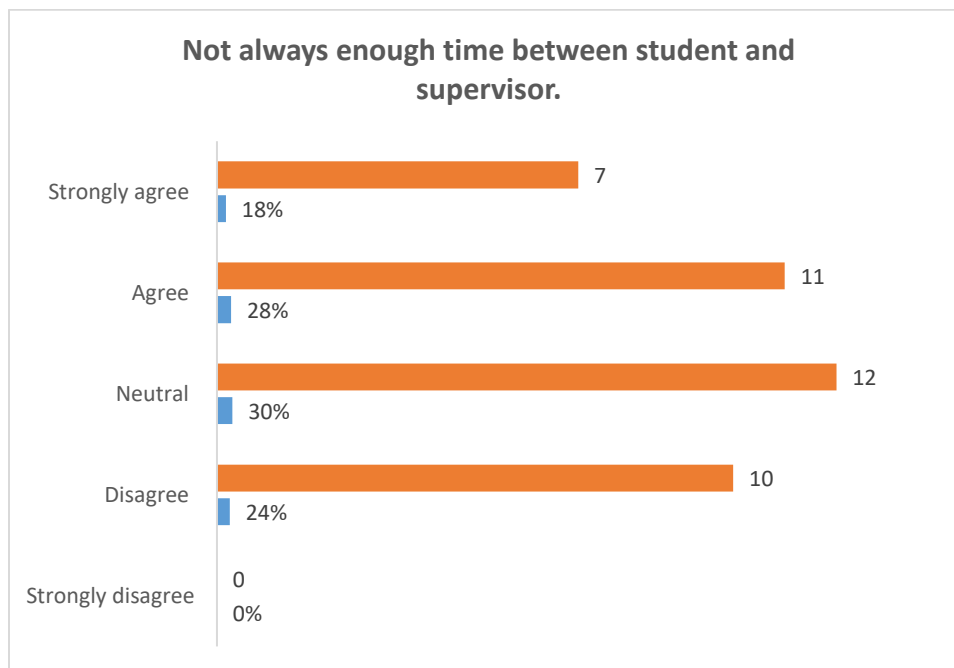
Source: own construction

In this regard, good time management is the best solution and coupled with dedication; it is possible to succeed. Nothing is impossible in the academic world. The majority in this statement does come from both levels of agreeing, 35% agree, and 35% strongly agree. That is an indication, and it is the truth, but it is possible to achieve.

Not always enough time between student and the supervisor	1 (0)	2 (10)	3 (12)	4 (11)	5 (7)
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RESPONSE: The time between the supervisor and the students is not a problem; it depends upon the arrangements between the two and equal adherence to them by both parties. This time issue is just a masquerade of running away from individual responsibilities by both or one of the two. Nevertheless, time is whether you make time, or should time be made available out of the blue?

Figure 7.62



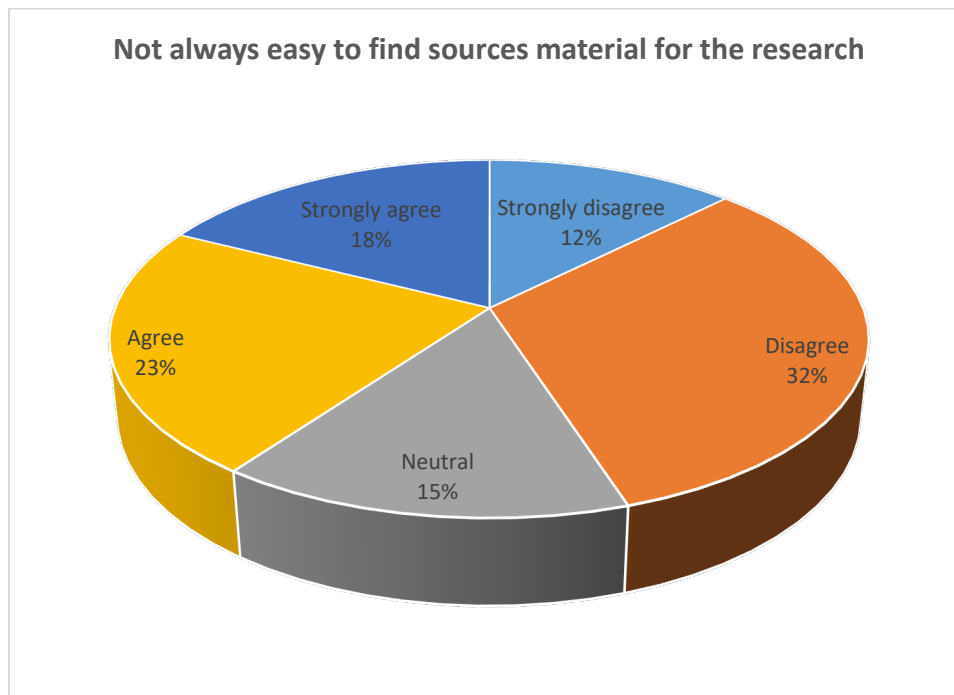
Source: own construction

The time factor has never been a problem in the academic world except when someone is full of foul play. The highest percentage in this regard is that of the neutrals (30%), and it is being followed by those who agree 28% and then 25% who disagree. In all these percentages listed, the difference has a very thin margin that shows that time issue is significant between the supervisor and student.

Not always easy to find sources material for the research	1(5)	2 (13)	3 (6)	4 (9)	5 (7)
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RESPONSE: In the past, it was difficult, but now it is easy and very possible in modern times. Now you can do your research without even going physically to the library through the internet. The issue of research needs one to be serious and dedicated at all times. No spoon-feeding is acceptable in research. The student needs to make it easy for themselves and the supervisor.

Figure 7.63



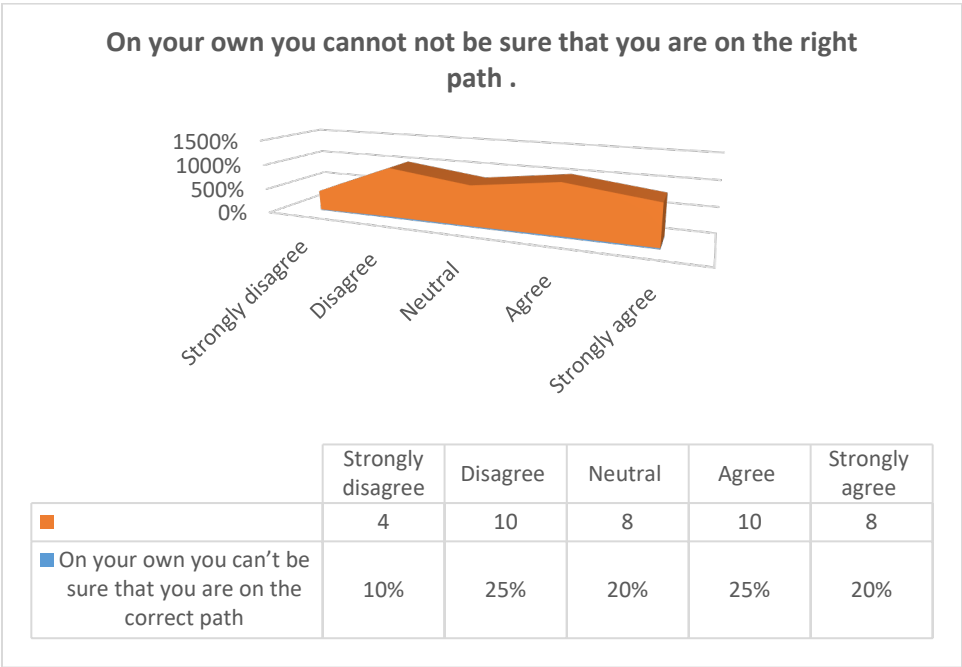
Source: own construction

The highest percentage of respondents (32%) disagree with the statement as it is now very possible to research currently, unlike in the past. Those who come from the camp of agreeing, 23%, and they agree with the statement is based on the old times when research was only associated with the library. It is very rare now that information is only found in one place and only for certain people but is found at many sources associated with the internet

On your own, you cannot be sure that you are on the correct path	1 (4)	2 (10)	3 (8)	4 (10)	5 (8)
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RESPONSE: In the world of research, it is all about trial and error, and no one is correct until the supervisor says so. What the student should do in this regard is to do the job and be closely in consultation with the supervisor for guidance. Indeed, you will not cope on your own as a student, and you will not know whether you are on the correct or wrong path.

Figure 7.64



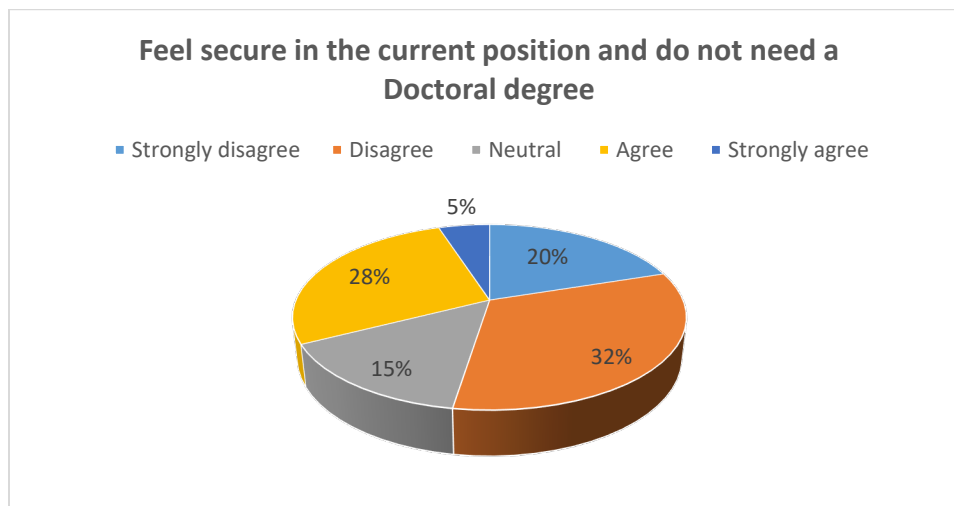
Source: own construction

Research at any level with the doctoral degree inclusive needs close supervision to know whether that is the correct path to take. Thus the topmost percentages in this regard are 25% disagree and 25% for agreeing. This splits the argument down the middle. On the other hand, 20% strongly agree, tipping the scale favouring the view that students are faced with going it alone, indicating the challenge to proceed correctly with research without meaningful support. All in all, supervision over research is highly needed for better research results.

SATISFACTION WITH CURRENT JOB STATUS					
Feel secure in the current position and do not need a doctoral degree	1 (8)	2 (13)	3 (6)	4 (11)	5 (2)

RESPONSE: Comfort zone is not something one can rely upon as there is no guarantee as to how long will it last. One should equip oneself with more qualifications whilst time still allows. You might, as time passes by, need that very senior degree you did not need before.

Figure 7.65



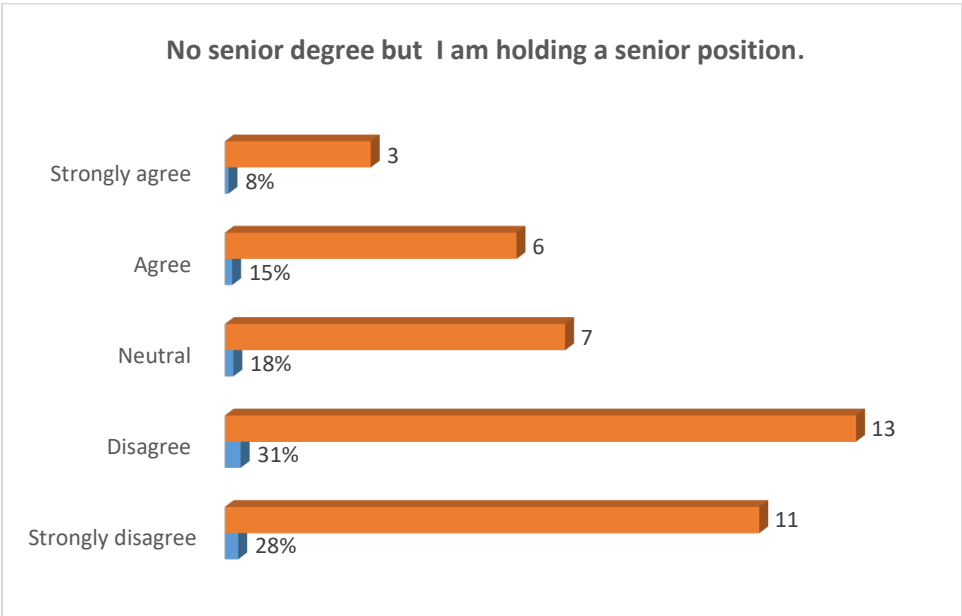
Source: own construction

. The respondents who in their majority disagree with the statement, 32% and followed by the 20% who strongly disagree, shows that in reality, one cannot predict the future. In brief, never say never, as you do not know what might happen in your circles. The 28% in agreement with the statement cannot hold much ground against the disagreeing groups.

No senior degree, but I am holding a senior position	1 (11)	2 (13)	3 (7)	4 (6)	5 (3)
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RESPONSE: This statement is all about the unfairness of recognising and respecting senior qualifications in some institutions. This is one of the reasons that might be responsible for people not wanting to enrol for the doctoral degree. In other instances, it is about saying, "you do not need a strong qualification to hold a senior position"

Figure 7.66



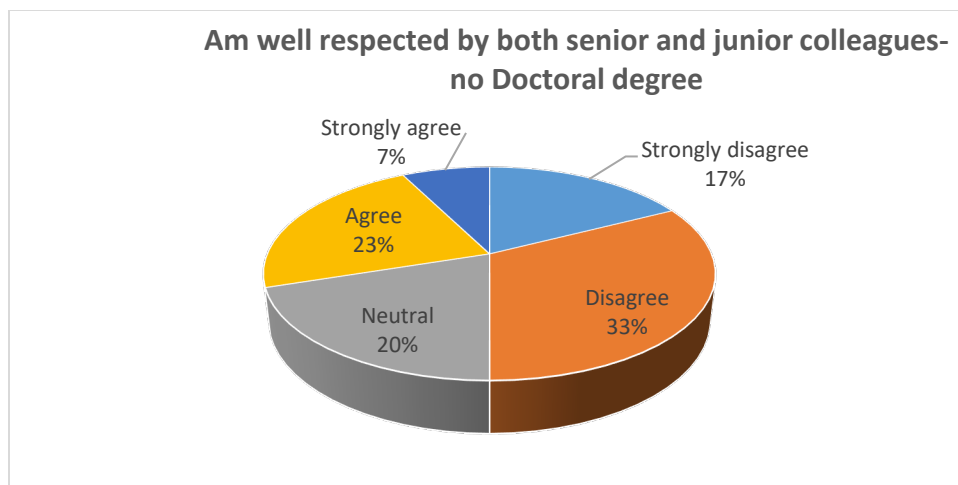
Source: own construction

The two higher percentages (33%) Disagree and (28%) Strongly disagree, clearly show that many university employees are disturbed by this as they are more qualified but hold junior positions in their work environment. However, the bulk or remainder of the percentages just plays a minor role compared to these two. Thus, such a situation needs to be remedied before it is too late.

Am well respected by both senior and junior colleagues-without having a doctoral degree	1 (7)	2 (13)	3 (8)	4 (9)	5 (3)
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RESPONSE: This indicates that some people do not need a doctoral degree to be up in the echelons of respect. Most of such people would rely on their long service and dedication to the institution. This is a very risky position that can turn for the worst if new management can come at very short notice.

Figure 7.67



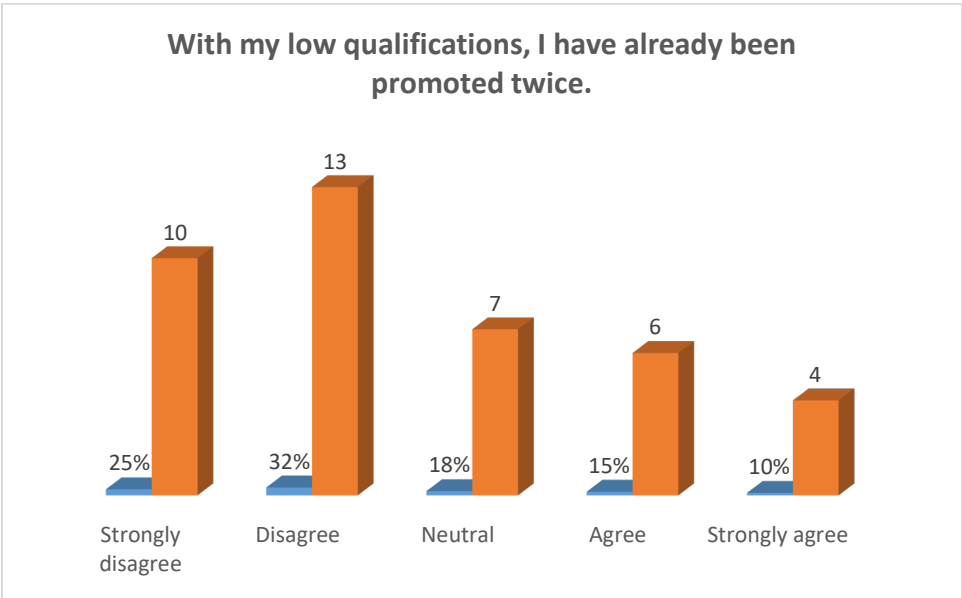
Source: own construction

Respect in the academic world is earned by dedication and higher qualifications and not long service and dedication to one's job. Thus, the percentage that disagrees with the statement is much higher than the rest (33%), whereas those who agree, are in the minority of just 20%. It shows that those who disagree have a strong point that you do not just rely on luck in the academic world but must strive and work to be at the top.

With my low qualifications, I have already been promoted twice	1(10)	2 (13)	3 (7)	4 (6)	5 (4)
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RESPONSE: This is blatant undermining of senior qualifications, which can easily lead to discouragement on the other side for people to enrol for a doctorate. This gives a negative picture as to how do this happen at an institution of higher learning. How do those with higher qualifications feel? This will even discourage them from enrolling for the doctoral degree.

Figure 7.68



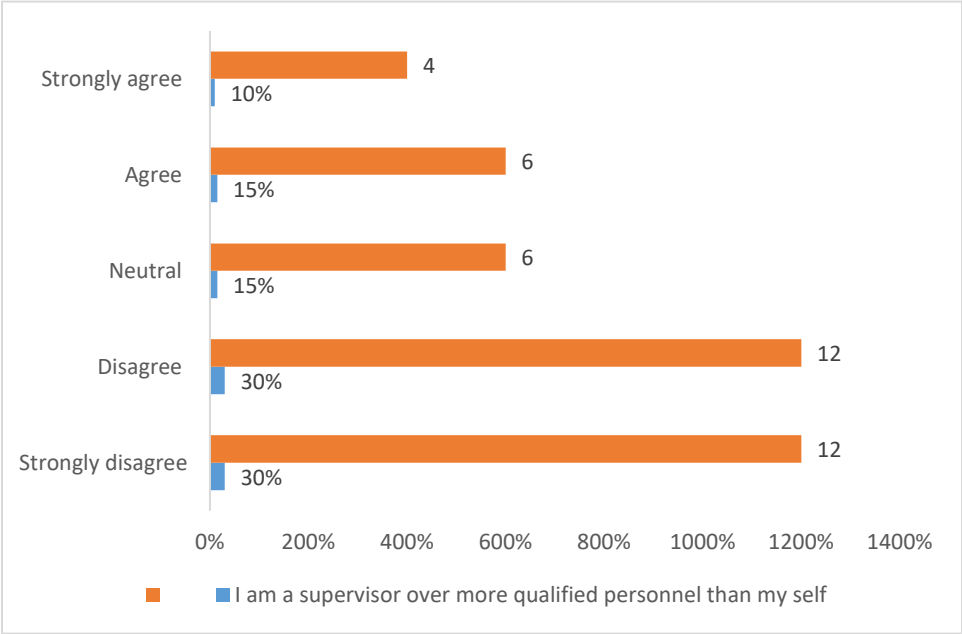
Source: own construction

As usual, even with previous charts, the issue in this statement is all about shooting down the interest of those master's candidates who might be aiming for doctoral enrolment. Thus, in such a statement, it is clear that the majority will disagree with it and stage a strong resentment, as is the case in that: 33% Disagree & 25% strongly disagree. With only those two percentages, it shows that the institutions themselves are sometimes responsible for the low numbers that enrol for doctorate within their staff members. They need to take the entire blame for this.

I am a supervisor over more qualified personnel than myself	1 (12)	2 (12)	3 (6)	4 (6)	5 (4)
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RESPONSE: This is yet another reason to discourage internal staff members from not enrolling for a doctoral degree. You cannot place a less qualified person to supervise over, e.g., doctorates. All that is a good recipe for staff resentment and rebellion from the most qualified. It is further a good recipe for incompatibility.

