

POSTGRADUATE DIPLOMA IN HIGHER EDUCATION

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**Assessing the Effectiveness of Tutorial Interventions on Student Academic Performance
for Undergraduates in the Department of Public Administration at a University of
Technology.**

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Declaration

I, Mashango Phillemon Sithole, declare that this dissertation hereby submitted by me for the degree Postgraduate Diploma in Higher Education at the IIE is my original work, has not been submitted previously at the University and to any other institution of higher education and that all sources used have been acknowledged by means of complete references.

Mashango Phillemon Sithole

Date**Dedication**

This study is dedicated to my late friend, Monsley Galane. When I started this course and this research in particular, she took upon herself to monitor my progress every single week. She unfortunately passed away before she could witness the product of the hard work that she had always supported. May her soul rest in eternal peace.

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The mentorship and guidance of my supervisor, Mr Mnisi, is hereby acknowledge and appreciated. His wisdom was invaluable through this study and made the journey less difficult.

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Dr P. R. Gumede's words of encouragement and unselfish motivation served as a fuel when motivation was low during the course of this study.

Abstract

The purpose of the study was to assess the effectiveness of tutorial interventions on student academic performance for undergraduates in the department of public administration at a university of technology. Student academic performance at higher education institutions is one of the major indicators of progress and barometer of success from a teaching and learning perspective. Studies show that institutions of higher learning in South Africa face challenges with regard to undergraduate pass rates, retention rates, throughput rates and graduation rates are well documented in research (Penprase, 2018; McKay, 2016; Badat, 2010; Bhorat *et al*, 2010). Studies by McKay (2016) and (Badat, 2010) show that first year students in particular are at a greater risk; two in three first year students fail at least one module during their first year of study at university. Penprase (2018), McKay (2016) and Badat (2010) have underscored that undergraduate students, particularly first and second year students, find the content challenging. The study was befitting in this regard to assess the effectiveness of tutorial intervention as a mitigation mechanism to ameliorate some of these challenges, particularly addressing low undergraduate pass rates.

To achieve the objectives of the study, a quantitative research approach was adopted. Quantitative research approach was befitting for the study as the study was interested in the relationship between various construct represented in the conceptual model. The study adopted a causation and association in data analysis, which is more suitable in explaining the relationship between constructs and variables. The data was collected from 120 students and 61 tutors through questionnaires. To test the reliability of the research instrument, Cronbach's Alpha test was conducted for tutor questionnaire which yielded alpha coefficient of $\alpha = 0.812$. For the construct of student questionnaire shows $\alpha = 0.804$, meaning that the adequate reliability was achieved. The data was analysed using SPSS where a Pearson's correlation coefficient and *P* values were used to assess the strength of the relationships between constructs.

The findings of the study suggest a strong support the hypothesis that there is a significant positive relationship between tutorial interventions and student academic performance. Results also suggest a strong support the hypothesis that there is a significant and positive relationship between support for tutors and tutor performance. The last hypothesis was not supported by empirical evidence as data failed

to reject the null hypothesis and thus the hypothesis that there is a significant and positive relationship between tutor performance and student academic performance was rejected.

1. CHAPTER ONE: INTRODUCTION

1.1 Introduction

Chapter one outline the general introduction of the study, the background of the study, the aim and objectives of the study, the research problem as well as the research questions thereof. The chapter also provides the significances and the format followed in conducting this study, as well as the synopsis for research methods adopted in conducting the study.

1.2 Background

Student academic performance at higher education institutions is one of the major indicators of progress and barometer of success from a teaching and learning perspective. Typically, students are expected to pass all their modules in order to successfully fulfil the requirements of an academic programme and graduate. The progress of students from one level to another-first year to second year, second year third and final year- is therefore paramount. However, if students fail modules along the way, the risk is that they may not be able to successfully complete the academic programmes or qualifications within record time, that is completing a three-year qualification within three years. This has a negative impact on the institutions rates, throughput rates as well as graduation rates. It is therefore imperative from both praxis and research perspective to engage in the discourse regarding some of the challenges and strategies implemented by universities to provide support for students in this regard.

The challenges facing higher education institutions in South Africa with regard to undergraduate pass rates, retention rates, throughput rates and graduation rates are well documented in research (Penprase, 2018; McKay, 2016; Badat, 2010; Bhorat *et al*, 2010). This often translates to high drop-out rates, students failing modules and students failing to complete qualifications within minimum time (Penprase, 2018). Some of the factors that contribute to these challenges include that students are often underprepared from high school education and find it difficult to transition into the academically demanding environment at higher education (Badat, 2010). For instance, McKay (2016) and (Badat, 2010) researched that first year

students in particular are at a greater risk; two in three first year students fail at least one module during their first year of study at university. Furthermore, scholars such as Penprase (2018), McKay (2016) and Badat (2010) have underscored that undergraduate students, particularly first and second year students, find the content challenging. They also have a propensity risk to dropping out, and as such the Department of Higher Education and Training (DHET) as well as universities have come up with strategies to support students in this regard.