Figure 7.69



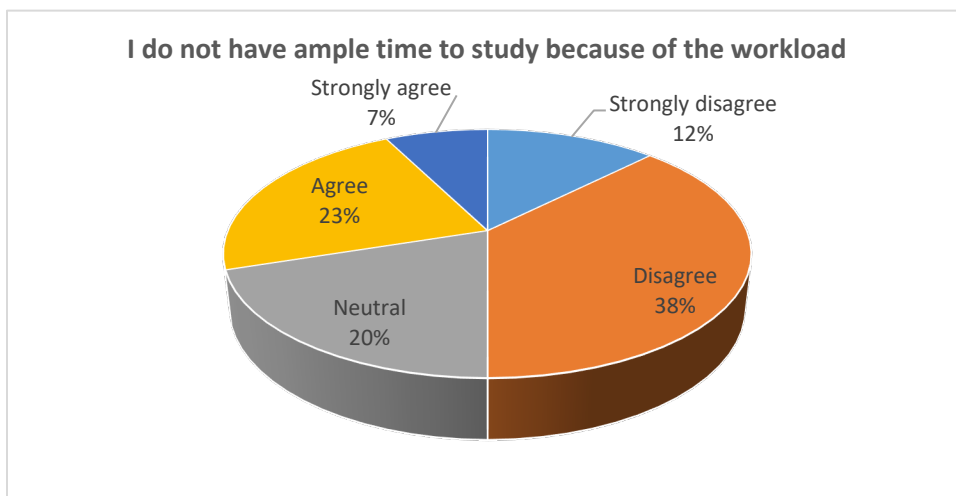
Source: own construction

In direct terms, this is a joke about people who have high qualifications and still aim to get more. Thus, more than half of the respondents disagreed from the start of this statement. Thus, in two instances of this statement, 30% Disagree & 30% strongly disagree, this in itself shows how much resentment and discontent such an arrangement causes. Furthermore, it categorically discourages people from going for a doctoral degree as they are aware that promotion will not come lest recognition of their qualifications.

WORKLOAD STRUCTURE					
I do not have ample time to study because of the workload	1 (5)	2 (15)	3 (8)	4 (9)	5 (3)

RESPONSE: Workload and time to study can be made to be compatible: all depends upon the individual. With studying for a doctorate, you need to sacrifice your free time as you cannot study forever, just for a short period. If you cannot make or organise your time, no one will do that on your behalf. The aspect of time depends upon people and not people waiting for the right time...no.no. Workload structure has nothing to do with the time factor.

Figure 7.70



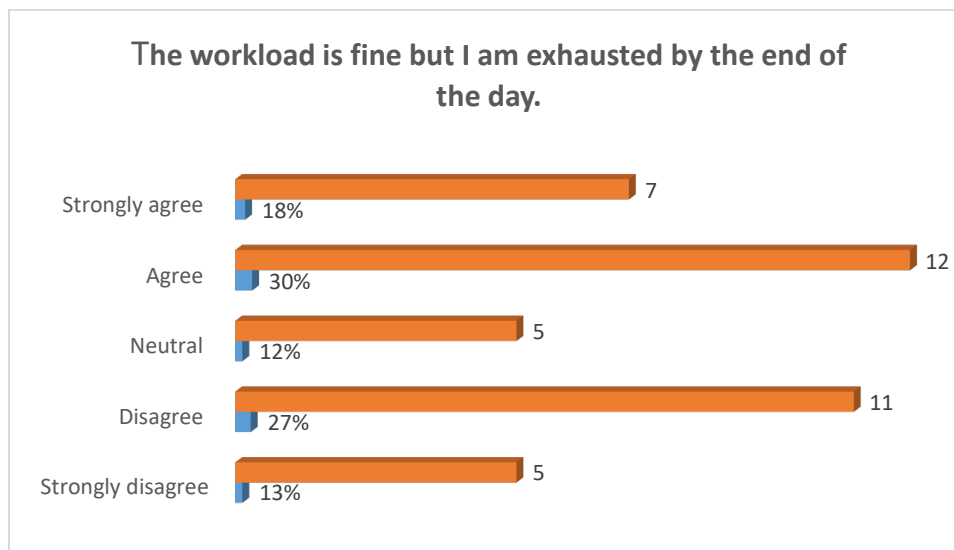
Source: own construction

The majority percentage in this chart is 38% Disagree and that on its shows that the issue of time is just a smokescreen that people are using to hide behind the issue of not having time, being just lazy and disorganised themselves. The neutrals (20%) problem is that they cannot be trusted as they do not know where they are standing. It is the individual who needs to make time and not time to be there for the individual.

The workload is, but I am exhausted by the end of the day	1 (5)	2 (11)	3 (5)	4 (12)	5 (7)
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RESPONSE: Some respondents' workload seems not to be a problem but just the daily exhaustion. There are many reasons attributed to exhaustion, and that needs the individual to address. It is not easy to address the exhaustion issue as it lies solely with the individual to find a workable solution. Exhaustion is not a deterrent from studying and can be addressed by the individuals themselves.

Figure 7.71



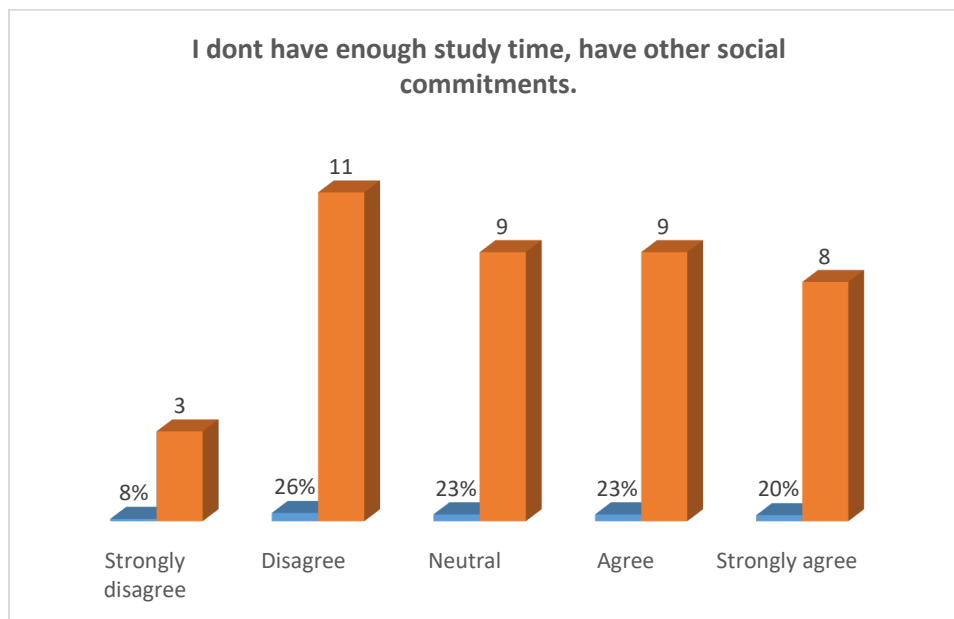
Source: own construction

In the explanation on this chart, it seems as though the line of division between opposing percentages is very low/thin: The workload on its own, not that much of a problem but just for the respondents to sort themselves out. In this regard, 30% Agree and 28% disagree. This shows how closely matched are these opposing percentages. It is the 18% that strongly agree, which shows that the respondents just need to address the problem of exhaustion.

I do not have enough study time, have other social commitments	1 (3)	2 (11)	3 (9)	4 (9)	5 (8)
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RESPONSE: The choice in this regard rest with the respondent. It is a matter of choosing between own academic advancement and social commitments. It is all about which one way is the most or much better than the other one. One must make choices earlier lest to regret later in life. One can still divide the time equally between them as it all depends on which one is more valued.

Figure 7.72



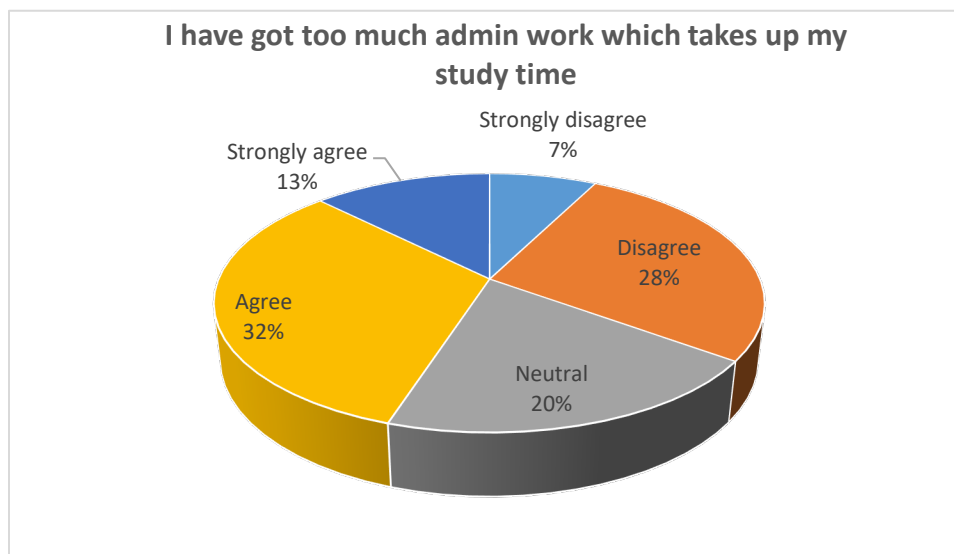
Source: own construction

The majority in this chart clearly shows that 28% Disagree, and that is a clear-cut indication that the issue of time is not a problem, but the individual, in this case, is the problem and needs to be clear about herself/himself. Furthermore, those who agree with the statement, 23%, are also mounting a strong challenge but are just blunted by Neutrals (23%). Time needs to be made by the individual and not the other way around.

I have got too much admin work which takes up my study time	1 (3)	2 (11)	3 (8)	4 (13)	5 (5)
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RESPONSE: The aspect of time, even in this regard, is not the problem, but the problem is people themselves who do not know how to manage their time and end up coming with many stories that favour their side. It is easy and possible to divide your 24 hours amongst your daily activities in order to be able to maximise your working time for the day. It is possible and can be achieved by anybody.

Figure7.73



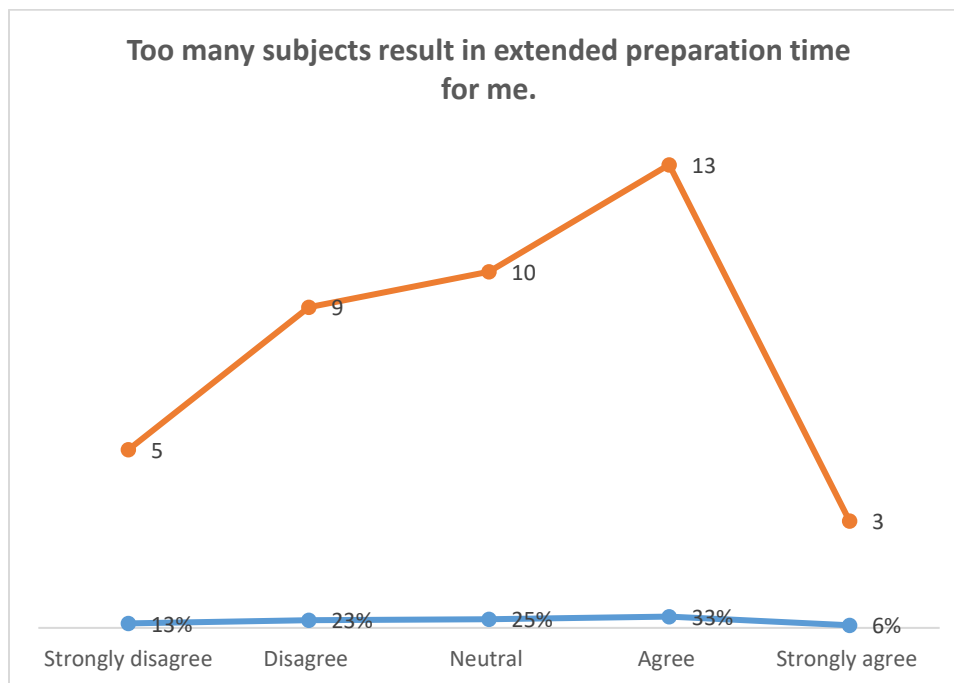
Source: own construction

It is very easy to divide your time amongst your duties for the day as you prefer or prioritise them. In this regard the agreeing group, is 32%, which shows that people value their admin work more than their studies/advancement. On the other hand, 28% disagree and indicate that people need to make time instead of expecting it from propping up from somewhere or nowhere.

Too many subjects result in extended preparation time for me	1 (5)	2 (9)	3 (10)	4 (13)	5 (3)
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RESPONSE: Still, in this regard, it is all about managing your time to do whatever you intend to do. Avoid taking too many subjects or responsibilities on your shoulders as that might be a drawback for you. Limit what you know that you can handle. Time on its own need strict management, and then you will succeed—too many things in your hands is a recipe for disaster.

Figure 7.74



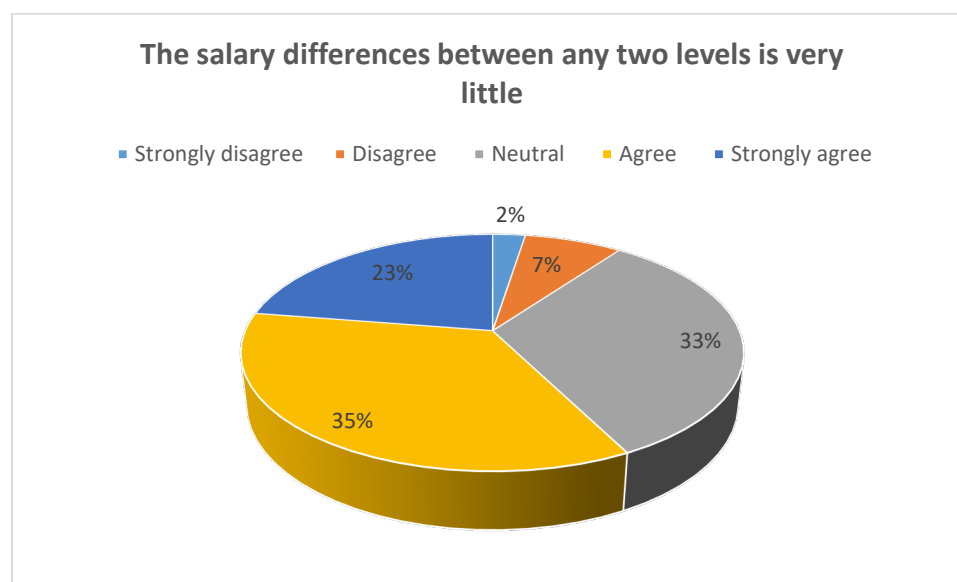
Source: own construction

Too many subjects in your workload will indeed tender one as a failure as you will be unable to manage them all. Take what you think will be easy to handle in accordance with your responsibilities. Thus, the highest percentage agrees to this 33%. It is in the interests of the individual to look after oneself, especially if you still want to study further.

INCENTIVES STRUCTURE					
The salary differences between any two levels are minimal	1 (1)	2 (3)	3 (13)	4 (14)	5 (9)

RESPONSE: The incentives in this regard are negligible between masters and doctoral employees and affect doctorate enrolment in the future. It is well expected that people with a doctorate should earn more than colleagues with a master's degree. In most cases, it is very little difference that separates the two. This on its own is a discouragement to others to enrol for the doctorate in future. Incentives play a significant role in motivation.

Figure 7.75



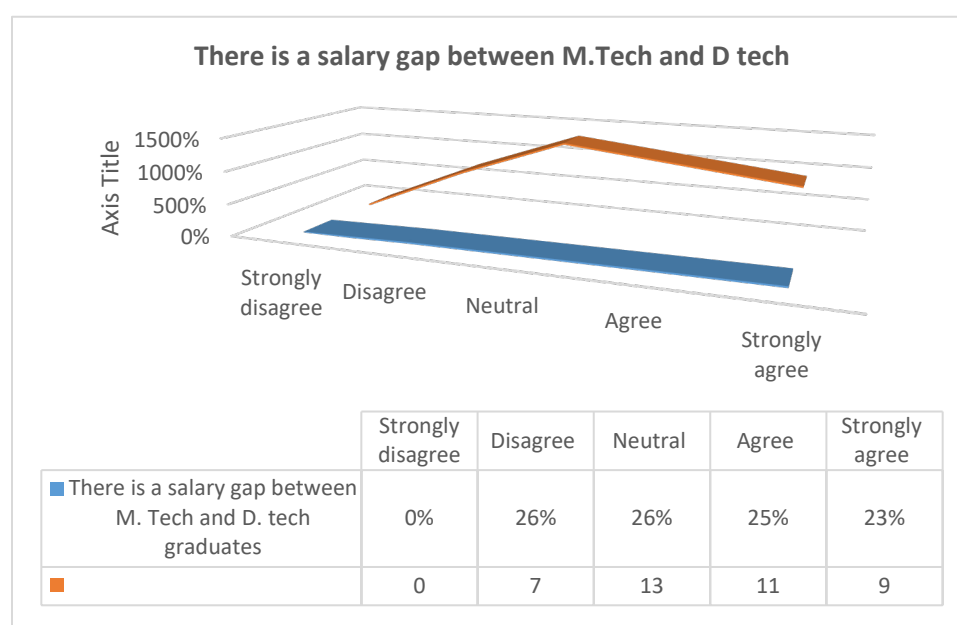
Source: own construction

No matter what can be said and irrespective by whom, salary in the working environment is the main incentive and motivator. This chart clearly shows that 35% agree with the statement and 23% strongly agree. These two, on their own, fully support the statement in all respects. The 33% are the bystanders in this entire issue. The difference between these two levels needs to be very clear.

There is a salary gap between M. Tech and D. tech graduates	1 (0)	2 (7)	3 (13)	4 (11)	5 (9)
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RESPONSE: It is expected that those with higher degrees expect to receive higher salaries, but in some instances, it is not that way. The salary gap issue can depend on the institution and the position; in other instances, those in the master's group earn more than their doctoral colleagues. Such a setup discourages those not yet with doctoral degrees from aspiring to a doctorate.

Figure 7.76

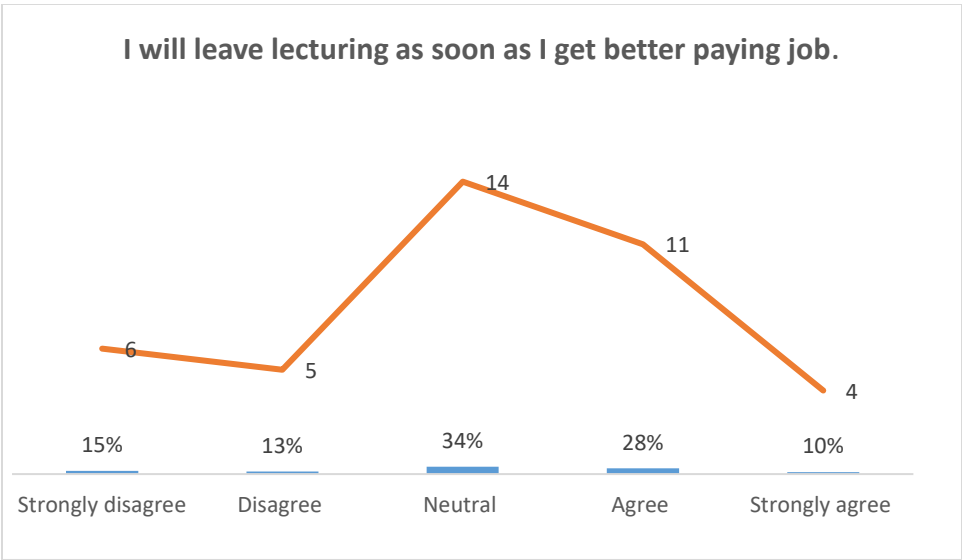


SOURCE: OWN CONSTRUCTION: In this regard, the lecturers who disagree (33%) are more in numbers than those who agree (28%). It needs to be understood that those who disagree bear the brunt of getting the salary with MTechs, who are lower in qualifications. Such unfair practice is common within universities. It all depends on whom you know on the higher levels and who are you.

I will leave lecturing as soon as I get a better paying job	1 (6)	2 (5)	3 (14)	4 (11)	5 (4)
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RESPONSE: It is common practice that dissatisfied lecturers leave the universities once they get better-paying jobs. It is not easy to stick your neck out where you are not well paid, especially when you know that you are well qualified for that post. Unfortunately, this is an ongoing trend in most institutions, and that, in the long run, leads to instability within the lecturing fraternity.