Universities have thus implemented tutorial programmes to provide support for undergraduate students in an effort to address the challenges alluded above. According to Baleni *et al* (2016), tutorial interventions in higher education provide students with extra academic support with regard to the subject matter. The authors hypothesise that sometimes academic tutor programmes produce positive results, as they enable students to get extra assistance from which they can fall back on when there is academic gap. This implies that tutorial interventions can be used to assist students who fall behind their academic work and students who are performing poorly in order to improve their marks. Baleni *et al* (2016) and Gammon (2005) explain that tutorials give students the opportunity to discuss about the subject matter covered in lectures, with the help of tutors who are more knowledgeable and more proficient in the subject matter. Furthermore, tutorials can enhance student's confidence and enable them to cope with the high demands of higher education more effectively (Horn *et al*, 2009).

In practice, the selected university has implemented tutorial interventions aimed at providing undergraduate students with academic support. To this effect, an internal focus group baseline study conducted by the university's teaching centre in 2019 revealed that one of the challenges that students have raised was the disturbing tendency by tutors to miss their sessions, and that some did not necessarily have the required skills to deliver content. This then raises the question of how do these challenges bear on the academic success of the students? This is vital, considering that students are the beneficiaries of the programme and tutors are the implementing agents of the programme. The baseline study and empirical studies (McKay, 2016; Boleni *et al*, 2016; Hof, 2014), are scant on the multiple dimension approach to understanding the effects of tutorial intervention on student academic performance. Therefore, this study is different in that it adopts a holistic approach by including both students and tutors in assessing the effectiveness of the tutorial interventions on student academic performance.

1.3 Rationale

The primary motivation for undertaking this study is to contribute, through empirical investigation, to the understanding of the relationship between tutorial interventions and student academic performance at

undergraduate level. It is pertinent to have some diverse scholarly contributions to the discourse of tutorial interventions and student academic performance in order to have an enriched understanding of the relationship between these two concepts at practical level. This should assist to understand the factors that have impact on the effectiveness of tutorial interventions on student academic performance. The point of departure for any scholarly engagement is often literature, thus this study endeavors to make a contribution to filling the identified gap as elucidated in the background.

1.4 Problem Statement

Horn *et al* (2009) and Karan (1996) underscore that tutorials have a positive impact on the academic performance of students as they encourage a collaborative approach to learning and assist students to become independent learners as well. Independent learning is a well-documented concept in education (Pather *et al*, 2017). Utilising tutors to provide support and feedback improves the performance of students who might be performing poorly academically. This undergirds the rationale behind the implementation of tutorial programmes at institutions of higher learning, especially with South African institutions confronted with student support challenges (Penprase, 2018; Bhorat *et al*, 2010). These are manifested in low success rates, low retention rates and low graduation rates (Pather *et al*, 2017). The synthesis between the effectiveness of tutorials (Horn *et al*, 2009; Karan, 1996) and the challenges of higher education (Pather *et al*, 2017; Penprase, 2018; Bhorat *et al*, 2010) show that it was necessary for the institution to have tutorial interventions as part of students support to improve academic performance. Thus, it is befitting that the effectiveness of these tutorial interventions be investigated, with a view to determine the factors contribute to the effectiveness of the interventions or hinder the effectiveness of interventions.

The objective of the tutorial programme at the selected university is to assist students in reaching their academic potential providing support through tutorial intervention which assist students with their academic work, promote active learning and independent learning and create an environment conducive for engaged learning (Tutor Manual, 2020). The end goal of this that students should ultimately improve their academic performance, based on the assumption that when students work with tutors they tend to perform well academically (Horn *et al*, 2009; Karan, 1996).

The crux of the problem that the study seeks to investigate is whether the implementation of tutorial interventions at the institution under the scope of the study is effective in improving student academic performance for undergraduates. The unit of analysis in this regard is undergraduates in one academic department. To investigate this, the study incorporates two perspectives; the student perspective and

tutor perspectives. The latter is vital as in getting a holistic insight as research (Pather *et al*, 2017) shows that the effectiveness of tutorial interventions can be affected by numerous factors, including tutor training and tutor support. This approach will allow the study to look at the problem from student perspective and tutor perspective in order to determine relationship between tutorial interventions and student academic performance. Also, as well as the factors that may have an impact on the effectiveness of the tutorial interventions at the institution from dual perspectives.

1.5 Research questions

According to Betram and Christiansen (2014), a research question provides operational direction for research and often serves as a point of departure for a scientific investigation. The question should emanate from the problem statement. Deducing from the problem statement, the following central research was constructed;

What are the effects of tutorial interventions on student academic performance?

The following sub-questions are formulated to provide further and more narrow focused direction;

- What is the relationship between tutorial interventions and student academic performance?
- What are the effects of tutor training and support for tutors on the performance of tutors when conducting tutorial sessions?
- What is the relationship between tutor performance and student academic performance outcomes?

1.6 Research objectives

Saunders *et al* (2012) postulate that research objectives gives a clear direction and purpose of what the study seeks to achieve. Pursuant to the research problem statement elucidated above, the following research objectives were deduced;

Objective 1: To determine the relationship between tutorial interventions and student academic performance.

Objective 2: To determine the effects of support for tutors on the performance of tutors when conducting tutorial sessions.