Figure 7.77



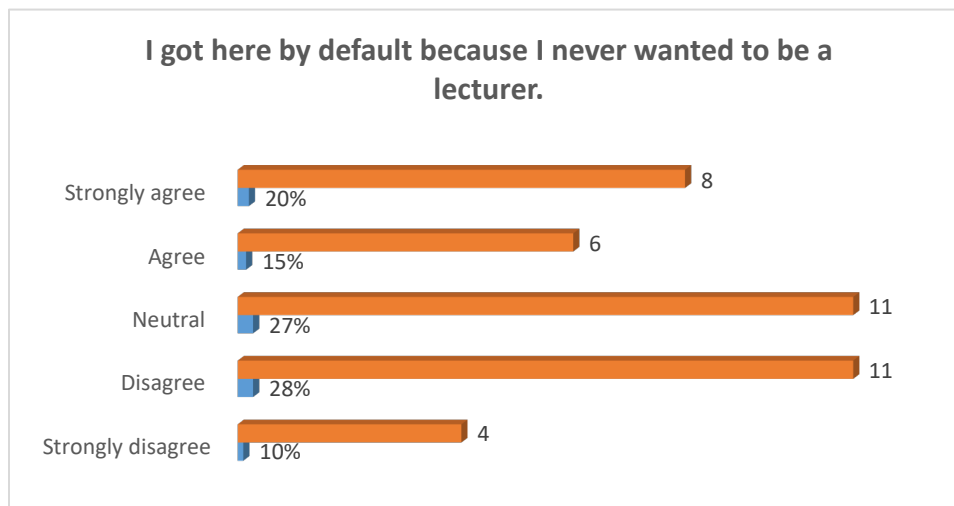
Source: own construction

Most lecturers agree with the statement; 28% agree and show how serious the situation is. As normal, the fence-sitters/neutrals, in this case, are in the majority and tip the scale of not knowing who will change their minds and when will that happen if possible. This is not a question of maybe, but reality, as many lectures leave lecturing once they find greener pastures.

I got here by default because I never wanted to be a lecturer	1 (4)	2 (11)	3 (11)	4 (6)	5 (8)
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RESPONSE: It is common knowledge that unintended circumstances can put you where you never thought or planned. You can plan to be something else, but in the end, you find yourself in an unplanned situation. In other words, it can be a question of "never say never in life."

Figure 7.78



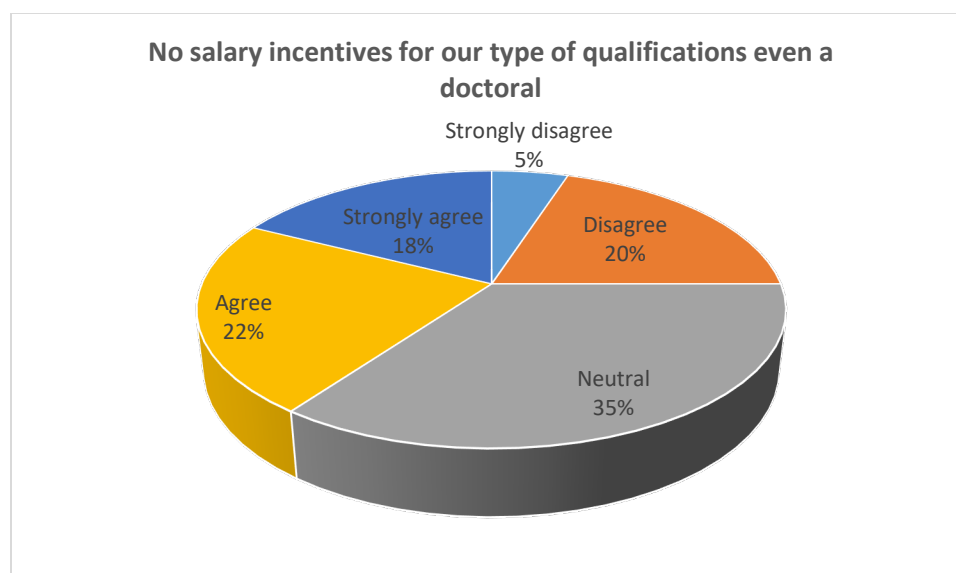
Source: own construction

In this situation, the respondents who disagree with the statement are in the majority (28%) and are only opposed by the neutrals, also 28%. On the other hand, those who agree with the statement are just 15% compared to the two higher percentages. The real issue here is that it is difficult to find yourself in a position as you cannot predict the future?

No salary incentives for our type of qualifications, even a Doctoral degree	1 (2)	2 (8)	3 (14)	4 (9)	5 (7)
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RESPONSE: Most lecturers complain that there are no incentives in the salary package as they would expect, especially for the doctoral degree level. A doctorate is the highest degree in all universities and is expected to be well paid for in salary terms, but it is the other way around in most instances. It is thus discouraging to those who have not yet arrived at that level to attempt enrolling.

Figure .7.79



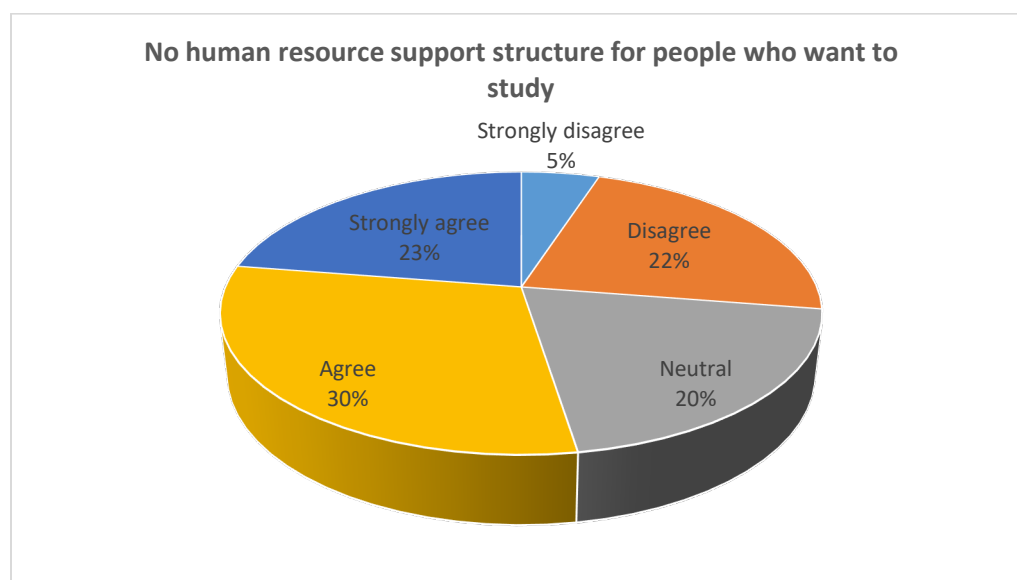
Source: own construction

The information in this regard is dominated by the neutrals, who are 35% in total and followed by those who Agree (22%). It is difficult to favour the statement as we do not get paid the same salary albeit our same qualifications; hence other people rather be neutral instead of choosing a position.

SUPPORT STRUCTURE					
No human resource support structure for people who want to study	1 (2)	2 (9)	3 (8)	4 (12)	5 (9)

RESPONSE: It is challenging to get as much support as you might need when studying for a doctoral degree, even from your institution. In many instances, one has to fend for himself to progress and get even a supervisor is still a mission to achieve. People do get discouraged due to the issues mentioned above.

Figure 7.80

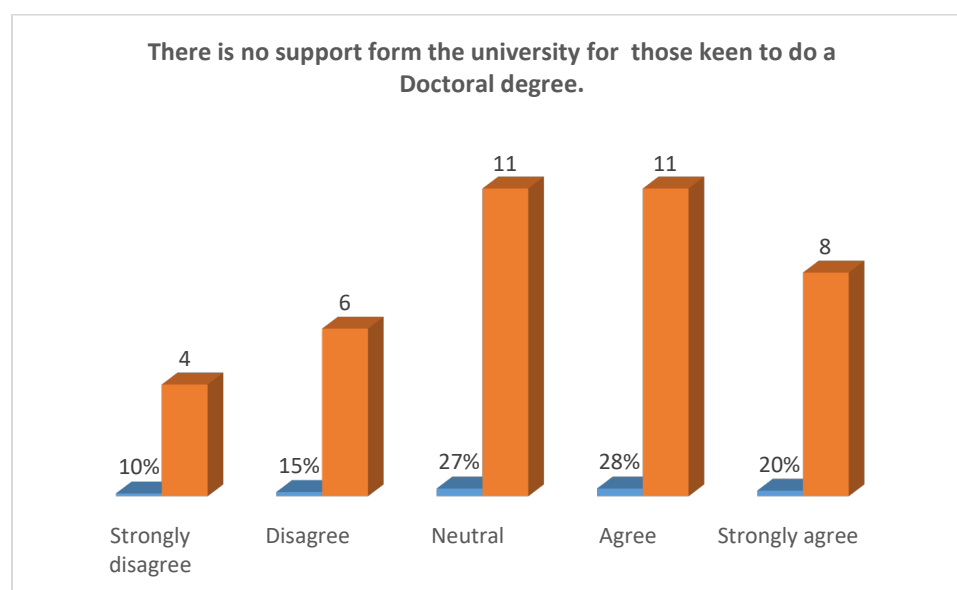


SOURCE: OWN CONSTRUCTION: It is not as easy as many might think about studying at university, even if you are a lecturer there. Conditions can vary for many reasons, and those who agree (30%) and strongly agree (23%). These two percentages clearly show that the statement is truthful in its standing; the two percentages take up the bulk of the information and tip the scale to one side, i.e., no human resource support.

There is support from the university for those keen to do a doctoral degree	1 (4)	2 (6)	3 (11)	4 (11)	5 (8)
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RESPONSE: Support for those who want to study further is always there from the university. It all depends on the candidates. This support is mainly/only focused on permanently employed staff and not contract staff. It is the support that helps people enrol for doctoral degrees irrespective of the institution but most preferably the one they are working for.

Figure 7.81



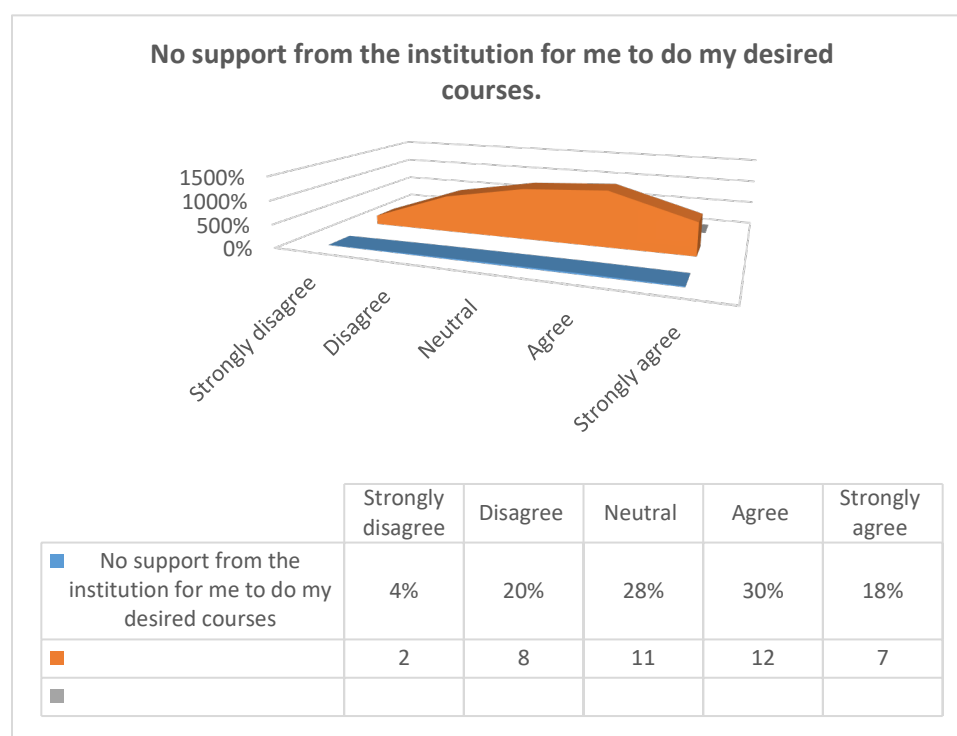
Source: own construction

Support information differs according to individuals in what they intend to pursue. In this regard, some lecturers agree with the notion of support being there, and they are 28% compared to those who disagree (15%) and the neutrals who stand at (28%). However, as said before, neutrals cannot be taken seriously because they have a solid stand or firm ground.

No support from the institution for me to do my desired courses	1 (2)	2 (8)	3 (11)	4 (12)	5 (7)
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RESPONSE: People will always have their reason for not having something. The issue of support from the institution depends upon the type of study one wants to take. At times, you find out that the very institution does not have the particular studies that one wants to do and then what?

Figure 7.82



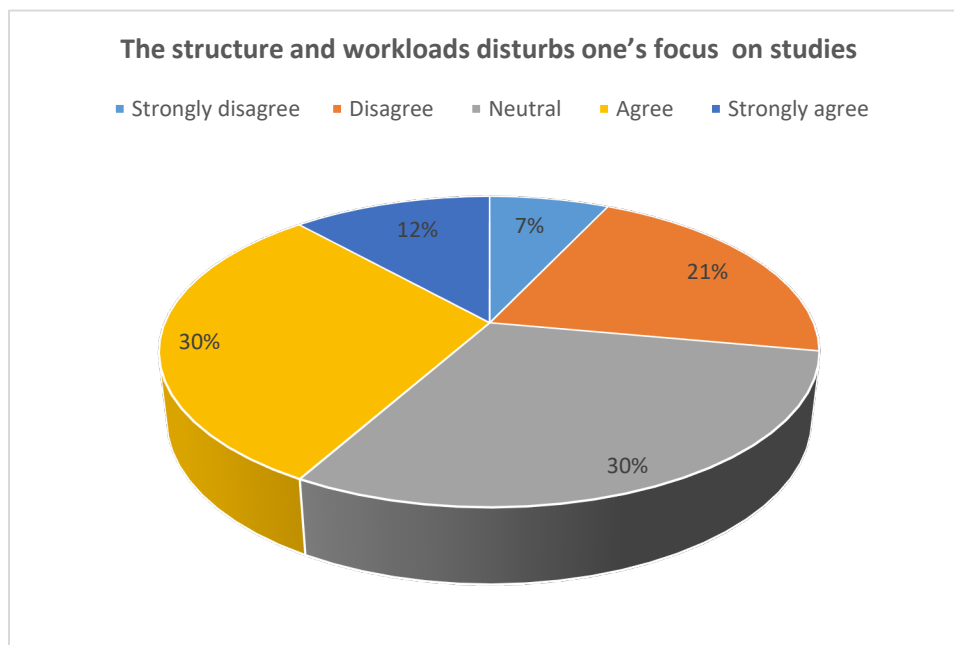
Source: own construction

This complaint is prevalent amongst academics who claim no support from the university for which they are working. In this regard, for those who lack support, 30% agree, and 18% strongly agree, compared to 20% disagree. In reality, it is pervasive in universities not to support their entire staff but only turn to focus on the permanently employed staff. As a result, the contract staff have to fend for themselves.

The structure and workloads disturb one's focus on studies	1 (3)	2 (10)	3 (9)	4 (13)	5 (5)
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RESPONSE: The aspect of workloads does not have or pose a problem in studying. It all depends upon the individual himself in sorting out the time to study and time to work. If you manage your time correctly, you can still work and study, but dedication and proper organisation are needed. Many academics have done it in the past, studying and working at the same time.

Figure 7.83



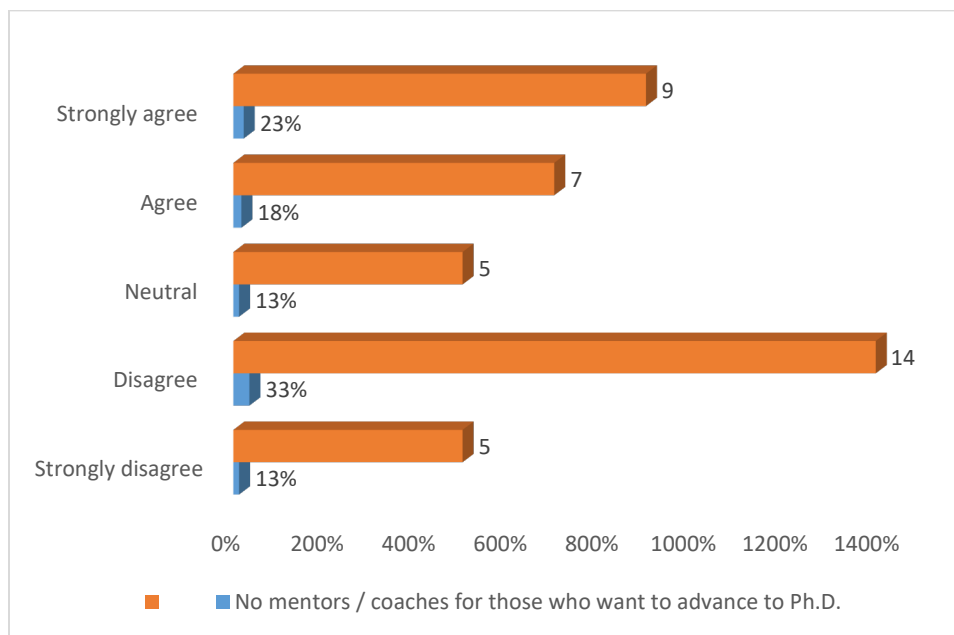
Source: own construction

The highest percentage in this regard is 30%, indicating that the majority agree with the statement being supported by strongly agree (12%). However, what is shocking in this regard, is the 30% of the neutrals. It is such people you cannot rely upon as you do not know where they stand.

No mentors/coaches for those who want to advance to the doctoral level.	1 (5)	2 (14)	3 (5)	4 (7)	5 (9)
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RESPONSE: It is challenging, if not impossible, to get mentors for doctoral candidates. People just go for the degree not knowing what they are entering into; is it manageable? Prior information and coaching can save them many unnecessary problems. Advice at that level, is thus very hard to come by, but it is very valuable if it is there.

Figure 7.84.



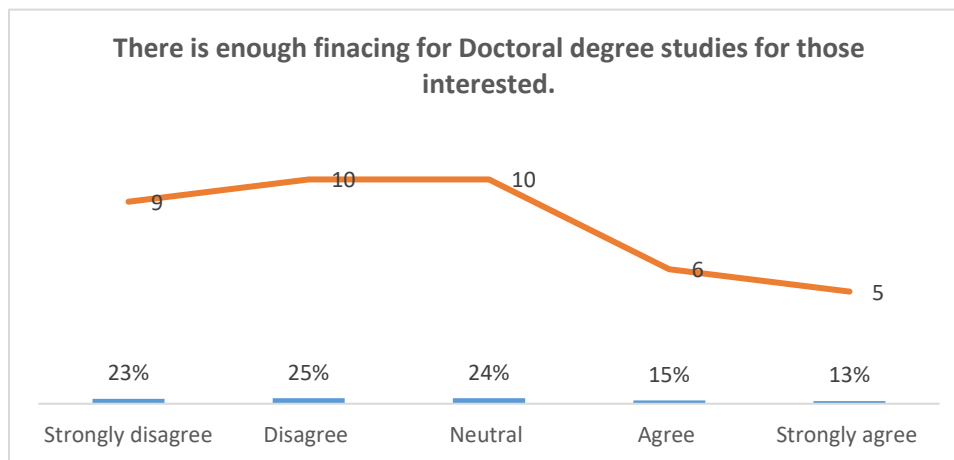
Source: own construction

The issue of figures/is just part of the information needed. The statement might indicate a particular outcome, but the respondents say something different in their open-ended responses. For instance, the outmost majority (35%) disagree with the statement instead of 18% agreeing. This echoes what has been stated by the respondents who verbally express a differing view. The statement is not the final information needed, but the respondent determines the sway of the information. The statement might say this, but the respondents would mean something different.

FINANCING STRUCTURE					
There is enough financing for doctoral studies for those interested	1 (9)	2 (10)	3 (10)	4 (6)	5 (5)

RESPONSE: Circumstances differ according to different situations. Financing is there for doctoral degree studies but, on most occasions, for the permanently employed staff. This is a handicap on the side of the contracted staff who would like to study for the doctoral degree. The statement should clarify that funding is there for which category of employees.

Figure 7.85



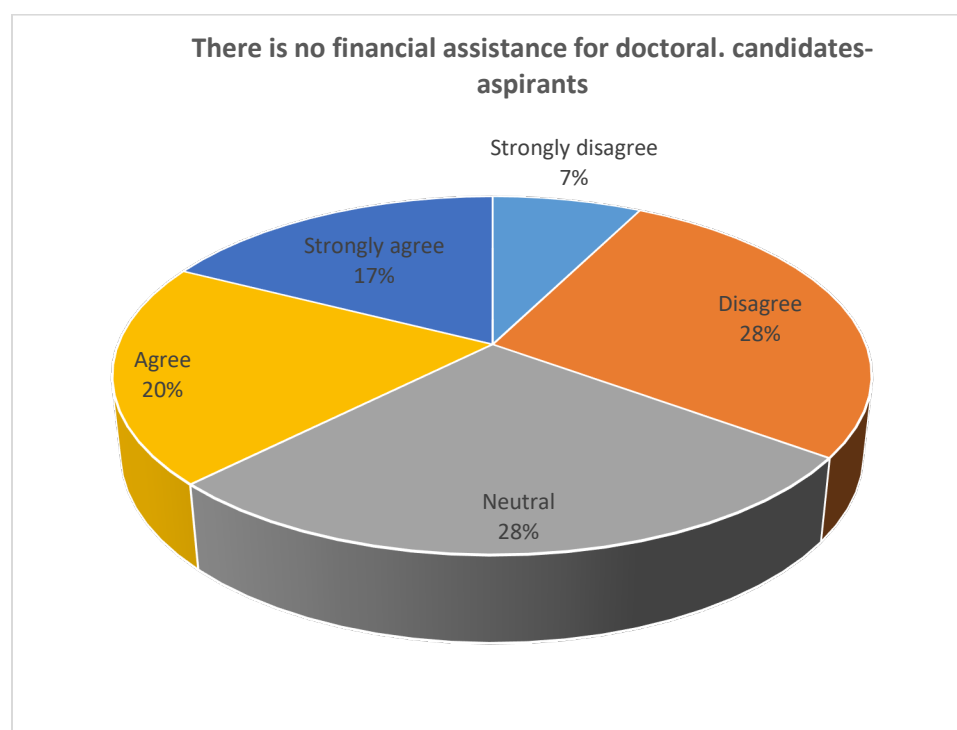
Source: own construction

Irrespective of the statement indications that there is enough funding for the doctoral degree, the percentages, according to the respondents, is giving a different picture altogether. The respondents—23% strongly disagree, and 25% disagree with the statement. This in itself indicates that it is not all that well with the funding for doctoral studies. The other larger % is the neutrals who are not reliable at all.