Objective 3: To determine relationship between tutor performance and student academic performance outcomes

1.7 Hypotheses

De Vos *et al* (2011) describe a hypothesis as an informed guess about the relationship between variables. Along similar lines of description, Betram and Christiansen (2014) consider hypothesis as a tentative statement about the relationship between variables that be proven through empirical evidence to ether be true or otherwise. As this study will be quantitative, the following hypotheses were developed and illustrated in figure 1;

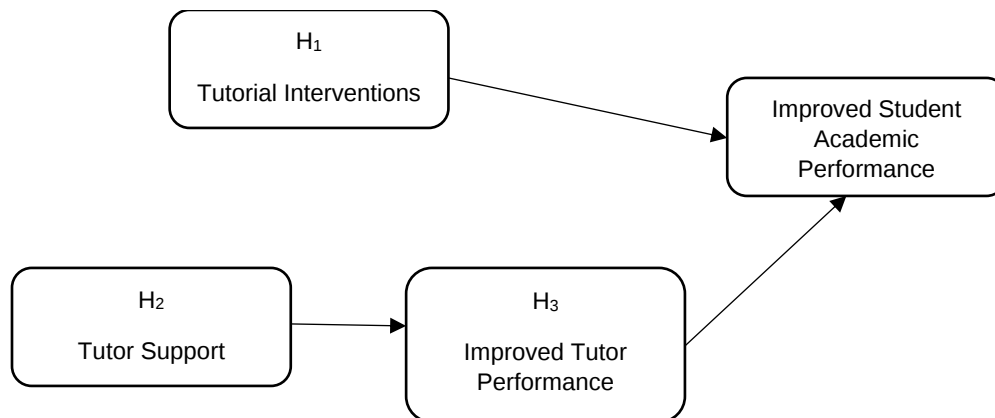
H₁: There is a significant positive relationship between tutorial interventions and student academic performance.

H₂: Support for tutors has a positive effect on the performance of tutors when conducting tutorial sessions.

H₃: There is a positive and significant relationship between tutor performance and student academic performance outcomes

Figure 1 below depicts the hypothesis model of the study, which three interrelated concepts that illustrate the relationship between variables. These concepts are tutorial interventions, tutor support and improved tutor performance, all of which are hypothesised to have a bearing on the student academic performance.

Figure 1.1: Hypotheses Model



1.8 Research methods

The study adopted a quantitative research approach. Bryman, 2012:35, De Vos *et al*, (2011) and Burns & Grove (2007:17) postulate that quantitative research method inherently involves quantities and quantifiable properties. Quantitative research primarily encompasses data collection and data analysis

procedures that generate or use numerical data (De Vos *et al*, 2011). In the area of social sciences, Bryman (2012:35) and De Vos *et al* (2011) postulate that quantitative research is predominantly concerned with testing a theory composed of variables. Quantitative research approach was befitting for the study as the study was interested in the relationship between various construct represented in the conceptual model. The data was collected through questionnaires and analysed using Statistical Package for the Social Sciences (SPSS) software.

1.9 Purpose of the study

This purpose of the study was to empirically assess the effectiveness of tutorial interventions on student academic performance on undergraduates at the selected university of technology. This should assist to determine the relationship between tutorial interventions and student academic performance as well as the relationship between tutor support and tutor performance.

1.10 Ethical considerations

Ethical standards are a *sine quo non* both in research, both in social sciences and natural sciences. This study followed the ethical guidelines espoused by Betram and Christiansen (2014), which require that the ethical principles should be upheld at all times when conducting research. A letter of permission to conduct the study (Annexure A) was obtained from the selected institution before data can be collected. The key ethical principles will be adhered as follows;

- Respondents were provided with information sheet (Annexure B) explaining the purpose of the study, what they are expected to do, their rights and that they can withdraw from participating at any time, as well as assurance for anonymity
- Respondents were given informed consent forms to sign before they can participate in the study. As the form was provided online, participants were given an option to “agree” to participate in the study and to “not agree”. If participant selected “not agree”, they were not permitted to continue with the questionnaire. Privacy and concealment of participant’s identities was ensured by not requiring participants to write their names.
- The results are a true reflection of primary and secondary data.

1.11 Contribution of the study

The contribution of the study is twofold; firstly, this research hopes to practically benefit practitioners involved in tutorial programmes at institutions of higher learning. Secondly, the will contribute to an in-

depth understanding of whether tutorials are effective as an academic student support mechanism in improving the academic performance of students.

1.12 Conclusion

Chapter one explained the setting and provided the contextual background of the study. The chapter described the aim, objectives of the study, the research problem and research questions. The next chapter deals with the review of literature related to tutorial interventions in higher education.

2. CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Literature review is an integral part of any research project. Babbie and Mouton (2012) mentions that literature review entails extensive reference to previous studies related to the topic under investigation. According to Betram and Christiansen (2014), the review of literature comprises of an explicit, and systematic methods for the identification, evaluation and synthesis of the existing body of knowledge contained in previous studies. Literatures review help the researcher to understand the topic better, and most importantly, to avoid duplication of the existing works and to identify gaps in literature, as well as the potential scholarly contributions of the study.

2.2 Conceptualisation

A tutor is considered to be a senior student who has completed a postgraduate degree (Baleni, Malatji & Wadesango, 2016) appointed by an institution to facilitate tutorials. Tutors should have performed well academically in their undergraduate and postgraduate modules (Baleni *et al*, 2016), especially in the modules that they are appointed to tutor and should have in-depth knowledge of the subject matter, and be able to assist students to understand the content (McKay, 2016). A tutor should help students to adjust to the demands of the university environment and guide them to become independent learners and help students to better understand the subject matter. Additionally, tutors assist students academically, individually and in small groups (McKay, 2016) and therefore students should be proactive as well. In terms of supervision, tutors are under the tutelage of module lecturers, who guide and allocate tasks to them.

McKay (2016) posit that there are numerous types of tutoring; one on one tutoring; peer tutoring; group tutoring; online tutoring; and cross age tutoring. For the purpose of this study, the tutorial system focused on entails small groups and one on one (individual) tutorials facilitated by a tutors with the objective of

complementing the lecturer, assisting students to understand the subject matter and adjust to the course. These type of tutorials provide a personalised experience for students unlike in big groups in class.

2.3 Theoretical foundation

The study is conducted within the area of education, and thus the theoretical underpinning of the study is rooted in the field of education. For a theoretical grounding, Vygotsky's (1997) theories of learning will be applied in the study. Vygotsky's (1997) proposition is that learning can occur through social interaction between the student and a tutor. There are two underlying principles in this regard: more knowledgeable other (MKO) and zone of proximal development (ZPD). MKO denotes to the senior postgraduate student with an in-depth knowledge of the subject matter compared to the student. In this case, MKO refers to the tutor, who channels a collaborative dialogue with the student about the subject matter. On the other hand, Vygotsky identifies ZPD as "an area where the learner develops higher mental functions through tutor's instructions and guidance". What this means is that poor performing student progress with assistance from tutors and help students to develop useful problem solving skills. Ultimately, the students become an independent learner and able to progress on their own once they have adjusted. This theory views student interaction with tutors as an effective way of enhancing vital skills and learning strategies for students who are struggling academically. Vygotsky's theory is relevant in this study because at the institution, tutors are appointed to provide support for students and are considered to be having more subject matter knowledge than their tutees.

2.4 Academic Challenges Facing Higher Education

The challenges facing higher education in South Africa are highlighted in studies conducted by Penprase (2018), McKay (2016), Badat, (2010) and Bhorat et al (2010). These studies indicate that low pass rates for first year students is one of the major challenges facing South African universities. Studies conducted by McKay (2016) and Badat (2010) found that two in three first year students fail at least one module during their first year of study at university. Under preparedness is cited as one of the major reasons first year students fail modules in higher education (Penprase, 2018; McKay, 2016; Badat, 2010; Bhorat et al, 2010), with huge gaps of academic demands between high school and higher education. McKay (2016) explain that some of the reasons for the poor performance for first years include that there is often a mismatch between the language of teaching and learning at universities, and the home languages of these students. The author also attributes the poor performance to the lack of "sociocultural skills and knowledge (like academic literacy) required for success in higher education" and poor self-management skills such as time

management and poor study habits. Moreover, universities grapple with low retention rates, low success rates and low graduation rates (Pather *et al*, 2017). The question therefore is how do higher education institutions support students in this predicament? Amongst other interventions, tutorial programmes are put into place to support undergraduate students to enhance their academic performance.

2.5 Tutorship as a Mitigating Mechanism in Higher Education

According to Baleni *et al* (2016) tutorial interventions in higher education provide students with extra academic support with regard to the subject matter. The authors hypothesise that sometimes academic tutor programmes produce positive results, as they enable students to get extra assistance from which they can fall back on when there is academic gap. This implies that tutorial interventions can be used to assist students who fall behind their academic work and students who are performing poorly in order to improve their marks. Baleni *et al* (2016) and Gammon (2005) avow that tutorials give students the opportunity to discuss about the subject matter covered in lectures, with the help of tutors who are more knowledgeable and more proficient in the subject matter. Furthermore, tutorials can enhance student's confidence and enable them to cope with the high demands of higher education more effectively (Horn *et al*, 2009).

Baleni *et al* (2016), Horn *et al* (2009) and (Mckay, 2013) advance that in higher education, first year students are often underprepared as they transition from high school to the higher education environment. This is often due to poor high school background (Baleni *et al*, 2016), which means that first year students in particular often need support for them to be able to cope with the academic demands of university. One of the objectives of tutorial programmes in this regard is to assist first year students to transition into higher education smoothly through the provision of tutorial interventions (Horn *et al*, 2009; McKay, 2013). Support does not end at first year, undergraduates at all levels are also provided with support through tutorial interventions (Penprase, 2018; Bhorat *et al*, 2010).

2.6 Benefits of tutorials

The institution's Tutor Manual (2020) states that there are benefits associated with tutorials for both students and tutors. For tutors, they can develop higher order thinking, improve subject matter knowledge and general knowledge, improved ability to manage their own learning and study strategies, as well as motivation to learn more. Furthermore, students can reflect on their own attitudes towards a particular module and adjust in order to assist students. For tutors, tutorials offer them an opportunity to supplement what was covered in the lecture, gain more understanding on various topics, improve their

academic performance and also improve their independent learning. The interactive nature of tutorials also assist students to prepare for tests, exams and assignments (Tutor Manual, 2020). This implies that there are explicit benefits are attached to tutorials in the context of the selected institution, including improved academic performance for students.

2.7 Tutorship and student academic performance

Literature concurs with the notion that there is a positive relationship between tutorial interventions and student academic support (Mckay, 2016; Boleni et al, 2016; Hof, 2014). These researchers found that tutorial interventions improved scores and results as students acquiring diverse studying strategies which were more effective. Hof (2014) and McKay (2016) assert that as a result of tutorial interventions for first year students, the failure rate decreased considerably as the tutorials helped to bridge the gap when students did not understand the concepts in normal lectures they were able to fall back on tutorials. This implies that tutorial interventions provide a significant value proposition for both students and the institution battling with low pass rates and at risk students. McKay (2016) emphasises that tutorials are typically structured to provide student with an avenue to bridge the gap after lectures, which explains the rationale why tutorials are normally preceded by lectures.