There is no financial assistance for doctoral studies candidates-aspirants	1 (3)	2 (11)	3 (11)	4 (8)	5 (7)
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RESPONSE: The issue of funding for doctoral degrees is not always the same for all those who want to study for a doctorate. In other instances, it is found that nothing at all is allocated for doctoral students whom the institutions do not fully employ. This is found to be very unfair as they are part of the staff too. Therefore, funding should be equally distributed amongst the staff irrespective of their category.

Figure 7.86



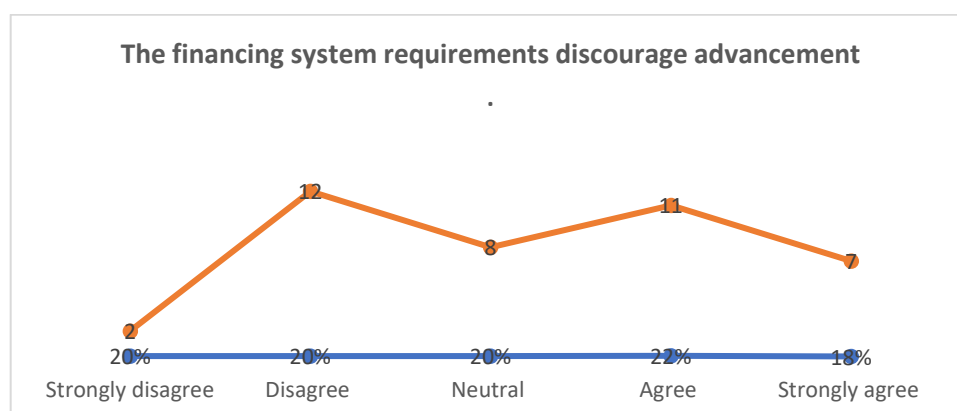
Source: own construction

Different respondents gave their input differently per the statement; those who agree 20% compared to 28% of those who disagree and again those who strongly agree, are 17% in total. However, those who agree and strongly agree still form part of the majority in this regard. Funding, in general, does form the main part of studying for the doctoral degree and any other qualification.

The financing system requirements discourage advancement	1 (2)	2 (12)	3 (8)	4 (11)	5 (7)
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RESPONSE: The regulations and demands of the funding for the doctoral degree is discouragement on their own for the advancement in a doctoral degree. Many restrictions discourage the intending candidates from registering—this needs to be brought to the institutions' attention per se. The financing system/programme should be attractive to the prospective candidates and not repel them from the onset.

Figure 7.87



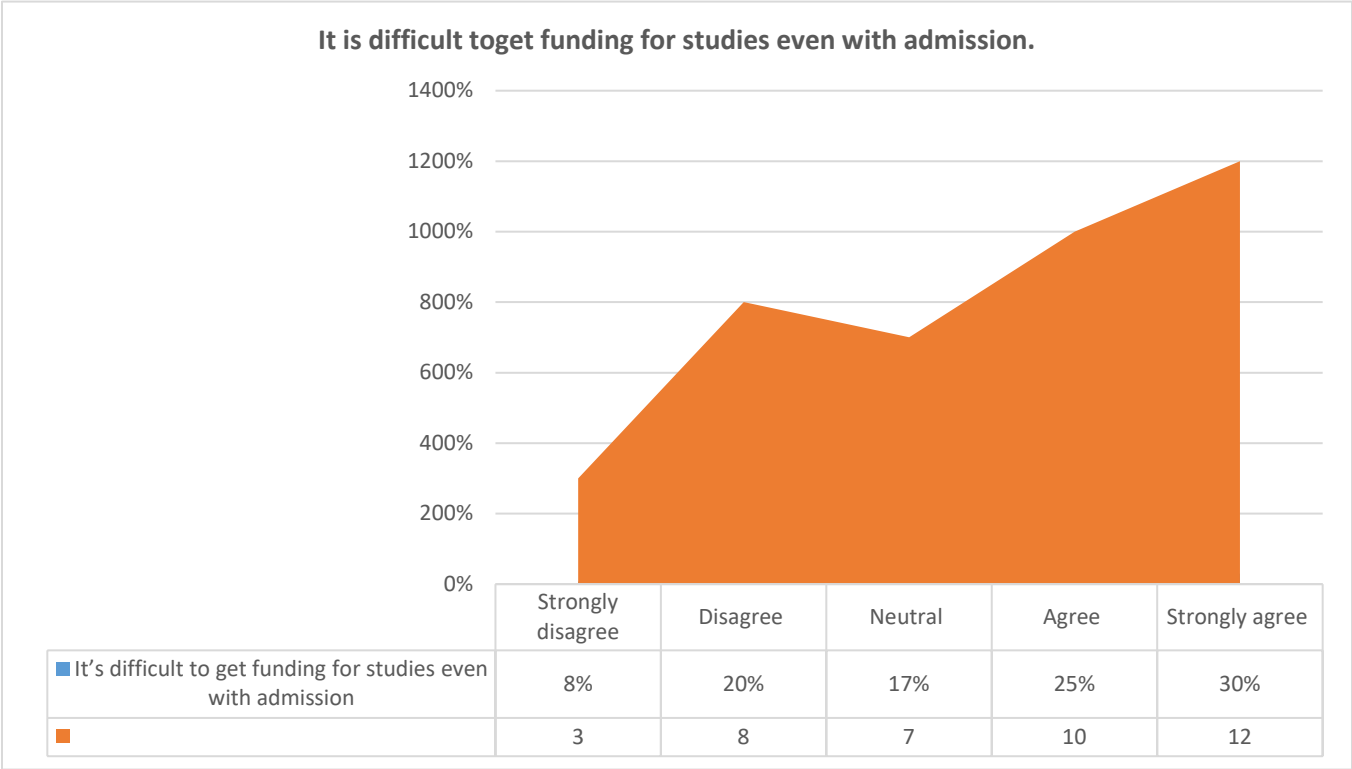
Source: own construction

Financing, if wrongly or unfairly implemented, does lead to complaints of all sorts. In other instances, it leads to people being satisfied but others being dissatisfied. The problem in this regard is the aftereffects of that which, in other cases, can lead to the discouragement of advancement. The other respondents disagree (30%) and strongly disagree (30%), and that says it is not always the case. However, the number of those who agree (28%) shows that the line of differences between the opposing views is very slim.

It is difficult to get funding for studies even with admission	1 (3)	2 (8)	3 (7)	4 (10)	5 (12)
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RESPONSE: In other instances, even when people do have admission, it is still very difficult to receive funding for doctoral studies. The reason may differ according to different departments in different institutions. There is no uniform rule that if you have been accepted, you will get funding. Another issue in this regard is whether your field of study is being financed.

Figure 7.88



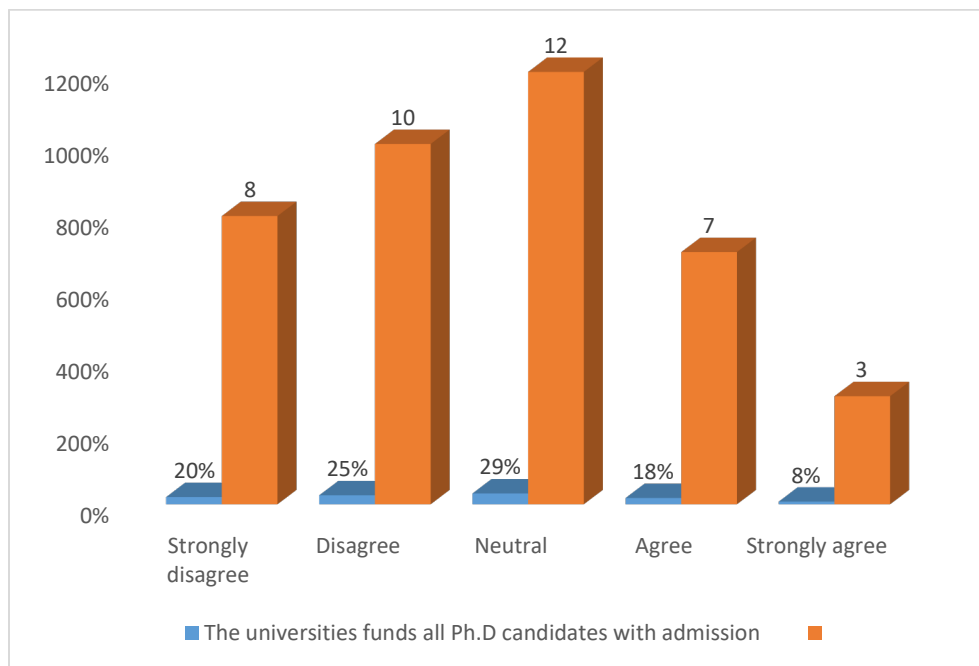
Source: own construction

In this instance, there are two brief aspects of funding. Agree (25%) & strongly agree (30 %). In both instances, the respondents are trying to show that admission is not a guarantee of being funded. The issue of funding can thus easily lead to a loss of interest in enrolling for a doctoral degree.

The universities funds all doctoral. candidates with admission	1 (8)	2 (10)	3 (12)	4 (7)	5 (3)
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RESPONSE: The issue of funding is a problem in itself as it does not satisfy all incumbents. In other instances, candidates are being funded well, and others nothing at all. It is always thought that when you have admission, then you are funded-guaranteed. The issue of funding all depends on different universities as to their funding restrictions concerning doctoral degrees.

Figure 7.89



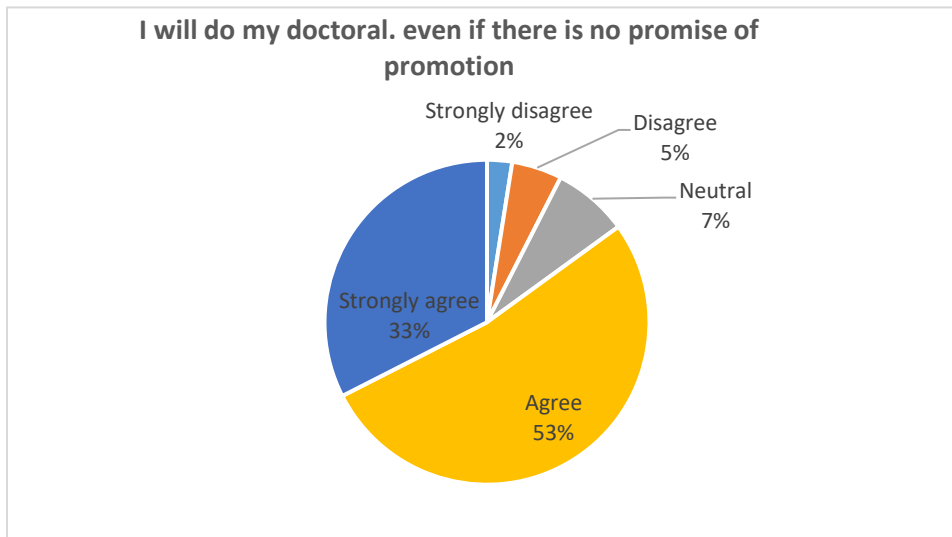
Source: own construction

This statement is not as easy as it might look. All in this regard depends upon the admission and funding rules of the institution per se. Respondents who disagree (25%) & strongly disagree (20%) is an indication that it is not always the truth that when having admission, it is not a guarantee that you will be funded: all depends on the institution itself

REASONS WHY I WILL DO A Doctoral degree					
I will do my doctoral. even if there is no promise of promotion	1(1)	2 (2)	3 (3)	4 (21)	5 (13)

RESPONSE: This relates to the interest and power the respondent has with education in general. This concerns self-satisfaction rather than anything else. It is more about proving others wrong who thought someone could not do the degree. It originates from pride and self-motivation. It has nothing to do with money /promotion per se.

Figure 7.90



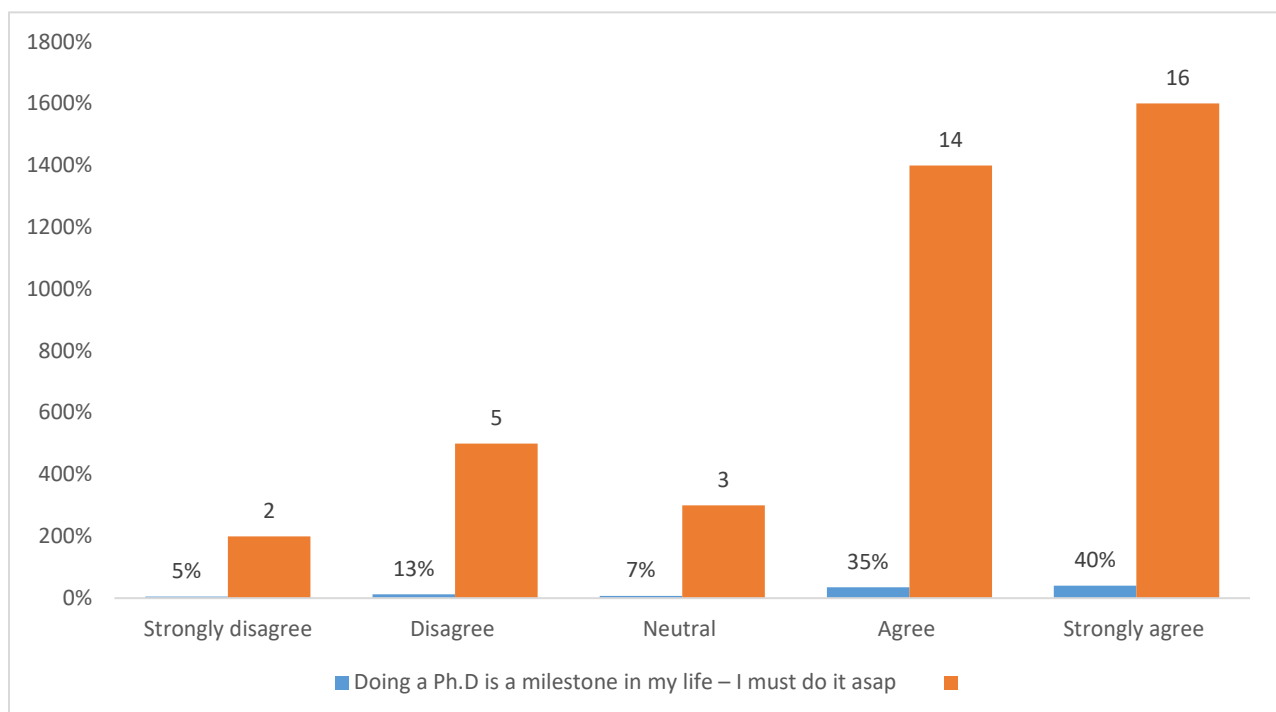
Source: own construction

In this aspect of self-motivation, most respondents agree with the statement with (33% strongly agree and (53% agree. Both these percentages indicate and show that it is all about pride and not promotion on this statement. This shows that the degree to most of the respondents does matter more than promotion itself.

Doing a Doctoral degree is a milestone in my life – I must do it asap	1 (2)	2 (5)	3 (3)	4 (14)	5 (16)
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RESPONSE: this is about full-scale motivation from the respondent in striving for the enrolment of the doctoral degree. In this case, it is all about pride, not just to do it but mainly to enrol for the doctoral degree itself. It is an honour to study for a doctoral degree and even more so to complete the degree.

Figure 7.91

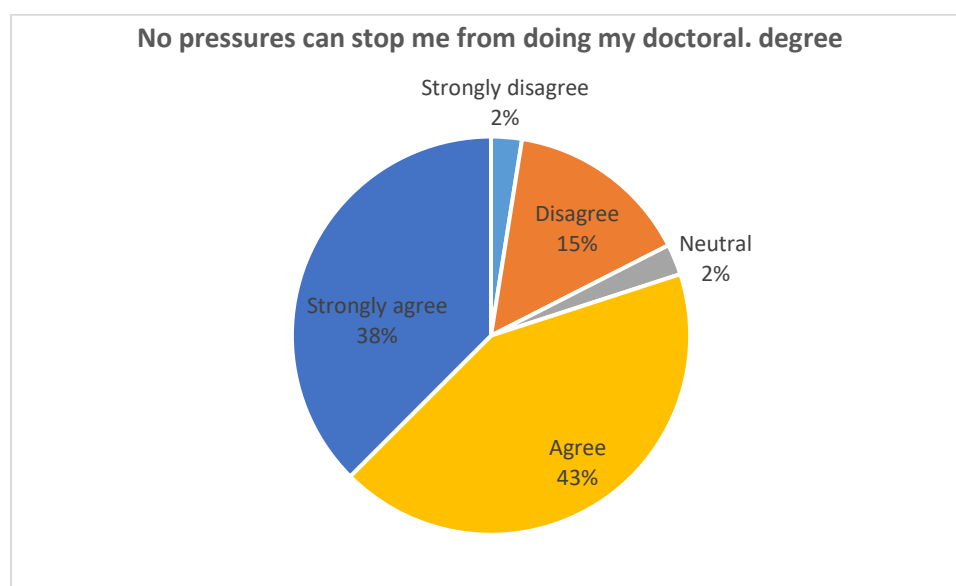


SOURCE: OWN CONSTRUCTION: The issue of a doctorate is a motivation to all those who enrol for the degree as it boosts the individual's social standing in society. Those who agree with the statement are 35% and more strongly agree 40%. Thus, just those two percentages indicate that a doctorate is a real milestone to pass it. It rubs your name in the social and academic history annals forever.

No pressures can stop me from doing my doctoral degree	1 (1)	2 (6)	3 (1)	4 (17)	5 (15)
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RESPONSE: This is all about self-motivation and certainty in that no matter what happens, nothing will stop me from moving forward with the doctorate. Pressures can come from work, family or even generally from the community/society itself. Pressures can still come from the peer groups and might be coming out from jealousy, so to say, but that will not stop the incumbent from going forward, and that is the social pull them Down syndrome.

Figure 7.92



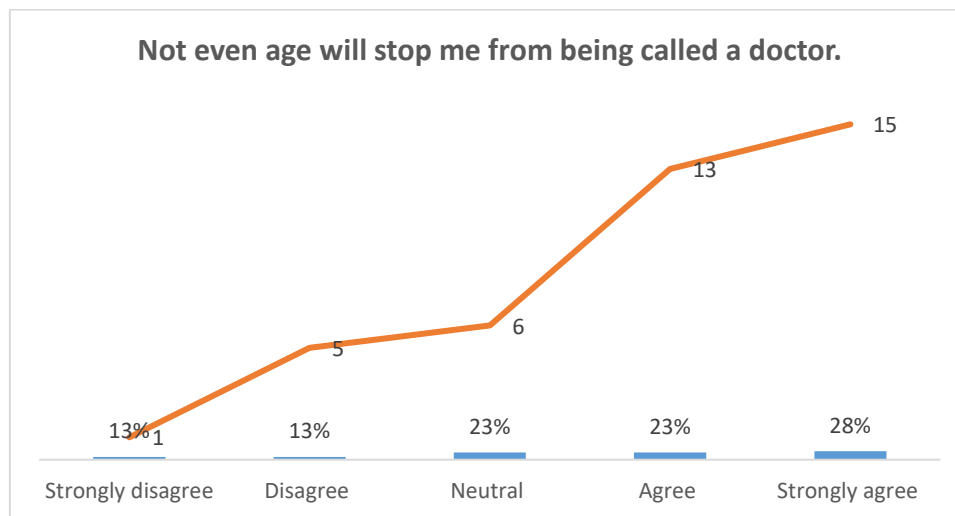
Source: own construction

The situation in this regard is cut out: the two primary responses from the respondents are 38% strongly agree, and 43% agree. In these instances, there is no dispute or rather argument as to where the indications are pointing. It is about the massive self-motivation of the respondents. It is infrequent to come across such type of motivation.

Not even age will stop me from being called a doctor one day	1 (1)	2 (5)	3 (6)	4 (13)	5 (15)
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RESPONSE: The issue of age should not be taken as an impediment to higher education. Education does not have limitations that are being based on age. It all depends upon the individual in that how much are you determined to acquire higher education. It all again depends upon the willpower of the individual.

Figure 7.93



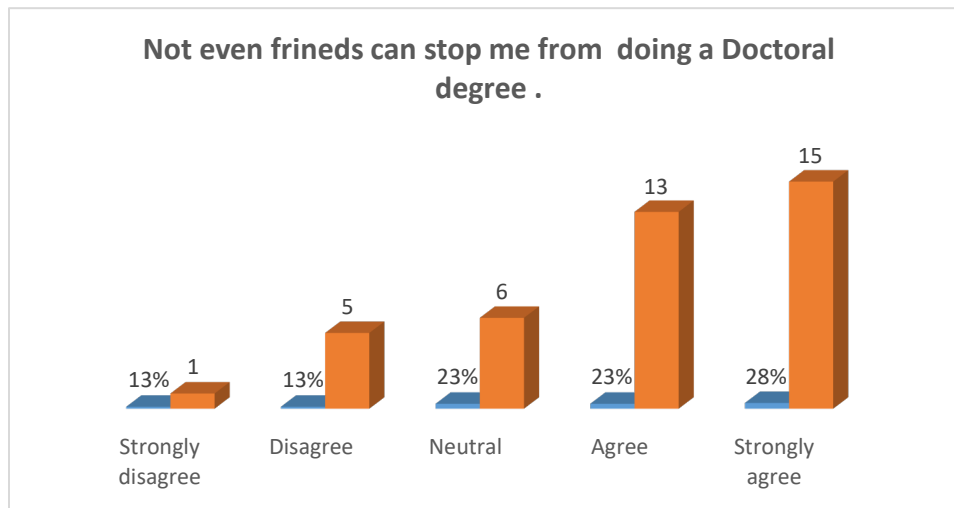
Source: own construction

On the issue of higher education, age is not a deterrent to most of the respondents in this statement; all they are concerned about is a doctoral degree. Thus, the majority in this regard fully support the statement: 33% Agree & 38% strongly agree. Thus is a given indication as to the intentions of the majority over this aspect of age and education.

Not even friends can stop me from doing a doctoral degree	1 (1)	2 (5)	3 (6)	4 (13)	5 (15)
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RESPONSE: Friendship circles in education can be very influential when working against a weak individual. It is better to follow one's instincts than friends as you might not know how seriously genuine they are about improvement in education. An individual in education need to take decisive decisions as the future does not belong to them but you.

Figure 7.94



Source: own construction

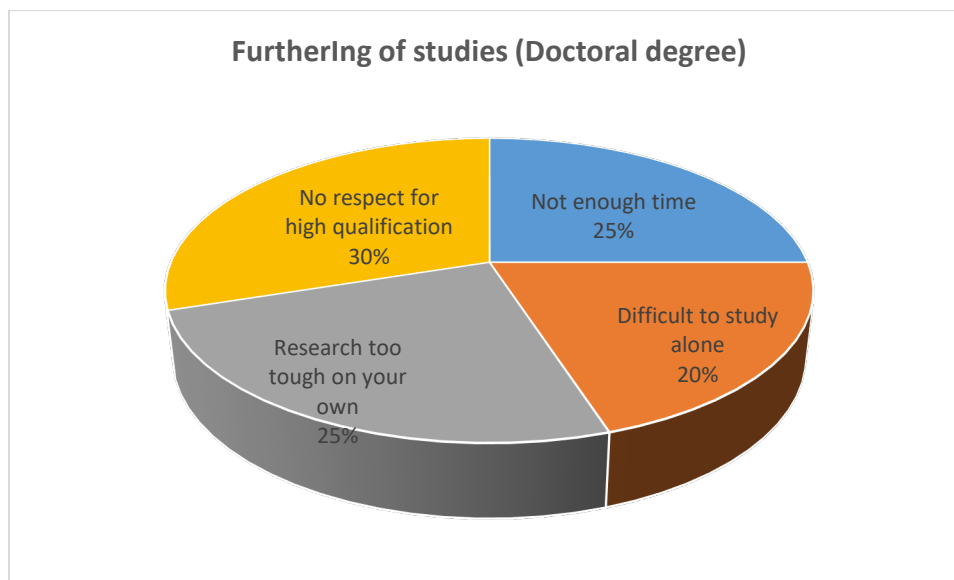
In this chart, what needs to be taken care of is that most of the respondents agree with the statement in its interpretation. 33% Agree and 38% strongly agree, in just those two percentages, it is a clear cut indication that some people know what they want and aim for in life and are not worried about what friends might or will say. They depend on their own decisions. Their moral compass leads them in the right direction.

7.6. SECTION C: This section was deliberately intended to start a discussion, guided by the study at hand, research objectives and research questions. Respondents will be asked/requested to list items as they understand emanating from the previous questions in the questionnaire.

REQUEST 1. Please give four reasons people do not want to further their studies – from your experience and interaction.

RESPONSE: This is about how well is higher education is respected in social circles. Most of the respondents state that it is difficult to go on with higher education, but they all give different reasons.

Figure 7.95



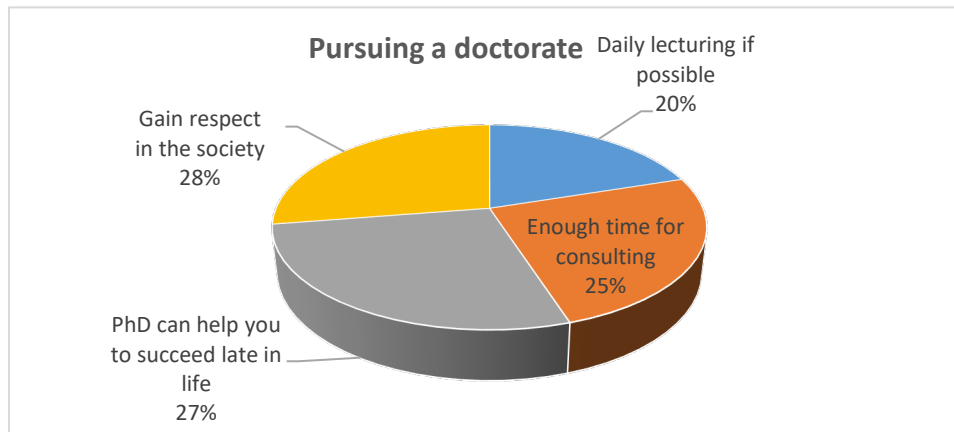
Source: own construction

The highest percentage of respondents are those who say most people do not have respect for higher education. The rest of the chart does give a clear cut explanation over circumstances prevailing within the chart itself. The highest percentage in this regard is 30%.

REQUEST 2; please state any four important things that would have encouraged you to pursue a doctoral degree

RESPONSE: pursuing the doctorate has many aftereffects, but the best is gaining social status in or within the community. The highest percentage indicates that it is very significant to be a doctor and lecturer. This is an honour that will never perish.

Figure 7.96



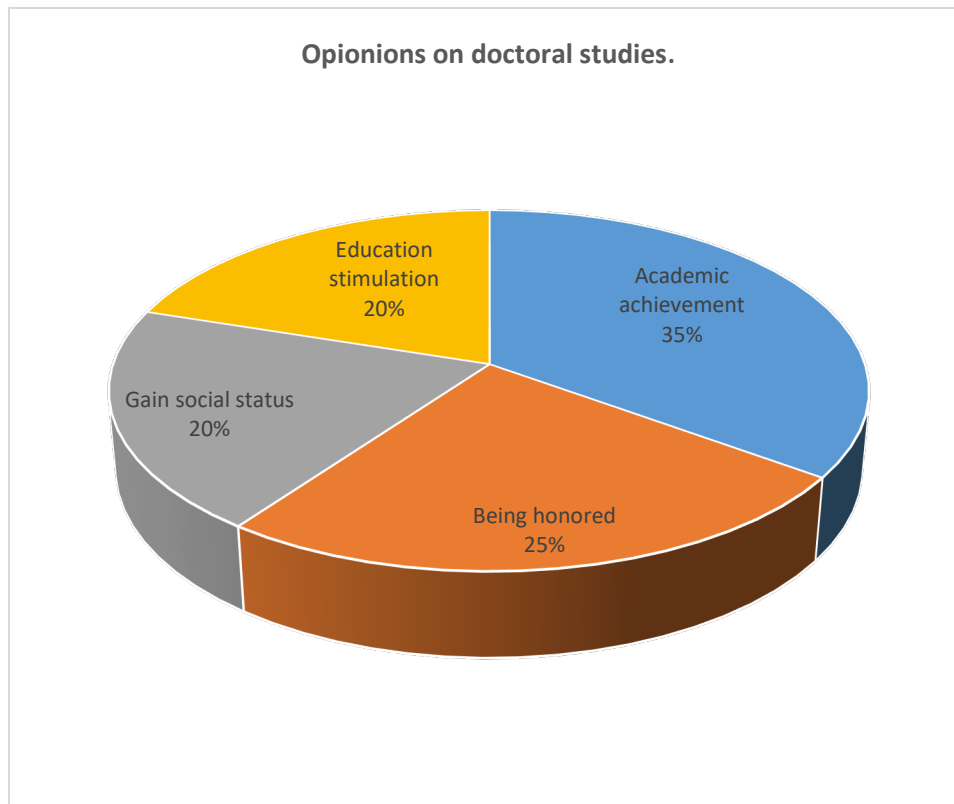
Source: own construction

In following the explanation of this chart, the highest percentage needs to be considered as it gives a broader picture and explanation of the entire situation. 28% and then 27% both these percentages give a clear explanation of the entire chart.

REQUEST 3; what, in your opinion, is the benefit for anyone to study for the doctoral degree? Please list four items.

RESPONSE: Opinions differ according to people, and all depends upon their reasoning. All these are being clearly and self-explained in the chart.

Figure 7.97



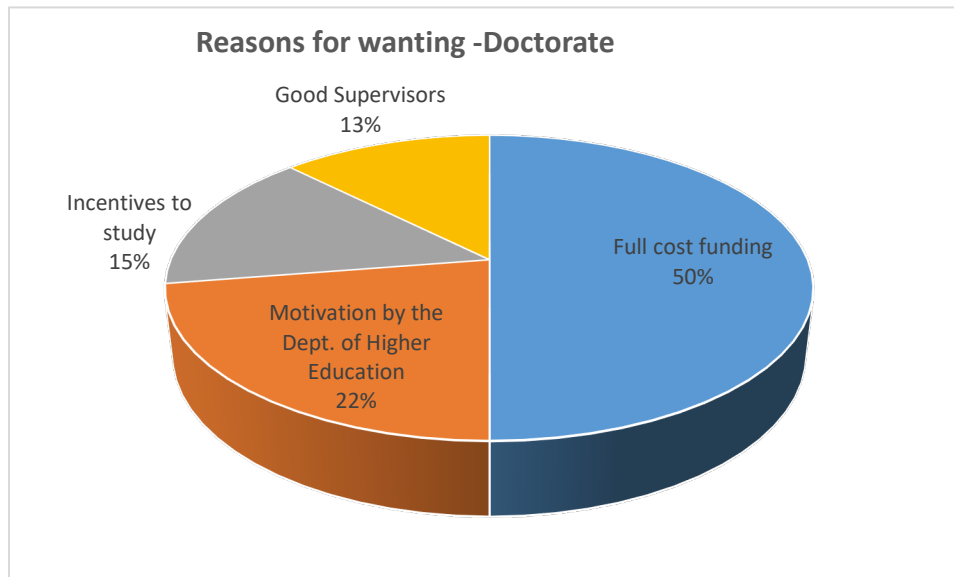
Source: own construction

In this regard, the highest percentage is 35%, and it shows that academic achievement is more important than any other aspect by the majority of the respondents. The rest of the chart is self-explaining.

REQUEST 4; think of at least 4 things you think if they were put in place – more people would want to study up to doctoral level.

RESPONSE: Respondents have different reasons why they want to have doctorate degree. Most of the reasons in percentage form are on the pie chart below

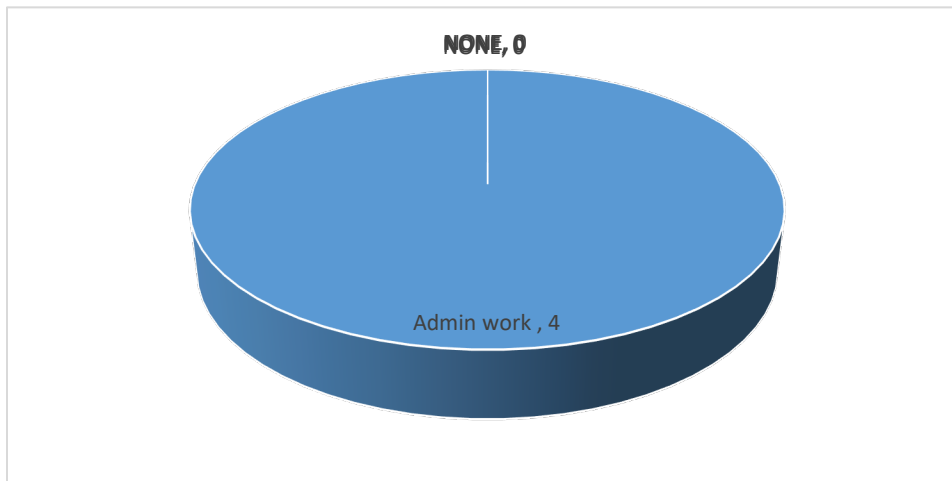
Figure 7.98.Reasons for -Doctorate



SOURCE; OWN CONSTRUCTION: Of all the reasons that might be put forward by whoever, the most appealing of them all is that of full cost funding for doing a doctorate degree, Thus the best and highest percentage is displayed on the pie chart:(50%) and this easily show or indicate how far education/PhD can be needed.

REQUEST 5; Are there any issues pertaining to this study that you think have been omitted or anything you want to share around this study. Please list 5 only;

Figure 7.99-General information-just



REQUEST 6; Please write below anything you want us to know about this subject...

7.7. CHAPTER SUMMARY

This is the chapter that dealt with the recording, analysis and interpretation of the collected data during the interviews. All in this chapter, gives out the questions from the questionnaire as well as the different responses of different respondents. The responses as well as the questions form the questionnaire, are being explained in the form of graphs which depict different questions as well as different response of the respondents. Every response depend on the question being asked to the respondent. It is out of these questions that the bulk of the information needed, will come out. It is in this chapter that all the feeling as well as what the respondents answers will be explained by the very respondents. The information in this regard is regarded as authentic and original and is being treated as confidential as possible. Thus no coercion has been used but just openness was needed form the very respondents and the interviewer. It is one of the main pillars of this research.

CHAPTER 8

8. SUMMARY OF FINDINGS, INTERPRETATION CONCLUSION AND RECOMMENDATIONS.

8.1. INTRODUCTION

The objective of this study was to evaluate the problems that lead to the slow production of senior degrees, in particular the doctorate in South Africa. The problem in this regard is having many doctorates that emanate from different sources within the very academic staff. South Africa, in particular, is very worrisome as it produces the most negligible numbers of graduates at the doctoral level compared to the other BRICS countries of which it is a member. It is also a senior member of the SADCC, and all the members are looking up to it, but it is not up to the expected standards and is the lowest among the BRICS group in producing doctorates. So, the research is seeking to explore and explain the reasons thereof and what can be done to arrest the problem and increase the number of doctorate graduates in the country who are strictly South African citizens. More disturbing, South Africa is on the same economic standard/level as Brazil, also a BRICS member.

Chapter one: This chapter is in the form of a proposal with a literature review, which is about the justification of the research. In addition, this chapter has shown the research objectives, questions, research methodology, and the target population. Again, this chapter shows the sampling size, data collection instruments, data analysis, and data interpretation. The problem statement in this regard defines and indicates the need for the study.

Chapter two: This chapter focuses on the history of education in South Africa at all levels (lower-higher). This chapter also discusses the role of cultural education and its role, especially to some different cultural groups/structures and the impediments found in our educational system. It also entails the issue of Bantu education and its history in South Africa.

Chapter three: This chapter, is focusing on the statistics from entry to exit levels of education. There is also the issue of the structure of the education system, factors that

impact progression. This chapter also tries to show that there have not been any changes that in education since the ANC came into power. The system is still the same, and to put it better, it has deteriorated.

Chapter four: This chapter focuses on the models of effective education, i.e., comparison with other countries as to how they managed their countries educational system and, more so, being on the same per capita level or even lower than South Africa. This chapter also shows what South Africa can copy in improving its education from countries like India, South Korea and the USA.

Chapter five: This chapter is all about the conceptual model in South Africa. It is all about a good model for South Africa and very suitable for all the levels of education in the country and not models like OBE, which has just killed our education. This conceptual model will show what the country should do to solve its education problems/crisis in its education and, in particular, from primary to secondary levels, which are more important than the upper levels.

Chapter six: In this chapter, it is all about the research design, methods being used in the research, the type of research application, differences between research methods and also the advantages as well as the disadvantages of research methods. Lastly, this chapter is trying to show what is meant by data analysis leading to data recording. This chapter summarises the findings as recorded in chapter five and adds the conclusion and recommendations to it. The reporting follows the same pattern exhibited in the preceding chapter in that the commenting is done with specific reference to specific questions or statements to which the practitioners responded.

Chapter seven: The chapter is based on the collecting of data from different sources, capturing of the data, cleaning of the data, its editing, and the interpretation thereof, as well as the analysis of that data. The data in this regard is explained using graphs as well as pie charts in most instances.

Chapter eight: This chapter is the last chapter of this research thesis and is all about summarising the research and interpreting the information in the research, the conclusion,

and the recommendations thereof in the research. Lastly, this chapter also deals with information as to what can be done to improve the standards of education in the country.

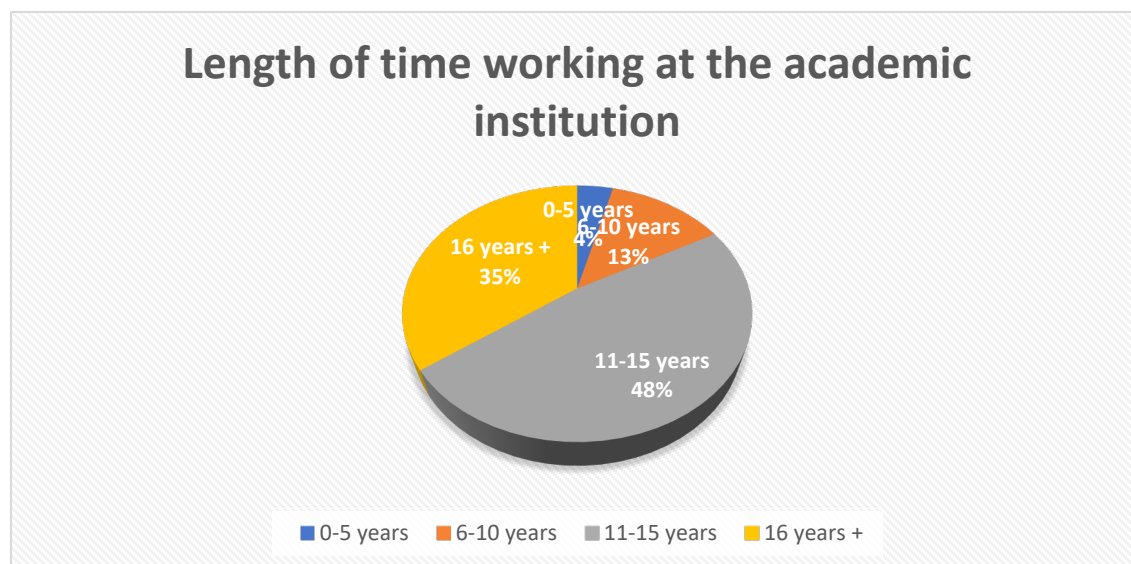
8.2. RESEARCH FINDINGS

The questions and responses follow chronologically the format of the questionnaire with each question followed by the response. Starting from Section A – through to Section C.

QUESTION 1: How long have you been in an academic institution?

RESPONSE: The purpose of this question was primarily to establish if the individuals had been in the system long enough to qualify. The response to this question is illustrated in figure 1 below.

Figure 1: Length of time working at the academic institution



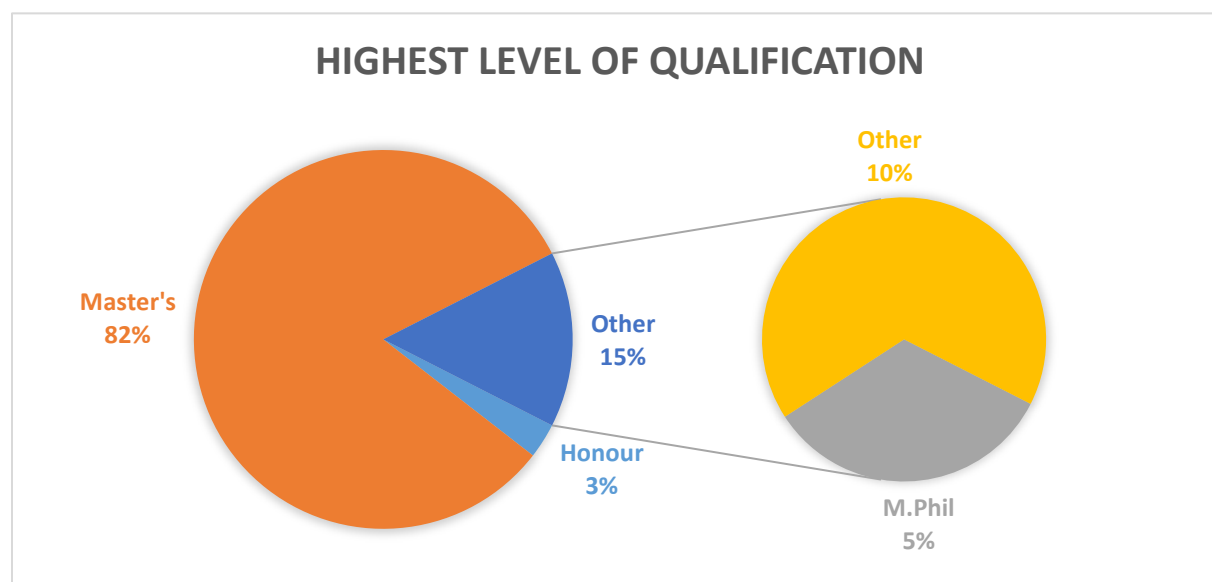
Source: own construction

A small percentage of 4% was in the range 0-5 years, these should not have been included in the purposive sample. Another 13% was 6-10 years, our cut-off was meant to be an average of 10 years in the system and what they did towards attainment of their doctoral qualification. The larger part of the respondents (83%) were within the range (11-15 years – 48%, and 16 years plus – 35%) and this was considered adequate for the purposes of the research.