Horn *et al* (2009) and McKay (2016) postulate that tutorials encourage collaborative learning; thus students can engage the subject matter in small groups which enriches learning. Consequently, students can perform better academically and underscores the necessity of tutorials as a means of academic support. From the tutor's perspective, research conducted by Ashwin (2006: 656) reveals that tutorial interventions "helped to facilitate the students' understanding of concepts as well as develop and define new positions on the topic". This denotes that tutors assist students to develop critical thinking and understand concepts for deep learning, which is vital to ensuring improved academic performance.

2.8 Tutor Training

Tutor support, mostly in the form of training and continuous feedback, is vital for carrying out their duties. The significance of tutor training is underscored by Staub and Hunt (1993). In their study, the authors used two control groups and concluded that "trained tutors had a significantly higher success with students than a control group of tutors who were not trained". A recent study by Faroa (2017:6) shows that "tutors seem to exhibit a generally positive attitude toward training as well as recognise the need for training". Studies attest that continuous training and support for tutors is critical to the development of tutors, and ultimately enhancing their performance (Layton, 2013). Given the role that tutors espoused by McKay (2016) and Boleni et al (2016), Bennett and Marsh (2002) argue that continuous training is therefore

essential for tutors. The authors recommend that tutor training should have conducted throughout the academic semester.

According to Bennett and Marsh (2002), “training topics include: contextual issues, academic skills such as writing, psychosocial topics such diversity, social and personal well-being, train the trainer (which includes tutor and student learning strategies) and e-tools (ICT training)” (page 15). This infers that the training exposes tutors to different aspects of their roles, and lead to the development of high quality tutors who are able to facilitate quality student engagement. Typically, tutor training exposes tutors to different pedagogies and pedagogical challenges and teaching and learning as a whole. Ng and Kong (2008) postulate that through training, tutors can be able to “demonstrate sufficient technical skills to tutor effectively using the online learning environment; differentiate between face-to-face and online learning and teaching contexts; identify strategies and techniques to facilitate online learning and help students exploit the advantages in relation to both independent and collaborative learning” (page 90). This means that tutors should be able to carry out their responsibilities more effectively as a result training, and thus contribute positively to their performance (Waltz, 2019).

2.9 Conclusion

This chapter reviewed literature pertinent to assessment of the effect organisational culture on employee job satisfaction. The concepts organisational culture, employee job satisfaction, motivation and performance were explained and contextualized to the public service in order to create a theoretical framework to enable the study to answer the research problem and questions. In chapter three the methodology and approaches utilised to conduct the study will be outlined in full.

The literature review chapter should demonstrate that you have read a significant amount literature and are able to discuss contemporary issues that relate to the phenomenon under study. In this chapter you have not done justice to that objective. You have not taken time to systematically discuss what others have said about the phenomenon under study. No solid argument for and against the phenomenon of tutoring. If anything this chapter reads rushed. Synopsis of the theoretical framework doesn't do justice to the study. More detail is required there.

3. CHAPTER THREE: RESEARCH METHODS

3.1 Introduction

Chapter three discusses the research methods and design followed in this study in answering the research questions. The chapter delineates the research design followed by research strategies and an outline of the research process. These are described and justified. Furthermore, the research design and data collection methods are explained and presented in this chapter.

3.2 Quantitative research

The discussion on positivism has let the methodological cat out of the bag for this study; the study will adopt a quantitative research approach. The common denominator amongst scholars (Bryman, 2012:35; De Vos *et al*, 2011; Burns & Grove, 2007:17) in the definition of quantitative research method is that it involves quantities and quantifiable properties. Quantitative research primarily encompasses data collection and data analysis procedures that generate or use numerical data (De Vos *et al*, 2011). In the area of social sciences, Bryman (2012:35) and De Vos *et al* (2011) postulate that quantitative research is predominantly concerned with testing a theory composed of variables. These are measured with numbers

and analysed with statistical procedures in order to determine whether the predictive generalisations of the theory hold true. Although quantitative research is predominantly applied in natural sciences (Burns and Groove, 2007), the method is also appreciated and applied extensively in social sciences. According to (Burns & Grove, 2007), quantitative research is inherently more systematic and more rigorous in the generation of information about the world.

Furthermore, Rahman (2017) and Bryman (2012) appreciate the objectivity of quantitative methods, emphasising that quantitative research minimises researcher bias. This can be attributed to numerical nature of quantitative research in data collection and data analysis. The rationale behind adopting quantitative research is that it will enable the research to collect data through structured questionnaires espoused by Rahman (2017) and Babbie and Mouton (2003).

3.2.1 Positivist

A positivist research paradigm is considered by Bryman (2012) as a paradigm which views research through natural sciences lenses. According to Rahman (2017) and du Plooy-Cilliers (2014), positivism proliferates for the use of natural science methods in research, including in social sciences studies. Bryman (2012) postulate that positivism is a nomothetic research paradigm, where knowledge is obtained through empirical testing, just like in natural sciences. In this regard, valid knowledge is obtained through objective and empirical evidence (du Plooy-Cilliers, 2014). In essence, the conceptualisation of reality and findings of the research should be a true reflection of objective reality (Bryman, et al, 2014). Along a similar line of argument Rahman (2017:106) indicates that positivism is associated with quantitative research. The goal of the research process under positivism is based on objective quantifiable data (Bryman et al, 2014), and to find causal relationship between variables (du Plooy-Cilliers, 2014).

The underlying propositions of positivism can be understood from different angles; epistemology, ontology, metatheory, methodology and axiology. Epistemology is concerned with what is considered to be valid knowledge. The epistemic proposition of positivism is that knowledge obtained through empirical evidence. du Plooy-Cilliers (2014) postulate that in the positivist world, knowledge is derived from empirical observation and thus it involves objective observations and hypotheses testing to find evidence for or against assumptions. Epistemologically, empirical evidence is central to support assumptions and predictions. The design of the study empirical, and thus the empirical evidence will be obtained in order to explain the relationship between tutorial interventions and student academic performance. Positivism can also be looked through the lenses of ontology. The central question addressed through ontological

lenses is what is reality and how do we know something is real (du Plooy-Cilliers, 2014). In this respect, the ontological proposition of positivism is that there is only one objective and stable physical and social reality (du Plooy-Cilliers, 2014). Rahman (2017) adds to the discourse indicating that the research in this regard endeavors to objectively observe and measure this reality.

From a metatheoretical perspective, positivism still maintains the natural sciences stance on objective observations and measurements. As espoused by du Plooy-Cilliers (2014), the aim of research in this regard is to develop common assumptions about the relationship between variables. This bears relevance to study as the objective is to test the hypotheses that tutorial interventions have a positive relationship with student academic performance. Theories should therefore “be universally valid or true, regardless of culture or history, and must therefore be universally applicable” du Plooy-Cilliers (2014: 25). This is because positivism is based on the principle of objectivity, and thus research should be value free. The axiology of positivism paradigm is objectivity (du Plooy-Cilliers, 2014), as positivist paradigm is concerned with objective reality. du Plooy-Cilliers (2014) states that “objective and value free” research is the hallmark of positivism, meaning that positivist research report objective as they are, and should not be contaminated by personal bias.

It is apparent that positivism is rooted in quantitative research methods. The methodological implications of positivism have been precipitated by Rahman (2017) at the point of departure. According to Rahman (2017) and du Plooy-Cilliers (2014), the objective of research is to reliable and valid causal relationship between variables. As positivism is a nomothetic research paradigm (Bryman, 2012), facts are obtained and recorded in terms quantities, meaning that the research methods should be designed in such a manner that they allow data to be collected through quantifiable techniques. This would ensure that the reality is studied objectively. The research methods and design adopted for the study is quantitative, which is inherently highly numerical and deals with quantitative data analysed through quantitative data analyses tools, namely the SPSS which will be used to analyse data.

3.3 Data collection

Rahman (2017) and Babbie and Mouton (2003) indicate that a questionnaire is normally used to collect data in a quantitative study. Data was collected through self-administered structured questionnaires (Annexure C) which were distributed to undergraduate students and tutors in one academic department at the selected university of technology. A five-point Likert scale questionnaire format was utilised, where respondents were given the margin to express and rank their views on the effects of tutorial interventions on student academic performance and tutor support.

3.3.1 Population and Sampling

The sample for this study was drawn from a population comprised of undergraduate students in the academic programmes in the selected academic department at the selected institution. A purposive sampling strategy was adopted (De Vos et al, 2011) as it allows researchers to select a predetermined sample. The sample size was determined using the sample size table espoused by Brynard, Henekom and Brynard (2014; 59).

Table 3.1: Sample determination

Population	Percentage suggested	Sample (No of respondents)
20	100%	20
30	80%	24
50	64%	32
100	45%	45
200	32%	64
500	20%	100
1000	14%	140
10 000	4.5%	450
100 000	2%	2000
200 000	1%	2000

Source: adopted from Brynard, Henekom and Brynard (2014; 59).

The guideline illustrates that for a population of 1000, the optimal sample size should be 14 percent of the population. This means that the sample size was 140 respondents, and the questionnaire was sent to 140 potential respondents. Out of 140 respondents, 120 completed the questionnaire, which translates to a response rate of 86 percent. In the sampling of tutors, 100% of the sample was drawn since the population is small, meaning that the questionnaire was distributed to all 86 tutors and 61 completed the questionnaire, which translates to a 71 percent response rate.

3.4 Research instrument

The primary data was collected with a structured and self-administered questionnaire which was constructed on Google Forms and sent as a link on email to 140 undergraduate students and 86 tutors.

Out of 140 respondents (students), 120 completed the questionnaire, which translates to a response rate of 86 percent. 62 tutors completed the questionnaire, which translates to a 72 percent response rate. De Vos (1998:152) argues that a 60 percent response rate falls within a threshold of acceptable response rate in research, thus affirming that the threshold of 80 percent is sufficient.

3.1.1 Questionnaire construction

The questionnaire is comprised a set of questions which are completed by participants in in the data collection process (De Vos, 1998:152). Questionnaire is simple to administer and economic to use when compared with other methods such as interviews. The design of the questionnaire ensured that anonymity of respondents was maintained. The data was collected using two sets of questionnaires; the one for students and the one for tutors, and both utilised a 5 point Likert type scale ranging from strongly disagree =1, disagree =2, not sure=3, agree =4, and strongly disagree =5. Likert-type scale simplified the process of data coding and data capturing analysis using SPSS software. The questionnaires comprised of two sections: Section A elicited biographical information from respondents such as age group, ethnicity and type of complement. Section B was the main questionnaire comprised of the questions that respondents answered. The survey questionnaire was sent to tutors via email, which contained the link for the survey. For students, the link was sent through communication platform Blackboard and email. The self-administered questionnaires were accompanied by the information leaflet and covering letter (Annexure B). Respondents answered the closed ended questions by indicating the extent to which they agree or disagree with the statements by ticking the relevant answer.