QUESTION 2: What is your qualification?

RESPONSE: The response, was according to expectation since the qualifications were known to the researcher, but a few interesting findings came out. The responses are illustrated in figure 2 below.

Figure 2: Highest level of qualification



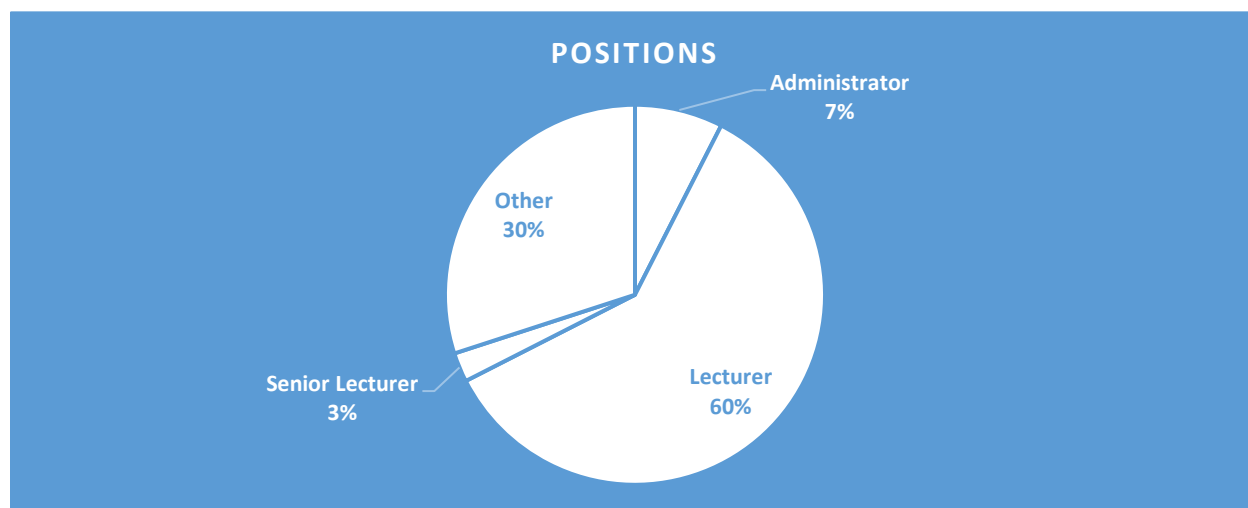
Source: own construction

Those with honours degrees who had been assumed to have masters' qualification were 3% with those reporting as other at 15%. Those reporting as other identified that they had done postgraduate diplomas and certificates to add on to their qualification, of particular interest was the 82% with masters and 5% with M. Phil totalling 87% of those eligible for the research.

QUESTION 3. What is your position in the institution?

RESPONSE: The expectation was to try and establish (during analysis) the relationship between the position (earning capacity) and the unwillingness to proceed to doctoral level. The assumption was that the closer an individual is to colleagues with a terminal degree (a doctorate), the more likely they would aspire for a doctorate in the hierarchy of education. The responses are in figure 2 below.

Figure 3. Positions of the respondents



Source: own construction

Most respondents were lecturers (60%) with an added 3% who indicated that they were senior lecturers, both groups had at least a master's degree for them to lecture. This is irrespective of the years they have been lecturing and in different departments and different subjects/courses.

QUESTION 4

If others, please specify

This column was largely to do with three groups, the larger part (62%) were in a form of management position in some section of the universities. Interestingly this included HODs of academic department, with 31% serving as senior administrators or supervisors in

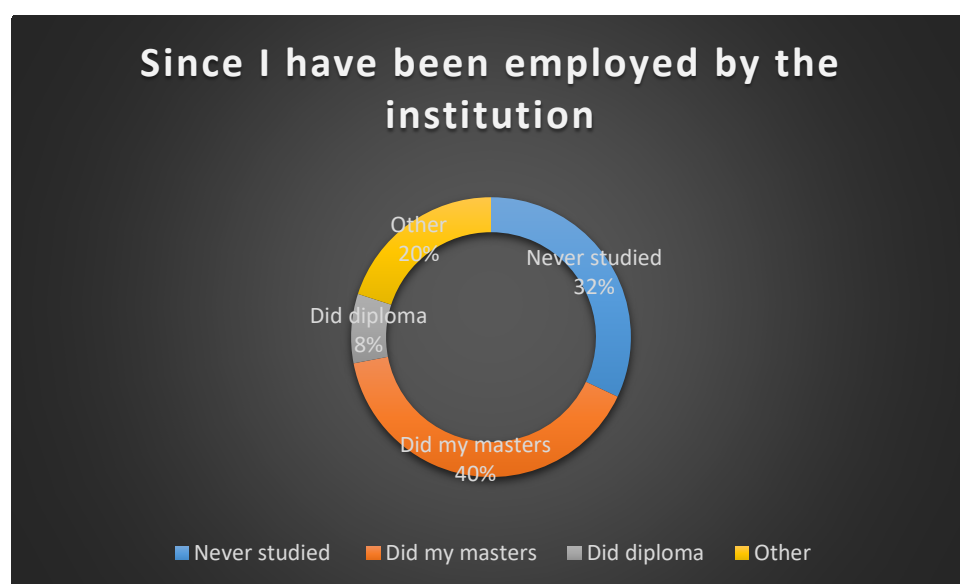
service providing department. It was equally surprising to see that certain departments had HODs with the same qualifications as those of departmental secretaries.

QUESTION 5

Developing academically; since employment at the institution, I have ever since....

RESPONSE; This sort to investigate if the activities of the employees for the time they had been employed under the particular institution of higher learning. The responses are illustrated in the figure 5 below.

Figure 5. Activities during the times of employment



Source: own construction

The question did not seek to ascertain the level at which the individuals were at when they got employed at the respective institutes. However, 40% of the respondents did masters after they were employed, yet 32% never did anything pertaining to furthering their education. The lack of academic oriented activities are increasingly of greater concern especially in circles of higher education where it is assumed the environment must be conducive.

QUESTION 6

If other, please specify

These were largely workshops and job training 1-2 weeks given by the institutions, mostly not credit bearing but to improve fit-for-purpose staff development. None of these had any bearing towards attainment of their doctoral qualifications for which this study is aimed.

QUESTION 7. Any issues you may want to discuss around your situation in the institution in terms of what you would have needed to develop your career further.

It was anticipated that there may be important aspects of the work environment that could have been missed or omitted by the researcher. The respondents filled in as they saw fit pertaining to the study at hand, and this is recorded in descending order of frequency.

1	We are paid same salaries for doing same jobs because some people are graded [put at higher levels] whereas we do exactly the same jobs
2	Promotion processes are not clear as there are no inbuilt and well-structured procedures, you don't want to be at the same level for your life
3	We are not given the same amount of work even when we belong to the same level and there is no clear career path if you work here
4	People should be paid according to their level and not type of job they are doing to avoid underpayment and improve motivation
5	It is difficult for one to have a full-time job and study at the same time because of time and other social responsibilities
6	The current situation is good in that I can live my life comfortably instead of going to school, I left it for too late now.

8.3. SECTION B THE LIKERT SCALE

Perceptions, attitudes and opinions are difficult to measure, so a Likert scale was used to rank the statements on a sliding scale of 1-5; 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. The findings are summarised into tables, the statements are recorded (chronologically as in the questionnaire) in the tables together with the frequencies of the responses in percentages.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	STRUCTURAL IMPEDIMENTS FOR PhD Studies	%	%	%	%	%
1	Funding for Doctoral degrees is not readily available	12	5	30	20	33
2	Requirements for doing a doctorate are generally too high	8	20	23	24	25
3	It is difficult to find a doctorate of one's choice	10	35	25	15	15
4	I cannot do a doctorate because there are no supervisors	22	25	15	25	13
5	Difficulty in getting employment with a doctorate	8	29	23	20	20

Table 8.1

Statement 1. Funding for doctoral degrees is not easily available.

Response; A total of 53% agreed (20% agreed and 33% strongly agreed) that it is not easy to get funding for doctoral degrees in the system. This is in direct disagreement with the provisions in the employment contracts, as well as government bursaries through NRF and other structures. Neutral is too high for comfort at 30% for people in the system, only 17% disagreed, suggesting that they knew it was not difficult to get funding for doctoral qualifications

Statement 2. Requirements for doing a doctorate are generally too high.

Response .A total of 49% agreed (24%agreed and 25% strongly agreed) that the requirements for doing a doctorate are very high. The neutrals at 23% are indifferent and only 28% in total disagreed implying they believe the requirements are not too high.

Statement 3. It is difficult to find a doctorate in one's area of interest.

Response. A total of 45% disagreed (10% strongly disagree and 35% disagree) suggesting that it is easy have an area of one's choice. Ambivalence remains high at 25% with those agreeing totalling 30%. No generalisation can be made, the impression is these individuals had not generally looked for information for doctoral studies.

Statement 4.I can't do a doctorate because there are no supervisors.

Response; A total of 47% disagree (22% strongly disagree and 25% disagree) suggesting that their inability to study for doctoral degrees had nothing to do with shortage of supervisors. The ambivalent are low at 15% with a total 38% (25% agree and 13% strongly agree) claiming that they could not study because they could not get supervisors.

Statement 5. Difficulty in getting employment with a doctorate.

Response; Ambivalence is at 23% with those agreeing with the statement totalling 40% (20% agreed and 20% strongly agreed), those in disagreement, suggesting that you will get a job with a doctorate are at 37% total. There seems to be high levels of uncertainty as no generalisation can be made.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	DISCOURAGEMENT FOR STUDYING FOR PhD	%	%	%	%	%
6	Doctoral graduates earn the same salaries as those with masters	2	18	36	26	18
7	Too much work to study but there are no worthwhile rewards	7	15	28	30	20
8	You are not better with a doctoral degree	12	28	30	17	13
9	Varsities do not make it worth pursuing doctoral degrees	7	32	25	28	8
10	The industry is not looking for doctoral qualifications	10	24	30	25	11

Table 8.2

Statement 6. Doctoral graduates earn the same salaries with masters.

Response; Neutral is high at 36%, understandably because salaries are treated as confidential, even though information will always leak. A total of 44% agree that there is no salary differentiation based on level of education, only 20% think there is a salary difference.

Statement 7. Too much work to study but there are no good rewards.
Response. Half the respondents agree (30% agree and 20% strongly agree) with the statement, neutral is at 28%, only 22% in total disagreed (15% strongly disagree and 7% disagreed).

Statement 8. You are not better in anywhere with a doctoral degree.
Response. Neutrals are at 30%, with those disagreeing totalling 40% (12% strongly

disagreeing and 28% disagreeing). Those who think there is no difference between having a doctorate or not total 30%.

Statement 9. Varsities don't make it worth to pursue doctoral degrees.

Response. The ambivalent are high at 28% with those in agreement totalling 36% and those in disagreement totalling 39%, almost equal responses between those in agreement and those in disagreement.

Statement 10. The industry is not looking for doctoral qualifications.

Response. Those who are not sure are at 30% and those agreeing total 36% (25% agree and 11% strongly agree) leaving a remainder of 34% disagrees (10% strongly disagreeing with 24% disagreeing) with the statement.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	JOB OPPORTUNITIES-DOCTORAL QUALIFICATIONS	%	%	%	%	%
11	Many senior graduates are underemployed in RSA	25	17	8	25	25
12	There is no job guarantee because one has a doctorate	7	20	15	30	28
13	I do not know a single doctoral graduate out of employment	15	22	33	23	7
14	Universities are the only places that employ doctorates	13	38	8	33	8
15	I do not want to be an academic-no need for a doctorate	15	23	20	27	15

Table 8.3

Statement 11. Many senior graduates are under employed in RSA

Response. Ambivalence is interestingly low at 8% suggesting knowledge of the situation,

those disagreeing scored a total of 42% (25% strongly disagree and 17% disagree), this leaves a total of 50% in agreement (25% agree and 25% strongly agree). This is close enough to allow for a generalisation.

Statement 12. There is no job guarantee because one has a doctorate
Response. Neutral is at 15% with those disagreeing totalling 27% whilst those in agreement, that there is no job guarantee because one has a doctorate total 58% (30% agreeing and 28% strongly agreeing). It can be generalised that the perception is that getting a doctorate is no guarantee for getting a job.

Statement 13. I don't know a single doctoral graduate out of employment.

Response. Neutral is high at 33% ($\frac{1}{3}$) who did not want to take a position on this question, a total of 37% disagreed suggesting that they know doctoral graduates out of employment, but whereas a total of 30% did not know anyone with a doctorate who is not employed.

Statement 14. Universities are the only places that employ doctorates.

Response. The ambivalent are down at 8% showing that most respondents were confident in a way, 41% (33% agreeing and 8% strongly agreeing) supported the statement, whereas those disagreeing (13% strongly disagreed and 38% disagreed) totalled 51%. It can be generalised that doctoral graduates have employment opportunities outside of academia.

Statement 15. I don't want to be an academic-no need for a doctorate.

Response; Neutral is at 20% which is $\frac{1}{5}$ of the respondents who do not know whether or not they want to be academics, yet working in an academic institution. Those in agreement total 42% (27% agreed and 15% strongly agreed) that though they will stay in an academic environment, yet they do not want to be academics. Only 38% disagreed (15% strongly disagreed and 23% strongly disagreed) suggesting that they want to be academics.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	FAMILY RESPONSIBILITIES DISTRACT FROM STUDYING	%	%	%	%	%
16	I do not have time to focus on my studies because of family	13	30	12	30	15
17	I don't know anyone with a doctorate and a well to do family	13	30	19	28	10
18	It is just an honorary qualification with no family benefit	10	15	30	20	25
19	Education has never been important in my family circles	28	40	12	12	8
20	I will study if that gives me more money for my family	17	20	13	20	30

Table 8.4

Statement 16. I don't have time to focus on studies because of family.

Response. The undecided are at 12% with those in agreement with the statement totalling 45% (30% agreed and 15% strongly agreed), and those in disagreement totalled 43% (13% strongly disagreed and 30% disagreed).

Statement 17. I don't know anyone with doctorate and a well to do.

Response. A total of 40% disagreed (13% strongly disagree and 30% disagree) suggesting that they knew doctoral graduates who had well to do family. Whereas those that agreed (had not seen anyone with a doctorate and a well to do family) totalled 38%, not very far from those opposing, neutral was 19%.

Statement 18. It is just an honorary qualification with no family benefit.

Response. A total of 45% (20% agree and 25% strongly agree) agreed with the statement suggesting that there is nothing outstanding about having a doctorate, neutral was up at

30% with those suggesting that having a doctorate has status in the family circle at a combined 35%.

Statement 19. Education has never been important in my family circles.

Response. Those disagreeing total 68% (28% strongly disagreed and 40% disagreed) which suggests that education has status in the families, it can be generalised. While neutral came down to 12%, a total of 20% indicated that education has never been of value in their family circles.

Statement 20. I will study if that will give me more money for my family.

Response. A total of 50% (20% agreeing and 30% strongly agreeing) were prepared to study if they would be paid more, whilst 13% were indifferent, 37% (17 strongly disagreeing and 20 disagreeing) will not study further even if they had sponsorship.

		Strongly	Disagree	Neutral	Agree	Strongly
	KNOWN PROMOTIONS FOR DOCTORAL GRADUATES	%	%	%	%	%
21	Colleagues who did doctorates are still level 8 lecturers	85	5	30	33	27
22	No one who did a doctorate here was ever promoted	10	7	33	35	15
23	There are non-doctorates managing doctorates	8	17	25	25	25
24	I Know doctorates 5 years after completing and still same level	5	15	35	22	23
25	There is no benefit for anyone to do a doctorate here	15	35	15	20	15

Table 8.5

Statement 21. Colleagues who did doctorates are still level 8 lecturers

Response. Neutral is high at 30% and this is confusing as it is expected that these respondents would have adequate information. However, 10% total disagreed suggesting that there were no doctorates at level 8, yet 60% (33% agreed and 27% strongly agreed) knew doctorates who were still at level 8.

Statement 22. No one who did a doctorate here was ever promoted

Response; Again neutral remains high at 33% with 17% total disagreeing suggesting that people with doctorates are promoted, whereas a total of 50% (35% agreed and 15% strongly agreed) had not seen anyone with a doctorate getting promotion.

Statement 23. There are non-graduates managing doctorates.

Response. Those in agreement total 50% (25%strongly agreed and 25% agreed) and neutral was at 25% ($\frac{1}{4}$) leaving a total of the remaining 25% (8% strongly disagreeing and 17% disagreeing). At least $\frac{1}{2}$ of the respondents know non-doctorates managing doctorates – this may be a discouraging factor to further studies.

Statement 24.I know doctorates 5 years after completing and still the same.

Response. Neutral has gone up at 35%, not sure if these respondents had no knowledge of these issues. All the same, a total of 20% disagreed suggesting that they knew doctoral graduates who had made progress in the last 5 years, yet 45% of the respondents (22%agree and 23 strongly agree)had not seen the progress after acquiring a doctoral qualification.

Statement 25. There is no benefit for anyone to do doctorate here.

Response. There appears to be clarity with neutral at 15%, and those suggesting that there are benefits to studying for a doctoral qualification (disagreeing with statement) totalling 50% (15% strongly disagree and 35% disagree), those agreeing with the statement scored a total of 35% (20% agreeing and 17% strongly agreeing)

Table 8.6

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	BENEFITS FACTORS FOR OR AGAINST	%	%	%	%	%
26	I thought of doing doctoral studies but was not motivated	13	26	10	28	23
27	I saw the way things are done here and I ignored studies	10	28	17	22	23
28	I tried once or twice but just felt weak/lazy about the idea	8	40	14	23	15
29	Some people are cut out for doctorates but not me	15	30	27	10	18
30	Anyone can do a doctoral degree if they think it benefits	7	25	28	20	20

Statement 26. I thought of doing doctoral study but was not motivated.

Response. Whilst 39% (strongly disagreeing and 26% disagreeing) disagreed with the statement (suggesting that they were motivated), 10% did not know what happened to them. However, 51% (28% agreed and 23% strongly agreed) of the view that they have not been motivated, that is too high a percentage if institutions want to promote doctoral studies.

Statement 27. I saw the way things are done here and I ignored studies.

Response. Neutral is at 17% while those agreeing to having been discouraged by the “state of affairs” totals 45% (22% agreeing and 23% strongly agreeing), those that were

not impacted on negatively (disagreeing with the statement) total 38% (10% strongly disagreeing and 28% disagreeing).

Statement 28. I tried once or twice but just felt weak/lazy about the idea.

Response. Those in disagreement are 48% (strongly disagree and 40 disagree), this may mean many things, that they never tried once or they tried and are still on it. With neutral at 14%, the remainder of 38% (23% agreed and 15% strongly agreed) was in agreement with the statement, suggested that they may have abandoned the doctoral studies.

Statement 29. There are people who are cut out for doctorates but not me.

Response. The ambivalent at 27% do not know whether there are people cut out for doctorates or not, but 45% (15% strongly disagree and 30% disagree) disagree suggesting that there are no people specifically meant to do doctoral studies. A sizeable number of respondents (28%) actually feel that doctoral studies are not for everyone (10 agreed and 18 strongly agreed).

Statement 30. Anyone can do a doctorate if they think it benefits them.

Response. The responses do not allow for a generalisation with 28% indifferent, 40% believe that anyone can do the doctorate (20% each for agreeing and strongly agreeing) and 32% (7% strongly disagreeing and 25% disagreeing) do not think that everyone can do a doctorate.

		Strongly	Disagree	Neutral	Agree	Strongly
	SOCIAL FACTORS AGAINST GETTING A PhD	%	%	%	%	%
31	I do not see any material benefit to my life	23	38	13	8	18
32	Senior academics appear to be gatekeeping	10	28	12	28	22
33	It takes too long for one to prepare and complete a PhD	13	28	18	30	11
34	I am too old now to do a PhD which I will never use	17	37	18	23	5
35	Jobs can be scarce outside academic institutions	15	35	12	23	15

Table 8.7

Statement 31. I do not see any material benefit to my life.