As the questionnaire was online, the first page outlined the information leaflet explaining the research procedure want participants are expected to do. It also included the option for participants to either “agree” to participate or elect “not” to participate, if a participant selected not participate, the online questionnaire did not allow them to process to the next section. The responses were automatically captured on Google Form as participants completed the survey online, which allowed the research extract the responses on an excel document.

3.5 Data analysis

Burns and Bush (2010:61) explain that data analysis transforms raw data into a meaningful information. There are four main categories of quantitative data analysis espoused by Betram and Christiansen (2014, citing Blaickie, 2003:236-237); inference, descriptive, causation and association. The study adopted a causation and association in data analysis, which is more suitable in explaining the relationship between constructs and variables (Bryanard *et al*, 2014). The data obtained through structured questionnaires will

be analysed using the SPSS. The advantage of SPSS is that it provides complex statistical analysis and allows data illustration through the use of histograms, pie charts, bar graphs and scatter plots (Betram and Christiansen, 2014). As the responses were automatically recorded on Google Forms, the response were exported into an excel document from Google Forms. The data was manually cleaned, coded, and assigned numerical values on excel before being imported into SPSS version 26.0 software. The raw data was then exported into SPSS for analysis and generate the findings from raw data.

3.6 Reliability and validity

According to Saunders et al. (2009:156) reliability is concerned with the extent to which the researcher's data collection techniques or analysis procedures will yield consistent findings. The study used Cronbach's Alpha (α) to test the internal reliability and efficiency of the instrument. Saunders et al. (2009:156, citing Cronbach 1951:298) assert that a value of 0.7 or more for the Alpha (α) is considered as an indicator of consistency. More precisely, the generally accepted guiding principles indicate that an α of 0.90 and above indicates high reliability, below 0.90 but above 0.80 moderate reliability and above 0.70 but below 0.80 low reliability. To test the reliability of the research instrument, Cronbach's Alpha test was conducted for tutor support construct which yielded alpha coefficient of $\alpha = 0.812$ for the 7 items as shown in table 3.2 and 3.3. This indicates that the items have a relatively high internal consistency. Table 3.4 and 3.5 for the construct of tutorial interventions construct shows $\alpha = 0.804$, meaning that the adequate reliability threshold was achieved.

Table 3.2: Reliability statistics for tutor instrument

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.786	7

Table 3.3: Individual item statistics

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Gender	23.541	20.819	.046	.073	.841
TS1	21.328	14.824	.528	.559	.796
TS2	20.984	14.283	.736	.631	.750
TS3	20.836	19.006	.196	.160	.840
TS4	21.164	13.973	.744	.675	.747
TS5	20.738	15.063	.773	.815	.749
TS6	20.820	14.784	.777	.833	.746

Table 3.4: Reliability statistics for student instrument

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.804	.835	8

Table 3.5: Individual item statistics

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Gender	24.750	28.592	.025	.162	.827
TAP1	23.700	26.363	.376	.346	.802
TAP2	22.500	21.261	.812	.790	.742
TAP3	22.467	21.293	.713	.774	.753

TAP4	22.533	21.629	.791	.795	.747
STS5	22.833	20.174	.315	.153	.873
TAP5	22.583	21.657	.794	.762	.746
TAP6	22.617	21.482	.687	.781	.756

The discussion of your ethical consideration should form part of the methodology chapter not just discussed as part of the introductory chapter.

3.7 Conclusion

The chapter discussed the research methods and design that were adopted in the study, which were centred around quantitative research approach which undergird the study. The chapter outlined the research design, research strategies as well as the research process. The chapter further outlined the limitations of the study and closed by providing a detailed discussion on the ethical protocols followed in the study. The next chapter presents the findings of the study and discussion of finding.

4. CHAPTER FOUR: PRESENTATION OF RESULTS

4.1 Introduction

Chapter four presents the results of the study, the descriptive statistical analysis and discussions of the findings. It starts by outlining the administration of the questionnaire and move to present the findings starting with the biographical information of participants in frequencies using pie charts. The results are analysed, interpreted and presented under each objective, and also discussed using literature.

4.2 Administration of the questionnaire

As survey questionnaires were in the form of a link attached to the email, 181 (120 students and 61 tutors) questionnaires were sent to respondents via email. Prior, communication was sent to potential

respondents to make them aware of the survey questionnaire, explain the purpose of the study and to increase the likelihood of high response rate. Respondents were also assured of confidentiality. They were given two weeks to complete the questionnaire, and a follow up reminder was made at the end of the first week. As the questionnaire was online, the first page outlined the information leaflet explaining the research procedure what participants were expected to do. It also included the option for participants to either agree to participate or elect not to participate in the study. If a participant selected not participate, the online questionnaire did not allow them to process to the next section. The responses were automatically captured on Google Form as participants completed the survey online, which allowed the research extract the responses on an excel document.

4.3 Presentation of findings

This section presents the findings from primary data using the frequency distribution depicted in pie charts and tables for each question, followed by an analysis of the correlation between constructs.