Response. Those who disagree totalled 61% (23% strongly disagreed and 38% disagreed) allowing for a generalisation that the respondents know that there are material benefits to doing a doctorate. Neutral is at 13% and those who do not see the benefits are at 26%.

Statement 32. Senior academics appear to be gate keeping.

Response; There is a general feeling that senior academics do some gatekeeping as evidenced by 50% (28% agreeing and 22% strongly agreeing) agreeing with the statement. However, 38% disagree (don't see any gate keeping) and neutral is at 12%.

Statement 33. It takes too long for one to prepare and complete a Doctorate.

Response; There appears to be uncertainties about the time it takes to do a doctorate as seen in the split between the scores of those in disagreement (41%) and those in agreement (41%) with neutral at 18%.

Statement 34. I am too old to do a Doctorate which I will never use.

Response. Age as a measure of the attitude towards acquiring a doctorate had 18% not sure if they were too old to pursue a doctorate, 54% disagreed that they are now too old to pursue a doctorate (17% strongly disagreed and 37% disagreed) with 28% agreeing (23% agreed and 5% strongly agreeing) that they are too old now to study for a doctorate.

Statement 35. Jobs can be scarce outside academic institutions.

Response; Half of the respondents (50% = 15% strongly disagree and 35% disagree) believe that jobs for doctorates may not be as difficult outside academia, whilst 12% decided not to say, 38% (23% agreed and 15% strongly agreed) think the statement is true.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	DEMOTIVATORS FOR DOCTORAL DEGREES: I am demotivated	%	%	%	%	%
36	Senior managers without a doctorate at a university	13	25	20	27	15
37	Our immediate bosses with less education than we have	10	25	21	25	19
38	There is no clearly defined route of study and promotion	12	25	23	25	15
39	When I see administrators with masters not promoted	15	20	12	30	23
40	Manager without doctorates manage doctorates,	15	18	13	30	24

Table 8.8

Statement 36. Senior managers without a doctorate at a university

Response. I is assumed that education if it has value at all, should be seen in the recognition of academic performance in centres of education. Neutral is high at 20% and 38% total say that does not demotivate them to study further. Whereas a total of 42%

(27% agreeing and 15% strongly agreeing) feel that this is demotivated, see no reason for further studies.

Statement 37. Our immediate bosses with less education than ourselves

Response; Neutral remains high at 21% with those disagreeing at a total of 35% and those feeling demotivated at a total of 44%. It would not assist management to have such a percentage of demotivated employees as this may affect their performance too.

Statement 38. There is no clearly defined route of study and promotion

Response. The ambivalent are up at 23% suggesting more uncertainty, a total of 37% disagreed with the statement – they are not demotivated by this. Whereas 40% are affected since they see no benefits in studying further.

Statement 39. When I see administrators with masters not promoted.

Response. A total of 53% agree that when people advance their education, there is a need for a corresponding upliftment in the functions at work. Neutral is down to 12% with those disagreeing totalling 35%.

Statement 40. Manager without a doctorate manages people with doctorates,

Response. Those in disagreement (who are not demotivated) total 33% with 13% neutral, but the larger totalling 54% (30%agree and 24%strongly agree) are of the view that it is demotivating to have someone with a lower qualification than yours managing you

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	PROCESSES TO RECOGNIZE DOCTORAL DEGREES	%	%	%	%	%
41	Many PhD graduates are not recognized for their doctorates	10	28	20	17	25
42	No clear outline on promotion process for doctorates	5	22	17	31	25

43	People with masters working as administrators are common	3	8	15	41	33
44	The institution has no structure to motivate for PhD students	7	22	20	18	33
45	Most doctoral graduates leave soon after completing studies	8	10	21	33	28

Table.8.9

Statement 41. Many PhD graduates are not recognised for their doctorates

Response; A total of 42% agree (17%agree and 25%strongly agree) that doctoral qualifications are not rewarded with neutral slightly up at 20% with 38% disagreeing suggesting that there was nothing wrong about that practice.

Statement.42. No clear outline on promotion process for doctorates.

Response; The absence of a clear career path based on qualifications is a demotivating factor as indicated by a total of 56% agreeing with the statement. Neutral is at 17% with those disagreeing at a total of 27%.

Statement 43. People with masters working as administrators is common.

Response; Clearly the value of education has not been promoted, with a total of 74% agreeing that people with masters qualification still work as administrators, meanwhile there is a purported shortage of lecturers in the country. Only 11% disagreed with neutral at 15%.

Statement 44. The institution has no structure to motivate for Doctoral students.

Response. In all 51% agree that the structure makes no provision to motivate people to study for doctoral qualifications with neutral at 20%. The remainder of 29% total, disagrees that there is no structure to promote doctoral graduates.

Statement 45. Most doctoral graduates leave soon after completing studies.

Response. Neutral has gone up to 21% which is more than $\frac{1}{5}$ of the respondents, otherwise only 18% in total disagree that doctoral graduates leave, 61% in total agree that the system loses its doctoral graduates.

Table.8.10

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	DOCTORATE BY COURSEWORK, NOT BY RESEARCH	%	%	%	%	%
46	I am concerned if I have to study by research on my own	10	13	25	28	24
47	If the doctorate was by coursework, I could have done it	5	15	20	35	25
48	I did not study because I did not want to study by research	1	27	27	25	20
49	I just did not have good reason to study for that high degree	15	30	18	26	11
50	If I cannot study by research-I will never do a doctorate	17	30	15	23	15

Statement 46. I am concerned if I have to study by research on my own.

Response. The usual neutral have gone up to 25% ($\frac{1}{4}$) of the respondents, 52% seem to be concerned about studying alone, with 23% not afraid to study on their own.

Statement 47. If the doctorate was by coursework, I could have done it.

Response. Neutral is at 20% and those disagreeing total 20% leaving the 60% to those that agree that they could have done it by now if it was to be coursework.

Statement 48. I did not study because I don't want to study by research.

Response. Uncertainty is gone up to 27% with those agreeing totalling 28%, the remainder of 45% suggesting that they did not because they have to study by research.

Statement 49. I just did not have a good reason to study for that high degree.

Response; Neutral keeps fluctuating, at 18% in this part, 37% admit that they did not have a good reason to study, whereas 45% disagreed suggesting that they had a good reason not to study.

Statement 50. I cannot study by research- I will never do a doctorate.

Response. A total of 45% disagree suggesting they will study by research whereas 38% agree that they will not study by research with 15% indifferent.

Table.8.11

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	SATISFACTION WITH WHAT I HAVE ACHIEVED	%	%	%	%	%
51	I never really bothered going that high with my education	25	30	17	18	10
52	Doctorates are for those that may have the brains, not me	38	39	10	10	3
53	I decided to focus on educating my siblings and children	23	26	23	23	5
54	I am satisfied with my current education and conditions	30	35	15	20	0
55	I never expected to get this high, I have achieved my goals	24	38	5	23	10

Statement 51. I never really bothered going that high with my education.

Response. A total of 55% disagreed suggesting they aspired to proceed with their studies, 28% agreed with the statement suggesting that they were never keen on going higher than where they are now, 17% remained neutral.

Statement 52. Doctorates are for those that might have the brains not me.

Response. The majority of 77% combined disagreed suggesting anyone can do the doctorate degree, whilst 13% agreed with the statement and indifferent are at 10%.

Statement 53. I decided to focus on educating my siblings and children.

Response. Neutral is at 23% which is higher than $\frac{1}{5}$ of the respondents, however 49% disagreed with the statement with only 28% making reference to having focused on their family development (black tax).

Statement 54. I am satisfied with my current education and conditions.

Response; A majority of the respondents (65%) say they are not satisfied with their qualifications, and only 20% agreed that they were satisfied, with ambivalence at 15%.

Statement 55. I never expected to get this high, I have achieved my goals.

Response; Neutral is at an all time low of 5%, 33% agreed with the statement suggesting that they “had arrived” with a total of 62% disagreeing – suggesting that they wanted to study further

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	COMPLICATIONS OF STUDYING BY RESEARCH	%	%	%	%	%
56	Research is more time consuming than coursework	2	12	18	35	33
57	Difficult to do research and work at the same time	3	15	13	34	35
58	Not always enough time between student and the supervisor	0	25	30	27	18
59	Not always easy to find sources material for the research	12	32	15	23	18
60	On your own, you cannot be sure that you are on the correct path	10	25	20	25	20

Table.8.12

Statement 56. Research more time consuming than coursework.

Response There was a high acceptance of the statement at 68% agreed with only 14% disagreeing and 18% neutral. This suggests that there is a dislike for research.

Statement 57. Difficult to do research and work at the sometime.

Response. There is acknowledgement by 69% total agreeing to the difficult of working and studying, only 18% disagreed with ambivalence at 13%.

Statement 58. Not always enough time between student and the supervisor.

Response. Neutral has gone up to just under $\frac{1}{3}$ (30%), with a total of 25% disagreeing and 45% agreeing that there isn't enough time between supervisor and student.

Statement 59. Not always easy to find sources material for the research.

Response. Those not sure stood at 15% with those disagreeing at 44% close enough to those agreeing (41%) suggesting that it is difficult to excess literature and resources for research.

Statement 60. On your own you can't be sure that you are on the correct path.

Response. There is uncertainty about the situation at 20%, whilst 35% of disagree and think that they can proceed on their own with 45% think it will be difficult to "find the correct path" on their own.

		Strongly	Disagree	Neutral	Agree	Strongly
		%	%	%	%	%
61	I feel secure in the current position and do not need a PhD	20	32	15	28	5
62	No senior degree, but I am holding a senior position	28	31	18	15	8
63	Am well respected by both senior and junior colleagues-no PhD	17	33	20	23	7
64	With my low qualifications, I have already been promoted twice	25	32	18	15	10
65	I am a supervisor over more qualified personnel than myself	30	30	15	15	10

Table 8.13

Statement 61. I feel secured in the current position and not need a PhD.

Response. Those with sense of insecurity (disagreeing) were 52% with 33% feeling secured (agreeing with statement), and neutral is at 15%.

Statement 62. No senior degree but I am holding a senior post.

Response. A total of 59% say they do not hold a senior degree and they do not have senior positions, but 23% claim that though they do not have senior degrees, they have senior positions. Neutral is low at 18%.

Statement 63. Am well respected by both senior and junior colleagues-no PhD.

Response. Neutral is 20% with those in disagreement totalling 50% suggesting that they are not well respected, 30% total agreed with the statement suggesting that they are respected.

Statement 64. With my low qualifications, I have already been promoted twice.

Response. Some 57% total disagree with the statement that they have been promoted without a senior degree, only 25% have been promoted, neutral is at 18%.

Statement 65. I am a supervisor over people more qualified than myself.

Response; A total of 60% claim that they are not supervisors to people better qualified than them, with neutral 15% only 25% agree that they supervise people with better qualifications than theirs.

		Strongly	Disagree	Neutral	Agree	Strongly agree
	WORKLOAD STRUCTURE	%	%	%	%	%
66	I do not have ample time to study because of the workload	12	38	20	23	7
67	The workload is acceptable, but I am exhausted by the end of the day.	13	28	11	30	18
68	I do not have enough time to study, have other social commitments.	8	26	23	23	20
69	I have got too much admin work which takes up much study time	7	28	20	32	13
70	Too many subjects result in extended preparation	13	22	25	32	8

Table 8.14

Statement 66. I do not have ample time to study because of the workload.

Response. Half (50% total of strongly disagree and disagree) disagree that there isn't ample time to study because of workload, with 30% total giving work as an excuse for not studying, neutral is at 20%.

Statement 67. The workload is fine but I am exhausted by the end of the day.

Response Neutral has come down to 11% and 41% disagrees with the statement suggesting they are not too exhausted by end of day to study. However, 48% agree that they will be too tired to focus on their studies by end of day.

Statement 68. I do not have enough time to study, have other social commitments.

.Response. A total of 45% say they have a lot of admin work to do which takes in a lot of their time for study, 35% of the respondents indicate that admin is not a concern on this issue with 20% remain uncommitted.

Statement 70. Too many subjects result in extended preparation.

Response. Neutral went up to ¼ (25%) of the respondents, with 35% disagreeing the number of subject as a cause, but 40% agree or accepting this as a factor.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	INCENTIVE STRUCTURE	%	%	%	%	%
71	The salary differences between any two levels are minimal	2	7	33	35	23
72	There is a salary gap between MTech and DTech graduates	0	23	30	24	23

73	I will leave the university as soon as I get a better paying job	15	13	34	28	10
74	I got there by default because I never wanted to be in academia	10	28	27	15	20
75	No salary incentives for our type of qualifications, even a PhD	5	20	35	22	18

Table 8.15

Statement 71. The salary differences between any two levels is very little.

Response. One third (33%) of the respondents were indifferent with 58% agreeing indicating that the salary differences are small between the levels, 9% disagreed.

Statement 72. There is a salary gap between M. Tech and D. Tech graduates.

Response. The indifferent remain high at 30% with a total of 47% agreeing with 23% disagreeing with the statement.

Statement 73. I will leave the university as soon as I get a better job.

Response. The neutral is gone higher at 34% which is more than 1/3 of the respondents, whereas only 28% total disagree with 38% planning to leave if they get another job.

Statement 74. I got here by default because I never wanted to be in academia.

Response. There's a slight decline of ambivalence (27%) with 38% disagreeing suggesting they wanted to be in academia, but 35% agreeing that they can move anytime.

Statement 75. No salary incentives for our type of qualifications even a Doctorate.

Response. It would appear that levels of uncertainty have gone high again (35%) with 40% convinced that the incentives are not ideal for their qualifications and the Ph.D., but 40% think that the incentives are good enough.

		Strongly	Disagree	Neutral	Agree	Strongly agree
		%	%	%	%	%
76	No human support structure for people who want to study	5	22	20	30	23
77	There is support from the university for those keen to do a doctorate	10	15	27	28	20
78	No support from the institution for me to do my desired courses	5	20	27	30	18
79	The structure and workload disturbs one's focus	7	21	30	30	12
80	No mentors/coaches for those who want to advance to PhD	13	33	13	18	23

Table 8.16

Statement 76. No human support structure for people who want to study.

Response. Human structure would mean the supervisors and other individuals associated with the studies, those not sure are at 20%, 53% total think that there isn't adequate support whereas 25% think there is adequate support.

Statement 77. There's support from the University for those keen to do Doctorate.

Response. Indifference remains high at 27% with total of 48% agreeing that there is support with 25% disagreeing with the statement.

Statement 78. No support from the institution for me to do my desired courses.

Response. The institutions do not support the respondents on the specific courses they want to do (48%) in agreement, only 25% disagree indicating that there is support from the institution, with 27% as neutral.

Statement .79. The structure and workload disturbs one's focus.

Response. Neutral again high at 30% with 42% agreeing that the workload disturbs their focus but 28% disagreeing with the fact that workloads disturbs focus.

Statement 80. No mentors/coaches for those who want to advance to Doctorate.

Response. The total in disagreement is 44% indicating that there are mentors available for students, whereas 41% agree indicating that there are no mentors with 13% as neutral.

		Strongly	Disagree	Neutral	Agree	Strongly agree
	FINANCING STRUCTURE	%	%	%	%	%
81	There is enough financing for PhD studies for those who interested	23	25	24	15	13
82	There is no financial assistance for a PhD candidate-aspirants	7	28	28	20	17
83	The financing system requirements discourage advancement	20	20	20	22	18
84	It is difficult to get funding for studies even with the admission	8	20	17	25	30
85	The universities funds all PhD candidates with admission	20	24	30	18	8

Table 8.17

Statement 81. There is enough financing for Doctoral studies for those who are interested.

Response. It appears that there is little information, or at least few people have the correct information evidenced the fluctuation of the neutral, now at 24% and the split between those in agreement (28%) and those who disagree (48%).

Statement 82. There is no financial assistance for a Doctoral candidates aspirants.

Response. Those disagreeing or with knowledge that there is financial assistance for doctorates are at 35%, with neutral at a high of 28%, 37% believe that there is no financial assistance for doctoral studies.

Statement 83. The financing system requirements discourage advancement.

Response. The trend continues with no generalisation possible, suggesting that no information through workshops or otherwise is ever communicated to the prospective doctoral students. Neutral remains high at 20% with a total of 40% disagreeing with the statement suggesting that there is nothing discouraging about the financing system, meanwhile 38% agree that there is a problem with the financing system.

Statement 84. It is difficult to get funding for studies even with admission.

Response. The general belief is that it is difficult to get funding (total of 55% agreeing with statement) even for those with admission. Contrary to this, all university permanent employees are entitled to funding and there are numerous other bursaries, only 28% of the respondents appear to have the information, 17% were neutral.

Statement 85. The University funds all doctoral candidates with admission,

Response. Clearly the prospects are not informed as evidenced by the sudden increase of neutral to 30%, 44% disagreed suggesting that the university doesn't fund all doctoral studies, with 26% in agreement or knowledgeable about the funding.

		Strongly	Disagree	Neutral	Agree	Strongly agree
	REASONS WHY I WILL DO A PhD	%	%	%	%	%
86	I will do a doctorate even if there is no promise of promotion	2	5	7	53	33
87	Doing a doctorate is a milestone in my life- I must do it asap	5	13	7	35	40
88	No pressures can stop me from doing my doctorate	2	15	2	43	38
89	Not even age will stop me from being called a doctor one day.	13	13	23	23	28
90	Not even friends can stop me from doing a doctorate	13	12	23	22	30

Table 8.18

Statement 86. I will do a Doctorate even if there is no promise for promotion.

Response. It is not clear why these respondents have not embarked on their doctoral studies to date considering that 86% are prepared to do the qualification even if the promotion prospects are low. Neutral is low at 7% with another 7% saying that they will not do the qualification.

Statement 87. Doing a PhD is a milestone in my life- I must do it as soon as possible.

Response. There seems to be a willingness to do the doctoral studies amongst the respondents evidenced by the 75% agreeing with the statement (35% agree and 40% strongly agree). Neutral remains low at 7% with 18% disagreeing indicating that they are not interested in studying for the degree.

Statement 88. No pressures can stop me from doing my Doctorate degree,

Response. Seeming contradiction to the scores on workload and other responsibilities. The respondents show determination with 81% (43% agree and 38% strongly agree) suggesting that nothing can stop them from doing this qualification. Neutral has taken a deep and is at its lowest ever at 2% with 17% holding out that they may never want to do the degree.

Statement. 89 Not even age will stop me from doing my Doctorate

Response. Age appears to be a factor, with neutral rising up to 23% (2% in the previous) and 26% (13% disagreeing and 13% strongly disagreeing) of the view that age can be an impediment, resilience and determination is seen in the 51% willing to defy age as a reason why they may not study for the doctoral qualification.

Statement 90. Not even friends can stop me from doing a Doctorate.

Response. Too often the peers, friends and family are a factor in the decisions taken by individuals in their lives, 52% agree (22% agree and 30% strongly agree) think that friends are not an issue on this. This has dropped from the 75% and 81% previous scores, neutral has remained high at 23%, suggesting that some of the respondents are not sure if they cannot be dissuaded or persuaded by friends, 25% disagree with the statement suggesting they may soldier on and not consider friends.

N.B. The Likert scale extensively explored all aspects of the employee pertaining to the pursuance of the doctoral qualification by employees in an academic environment. As alluded to in the beginning, the premise on which this discussion is centred is that these people work in a university environment where getting educated is an expectation. There is equally a direct relationship between the level of doctoral qualifications and the level of development and entrepreneurship in a country (Du Toit et al, 2018:37-38). Doctoral degrees are therefore a must have for poor countries like South Africa that aspire to develop, this is why the government has put large amounts to fund research (Duncan, 2010:117-118). In the study, the Likert scale was divided into 18 subsections /

subheadings under which the statements were given for ranking on a scale of 1 to 5 as detailed above.

Of great concern was the high level of neutrality (20% - 38%) which does not allow for easy decision making, and in many instances making it difficult to make generalisations. Many assumptions have been made in the process, it is difficult to make the assumption as a finding for diverse reasons. The high levels of neutrality may signal, among other things;

Either genuine ignorance about the matters in question on the part of the respondents to these statements,

Deliberate effort not to say certain things for fear of victimisation since it was known who were the interviewees

These people may not have had any interest in the doctoral programmes and therefore never look for information

The structure of the university in relation to doctoral studies may not be user friendly and there may be no information centres.

The doctorate may not be a serious consideration for the university focusing on traditional diplomas and advanced diplomas.

A few of the statements were ranked or scored 50% and above, allowing for generalisations. Even in such instances the frequency of the neutrals is unacceptably high, a few of those at 50% and above are listed.

Funding for doctoral degrees is difficult to get – 53%

There is too much to be done in a doctorate and yet there are no corresponding salary / position benefits 50%

Senior graduates are under-employed in the country giving no incentive to study for the doctoral degree – 50%.

No guarantee of getting a job because you have a doctorate – 58% and only universities employ doctoral graduates – 51%

Those prepared to study if the degree will mean better life (salary and promotion) for them – 50% and yet 60% of them knew doctorates who were at level 8 (lectures) with masters' graduates as senior manager or senior lecturers.

A good 50% of the respondents had not seen any doctoral graduate promoted and another 50% witnessed the promotion of masters' graduates over doctorates.

Even though, but 50% still see the need to do a doctorate degree and yet 51% claim that they have not been motivated to study for that degree.

At least 50% of the respondents think that senior academics are gate keeping (blocking others from doing doctorates) and 54% think that they are now too old to study.

Half (50%) of the respondents think that getting a job outside academia may be possible but may be under-employed, 54% are demotivated to study because they see masters' graduates working as assistant administrators in the university system.

There's no clear career pathing or structures to promote people according to education (56%) with a majority of 74% claiming that education has never been given value in the system with administrators with masters' degree and doctorates managed by masters and sometimes lower.

With no structure to motivate for doctorate graduates (51%) there is an exodus from the university of people who have completed their doctoral studies at the university according to 61% of the respondents.

On the study process, 52% are concerned because research degrees mean that you study alone, 60% expressed that if the degree was by coursework, they could have completed their studies by now.

A total of 55% stated that they wanted to proceed to study for their doctorate, and 77% of them believe that anyone can study for that qualification and that it is not meant for specific people.

The majority of the respondents (65%) claim that they are not satisfied with their current qualification and wish to study higher and 62% say they have not achieved their study goals.

However, the majority (68%) believed that research is more time consuming than coursework and that working and studying is not easy (69%).

A combined 52% do not feel secured in their current position and education, with 59% of them not holding senior positions.

Only 50% feel respected by their peers in the positions they occupy and have not been promoted for a while (57%).

A total of 60% claim that they do not supervise / manage people with higher qualifications than themselves and claim that there may be ample time for them to study further (50%).

The salary differences between the levels were observed as being narrow (58%) and that there is inadequate support for doctoral studies (53%)

Regardless of the inadequacies of the policy and support system, 86% feel they still want to do the doctorate, with 75% of them considering it a milestone in their lives.

A total of 81% stated that nothing could stop them from doing the degree with 51% categorically positing that not even age can stop them.

Only 52% think that friends and family may be an issue to be considered in their decision to do the degree.

8.4. SECTION C – OPEN ENDED QUESTIONS

This section was intended to start a discussion, guided by the research objectives and research questions. It was expected that respondents had more information that they may not have been asked in the questionnaires. They were requested to list a few items under the “Requests” since they knew and understood the circumstances better. The reporting is done in ascending order with the most frequently stated statement at the bottom.

REQUEST 1; please give 5 reasons why people do not want to further their studies from your experience and interaction.

1	Not all master's degree holders qualify for the doctorate because there is a minimum percentage entry requirement.
2	Some people do not see themselves as doctoral material and are therefore reluctant / afraid to study further
3	The environment which / that people live in also encourages or discourages going for doctoral studies because no one else does
4	The understanding is that you study on your own and many people dread the idea of studying alone without a lecturer and exams to write
5	This qualification is seen as ideal for very intelligent people only, thus the average student, though they pass masters, they fear the doctorate
6	Very little information is provided on this doctoral qualification and we only get information in bits and pieces – discouraging
7	The few people who did the qualification took 6-7 years which is a life time – course is too long for an individual to study
8	We don't know anyone who did a doctorate and their life changed in terms of earnings or respect through promotion in the university
9	After studying so hard, yet you are managed by people with masters qualifications indicating that a doctorate is a waste of time.
10	We have people at level 8 with doctoral qualifications and level 6 [management] with basic degrees or masters – what's the use?

REQUEST 2; please state any 5 important things that would encourage you to pursue a doctoral degree

1	If the degree was done in class and students writing tests, examinations and assignments at the different stages until completion
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2	If they reduce the number of years that it takes to complete the degree from 6-8 years down to 3-4 years it would be motivating
3	If they stop frustrating doctoral graduates because all people who completed here left soon after, unhappy with the treatment
4	If all doctorates could be made senior lecturers (level 7), many doctorates are mere lecturers (level 8) paid less than the masters graduates even though both lecture
5	There should be tangible incentives and benefits for people who spend so much time and effort studying to pass the doctorate degree
6	We can't decide because it is never talked about and no promotion is undertaken to enable people to make decisions to study
7	If I had guaranteed salary increase commensurate with the status of a doctorate one would aspire for both dignity and benefits
8	If there was an automatic promotion distinguishing me from the others that would be worth sacrificing those many years
9	If all doctoral graduates were to be made senior to masters graduates in all aspects, I would register immediately for a doctorate degree

REQUEST 3; state 5 things that have discouraged you from doing a doctorate all these years of your service in academia

1	Mostly procrastination because nothing was pressing for me to study since there were no immediate benefits for studying
2	There was no reason not to study more than that there was no reason for me to study as I could not and still do not see the benefit
3	Mostly viewed the doctoral qualification as an honorary achievement as it never appeared to help in material value for me
4	Focused mostly on other piece jobs outside to supplement my income because the doctorate would never help me with money
5	It is not the in thing, very few people do this qualification because there are no rewards or benefits that are associated with it.
6	The university does not promote this because they are also aware that there are no direct benefits for hard work put in this.
7	We have heard people as deans and deputy vice chancellors made professors without doctoral qualifications, it a matter of luck.

8	The absence of a career path showing how the doctorate benefits and where you will end are my constant problem
9	Lack of information always resulted in postponement and procrastination with the eventual reluctance to do the doctorate
10	No one has ever justified or given a formidable reason to do it when I know master's graduates in the varsity who earn more than doctorates.

REQUEST 4; give at least 5 things you think could make you go for your doctoral study without delay.

1	Promote the doctoral program, if the senior management consider it important why don't they promote it to staff?
2	Tell us what is in a doctorate, which should be the focus areas and the intricacies involved in the doctoral programs
3	Regular training programs on doctoral studies with detailed information on expectation, funding, conferences and other related
4	Promotion and managerial responsibilities because of a higher qualification and acquisition of more knowledge
5	Salary increase showing me the benefit of studying for the doctoral degree instead of staying with a master's degree
6	Career-path, show me the development path and benefits for a doctoral qualification compared to staying with a master's degree
7	If the faculty advertised admission into doctoral programs like they do with other courses many people would plan to study
8	Demystify this doctoral programme by regularly conduction sessions end of the year and add value to it by rewarding the graduates.

REQUEST 5; List any 5 things / issues pertaining to this study that you think have been omitted or anything you want to share around this study.

1	The entry requirements for the doctoral qualification are not clearly specified and therefore difficult for a student to know if they qualify
2	Very few departments offer the qualification, we are constantly reminded that there is no space or your title is not relevant for the department
3	Introduce structured doctoral proposal writing workshops every year aligned to departmental requirements and help with study topic selection
4	If the doctorate was structured as a coursework including industry related subjects it would be more encouraging if people want to join industry
5	People with doctoral qualifications should be acknowledged through promotion and good salaries and associate professorships
6	The university should promote people according to academic qualifications if they want the qualifications to have value to the people.

N.B. Primarily the presumed failure of doctoral programmes is because of the absence of many factors. Chief among these would be visionary leadership that would foresee the impact of certain management behavioural patterns and the absence of structures that promote the programmes. It would appear that there is no specific plan put in place to promote and implement effective doctoral programmes for the employees. Consistently respondents state that there is no difference in earning capacity and positioning of doctoral graduates which would motivate other prospective students. Mention was made consistently of numerous people with doctoral qualifications who are always omitted for appointment into acting positions. These positions would groom these doctoral graduates into future leaders and therefore bring meaning to their qualification.

8.5. RECOMMENDATIONS

The study was extensive and exhaustive, not all suggestions made by the respondents can be recorded here. Suffice to say, the detailed findings point out to the errors and absence of visionary leadership consistently. The recommendations however can be summarised to the following;

1. People see better and understand better what they see and live with more than what is wished for – let the doctorate degree be given the respect it needs to have.
 - Graduates should get salary increases as a matter of policy,
 - Graduates should be moved to a higher level when they complete
 - Graduates should be assisted and be developed to professorship
2. Management should make up their mind if the doctorate degree is of any value and open to all
 - Advertise this doctoral programme regularly like with other universities
 - Workshop your employees regularly on the doctoral programmes
 - Use education as a measure of success and a *career-pathing* programme
 - Give your employees a reason to study for this degree instead of discouraging them

8.6. LIMITATIONS TO THE STUDY

The study primarily focused on employees from one university, a former *technikon* and this may not be a true reflection of other universities. It should also be accepted that most if not all of the managers in this university come from traditional universities, suggesting that this may apply to the other universities too.

8.7. RECOMMENDATIONS FOR FUTURE STUDY

It may be necessary for the future researchers to include more universities and involve all degree levels. It would be interesting to know why students will not proceed to a degree from the diploma, to a postgraduate qualification

(masters) after a degree, and eventually a doctorate. This may assist in planning for both government and universities and including other institutions of higher learning.

8.8. CONCLUSION

The study was an eye-opener to a great extent even though some of the issues were known but not highlighted as is now. It can be concluded that the failure to increase doctoral graduates has its preliminary factors in the early stages of student development. Largely however, it is a true reflection of the absence and inadequacies inherent in the university management system, this is vindicated by policy and practice. The absence of specific education related promotional packages immensely works against the promotion of postgraduate education in the university. Uncomfortable though this may be, but the management is to blame for the absence of policy and practice that recognizes academic achievement going up the ladder. The employment of individuals with lower qualifications over those with higher qualifications clearly says that education is not important. The presence of different levels within the academic space (lecturing) where people are recognized by relationship and not by performance is disturbing and discourages advancement. This ultimately does not benefit the country of much needed academic resource, merely because of the absence of effective leadership.

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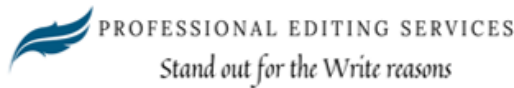
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APPENDICES

APPENDIX A: Certificate of Editing



Gerald T du Preez

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Certificate of Editing

This serves to confirm that copy-editing and proofreading services were rendered to

Tseliso Mario Leshoro

for a dissertation for Doctor of Technology entitled

A model for context-relevant approach to increase doctoral graduates output of a faculty of a university of technology in the Western Cape.

with final word count of 84 222 on 08 October 2021

I am a member of the Professional Editors' Guild (member number DUP015) and commit to the following codes of practice (among others):

- *I have completed the work independently and did not sub-contract it out*
- *I kept to the agreed deadlines and/or communicated changes within reasonable time frames*
- *I treated all work as confidential and maintained objectivity in editing*
- *I did not accept work that could be considered unlawful, dishonest or contrary to public interest*

I uphold the following editing standards:

- *proofreading for mechanical errors such as spelling, punctuation, grammar*
- *copy-editing that includes commenting on, but not correcting, structure, organisation and logical flow of content, formatting (headings, page numbers, table of contents, etc.), eliminating unnecessary repetition*
- *checking citation style is correct, punctuating as needed and flagging missing or incorrect references*
- *commenting on suspected plagiarism and missing sources*
- *returning the document with track changes for the author to accept*

I confirm that I have met the above standards of editing and professional ethical practice. The content of the work edited remains that of the student.

Gerald T du Preez, PhD

APPENDIX B

QUESTIONNAIRE

A model for context-relevant approach to increase doctoral graduates output of a faculty of a university of technology in the Western Cape.

This is an academic study and it is not compulsory for you to participate in this research. This is an academic study and it is not compulsory for you to participate in this research. Please do not put your name or any marking that can be used to identify you, your participation is strictly confidential and no authorities will be given access to this document. You are free to opt out of the research if you are not comfortable with anything, or, omit any parts that you may not be comfortable with. THANK YOU FOR PARTICIPATING.

SECTION A – BIOGRAPHY

How long have you been working for this institution?

0-5 years	6-10 years	11 – 15 years	16 plus years
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What is your current / highest qualification to date? Please indicate in one the boxes which one is relevant to you.

Honours' degree	Masters degree	M. Phil	Other -
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What is your current position in the institution? Please by marking in the relevant box to you.

Administrator	Lecturer	Senior lecturer	Other -
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4. Others, please specify.....

Did you attain any degree since you were employed at this institution – please indicate in the box below.

No I have not	Tried but discontinued	Currently studying	Completed
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Any issues you may want to discuss around your situation in the institution in terms of what you would have needed to develop your career further.

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SECTION B – This section is for the measurement of the perceptions, attitudes or beliefs that the respondents have, which are not quantifiable. The Likert scale therefore seeks to assist on a sliding scale of 1-5, 1 = strongly disagree, 2 = disagree, 3 =neutral, 4 = agree and 5 = strongly agree. Please make use of the “Likert scale” provided below to enable us to understand.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
STRUCTURAL IMPEDIMENTS FOR POSTGRADUATE STUDIES	0	0	0	0	0
Funding for doctoral degrees is not easily available	1	2	3	4	5
Requirements for doing a doctorate are generally too high	1	2	3	4	5
It is difficult to find a doctorate degree of one's choice	1	2	3	4	5
I can't do a doctorate because there are no supervisors	1	2	3	4	5
Universities don't show need for doctoral degrees	1	2	3	4	5
INCENTIVES TO STUDY FOR THE DOCTORAL DEGREE	0	0	0	0	0

Doctoral graduates earn the same salaries with masters	1	2	3	4	5
Too much work to study but there are no good rewards	1	2	3	4	5
You are not better in anywhere with a doctoral degree	1	2	3	4	5
Varsities don't make it worth to pursue doctoral degrees	1	2	3	4	5
The industry is not looking for doctoral qualifications	1	2	3	4	5
JOB OPPORTUNITIES-DOCTORAL QUALIFICATIONS	0	0	0	0	0
Many senior graduates are under employed in RSA	1	2	3	4	5
There is no job guarantee because one has a doctorate	1	2	3	4	5
I don't know a single doctoral graduate out of employment	1	2	3	4	5
Universities are the only places that employ doctorates	1	2	3	4	5
I don't want to be an academic - no need for a doctorate	1	2	3	4	5
FAMILY RESPONSIBILITIES DISTRUCT FROM STUDYING	0	0	0	0	0
I don't have the time to focus on studies because of family	1	2	3	4	5
I don't know anyone with a doctorate and well to do family	1	2	3	4	5
It's just an honorary qualification with no family benefit	1	2	3	4	5
Education has never being important in my family circles.	1	2	3	4	5
I will study if that will give me more money for my family	1	2	3	4	5
PROMOTIONS FOR DOCTORAL GRADUATES	0	0	0	0	0
Colleagues who did doctorates are still level 8 lecturers	1	2	3	4	5
No one who did a doctorate here was ever promoted	1	2	3	4	5
There are non-doctorate graduates managing doctorates	1	2	3	4	5
I know doctorates 5 years after completing and same level	1	2	3	4	5
There's no benefit for anyone to do a doctorate here	1	2	3	4	5

FACTORS FOR OR AGAINST	0	0	0	0	0
I thought of doing a doctoral study but was not motivated	1	2	3	4	5
I saw the way things are done here and I ignored studies	1	2	3	4	5
I tried once or twice but just felt weak/lazy about the idea	1	2	3	4	5
There are people who are cut out for doctorates not me	1	2	3	4	5
Anyone can do a doctoral degree if they think it benefits	1	2	3	4	5
PROMOTIONAL PROCESSES TO MOTIVATE	0	0	0	0	0
The dean is always talking about us doing doctorates	1	2	3	4	5
Is there guarantee for promotion with a doctorate?	1	2	3	4	5
How does the process of promotion take place?	1	2	3	4	5
Does promotion come with long service and qualifications.	1	2	3	4	5
DEMOTIVATORS FOR DOCTORAL DEGREES; I AM DEMOTIVATED;	0	0	0	0	0
When I have a Vice Chancellor without a doctorate	1	2	3	4	5
When I have a Deputy VC without a doctorate	1	2	3	4	5
When I have a faculty dean without a doctorate	1	2	3	4	5
When I have an Head of Department without a doctorate	1	2	3	4	5
When a manager without a doctorate manages people with doctorates	1	2	3	4	5
When matriculants are at the same level with doctorates	1	2	3	4	5
PROCESSES TO RECOGNISE DOCTORAL DEGREES	0	0	0	0	0
Many doctorates are not recognized and frustrated	1	2	3	4	5
No clear outline on promotion processes for doctorates	1	2	3	4	5
People with masters working as administrators is common	1	2	3	4	5
Poor attention to doctoral aspirants demotivates people	1	2	3	4	5
Most doctoral graduates leave soon after completing	1	2	3	4	5

DOCTORATE BY COURSEWORK NOT BY RESEARCH	0	0	0	0	0
I am concerned if I have to study by research on my own	1	2	3	4	5
If the doctorate was by coursework I could have done it	1	2	3	4	5
I did not study because I don't want to study by research	1	2	3	4	5
I just didn't have good reason to study for that high degree	1	2	3	4	5
If I cannot study by research - I will never do a doctoral study	1	2	3	4	5
SATISFACTION WITH WHAT I HAVE ACHIEVED	0	0	0	0	0
I never really bothered going that high with my education	1	2	3	4	5
Doctorates are for those that may have the brains not me	1	2	3	4	5
I decided to focus on educating my siblings and children	1	2	3	4	5
I am satisfied with my current education and conditions	1	2	3	4	5
I never expected to get this high, I have achieved my goals	1	2	3	4	5
COMPLICATIONS OF STUDYING BY RESEARCH	0	0	0	0	0
Research more time consuming than coursework	1	2	3	4	5
Difficult to research and work at the same time	1	2	3	4	5
Not always enough time between the student and the supervisor	1	2	3	4	5
Not always easy to find material for the research	1	2	3	4	5
Not always sure that you are on the correct path or not	1	2	3	4	5
SATISFACTION WITH CURRENT JOB STATUS	0	0	0	0	0
Feel well secured with the current position and do not need a PhD	1	2	3	4	5
No senior degree but I am holding a senior position	1	2	3	4	5
Command respect from both senior and junior colleagues- no PhD	1	2	3	4	5

With my low qualifications, have already being promoted twice	1	2	3	4	5
I am a supervisor over more qualified personnel than my self	1	2	3	4	5
WORKLOAD STRUCTURE	0	0	0	0	0
I do not have ample time to study because of the workload	1	2	3	4	5
The workload is fine but I am exhausted by the end of the day	1	2	3	4	5
There is enough study time but I have other family issues	1	2	3	4	5
I have got too much admin work which takes up my time	1	2	3	4	5
Too many subjects result in extended preparation time	1	2	3	4	5
INCENTIVES STRUCTURE	0	0	0	0	0
The salary differences between any two levels is very little	1	2	3	4	5
The salary differences between any two levels is very significant.	1	2	3	4	5
I will leave lecturing as soon as I get another job	1	2	3	4	5
There are no promotion opportunities in lecturing	1	2	3	4	5
No salary incentives for our type of qualifications	1	2	3	4	5
Less qualified people manage highly qualified people	1	2	3	4	5
SUPPORT STRUCTURE	0	0	0	0	0
No human support structure for people who want to study	1	2	3	4	5
Ample support for those keen to study further	1	2	3	4	5
The institutions don't offer my desired courses	1	2	3	4	5
The management structure disturbs focus for studies	1	2	3	4	5
No mentors and coaches for those who want to advance	1	2	3	4	5
FINANCING STRUCTURE	0	0	0	0	0
There is enough financing for studies for those interested	1	2	3	4	5

There is no financial assistance for further studies for us	1	2	3	4	5
The financing system discourages self-advancement	1	2	3	4	5
It's difficult to get funding for studies for studies anywhere	1	2	3	4	5
Getting funding for postgraduate study is cumbersome	1	2	3	4	5

SECTION C: OPEN-ENDED QUESTIONS

This section was deliberately intended to start a discussion, guided by the study at hand, research objectives and research questions. Respondents will be asked / requested to list items as they understand emanating from the previous questions in the questionnaire.

REQUEST 1 Please give 5 reasons why people do not want to further their studies – from your experience and interaction.

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REQUEST 2; Please state any 5 important things that would have encouraged you to pursue a doctoral degree

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REQUEST 3; what in your opinion is the benefit for anyone to study for the doctoral degree – please list 5 items;

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REQUEST 4; think of at least 5 things you think if they were put in place – more people would want to study upto doctoral level.

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REQUEST 5; Are there any issues pertaining to this study that you think have been omitted or anything you want to share around this study. Please list 5 only;

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THANK YOU FOR PARTICIPATING – YOUR CONFIDENTIALITY IS GUARANTEED

APPENDIX C: PLAGIARISM REPORT

A Model For Context Relevant Approach To Increase Doctoral Graduates Output Of A Faculty Of A University Of Technology In The Western Cape .

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APPENDIX D: ETHICS CERTIFICATE



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Symphony Road Bellville 7535

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The Faculty's Research Ethics Committee (FREC) on **20 October 2020**, ethics **Approval** was granted to **Tseliso Mario Leshoro (218046588)** for a research activity **Doctor of Public Administration** at Cape Peninsula University of Technology.

Title of dissertation/thesis/project:	A model for context relevant approach to increase doctoral graduates output of a faculty of a UOT in the Western Cape Lead Supervisor (s): Dr L Jowah / Prof P Green
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Comments:

Decision: APPROVED

 Signed: Chairperson: Research Ethics Committee	9 December 2020 Date
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