4.3.1 Statistical analysis

Data analysis followed in this study was performed following the dictates of structural equation modelling (SEM) embraced by Anderson and Gerbing (1988:411), as it requires the testing of validity and reliability of the instrument. The SPSS 26.0 statistical package was used to conduct the analysis. Nimako, Kwesi and Owusu (2014:42) underline that computer-based statistical packages such as SPSS are essential in business and social research as they enable the processing of high volume of data, coupled with their speed and level of accuracy in computational analysis in comparison with manual systems.

The study was underpinned by three alternative hypotheses, and this section presents the results of hypothesis testing conducted using SPSS, the aim of which to test the null hypothesis in order to confirm the or reject the alternative hypothesis. The correlation coefficient was conducted using Pearson's coefficient (r) and null hypothesis depicted in p-values (P). Altman and Krzywinski (2017) postulate that p-value assist to assess the strength of evidence regarding the truth or falsehood of the null hypothesis. The p-value ranges between 0 and 1, and typically a small p-value (≤ 0.05) shows a strong evidence against the null hypothesis, meaning that the null hypothesis is rejected in this regard. A higher p value (>0.05) suggests a weak evidence against the null hypothesis. The proposition of the null hypothesis (H_0) is that there is no relationship between the variables, the converse of which is the alternative hypothesis (H_a). Thus, the null hypothesis is tested and used to confirm or reject the alternative hypotheses; weak evidence against the H_0 implies that the H_a is supported, and the converse is true.

4.3.2 Bibliographical / Biographical Analysis

This section outlines the personal data of the respondents which entails gender, age group, educational qualifications, race, period of operation, economies of scale and average annual sales turnover.

Figure 4.1: Student participant gender

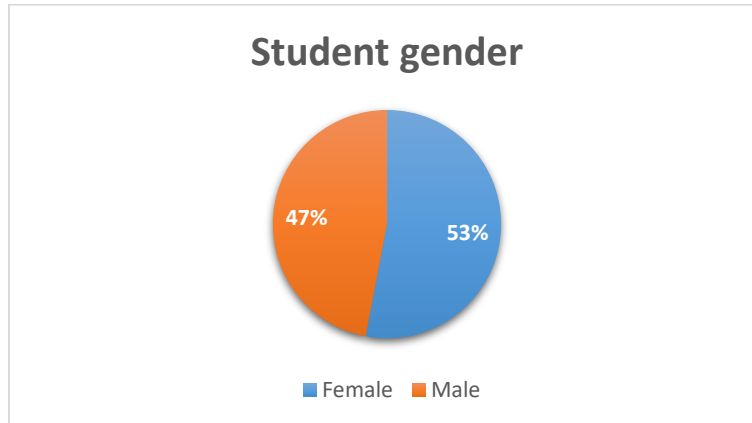
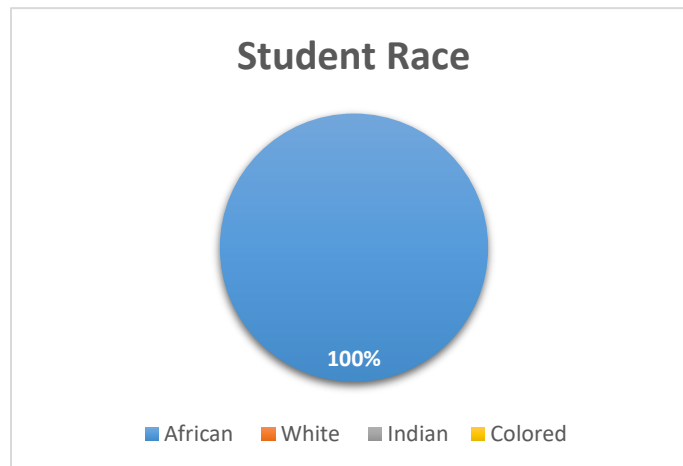


Figure 4.1 depicts that the student cohort of participants was comprised of 53 percent of females and 47 percent males. The data suggests that there are no significant disparities in terms of gender for the cohort of students.

Figure 4.2: Student cohort by race



The data presented in figure 4.2 shows that the student cohort of participants was comprised, in terms of race, 100 percent Africans. The data suggests that all students who participated in the study were Africans by race.

Figure 4.3: Student study level

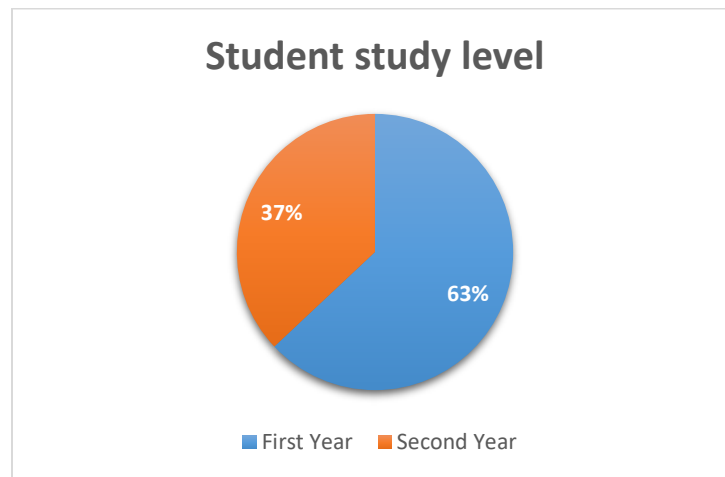
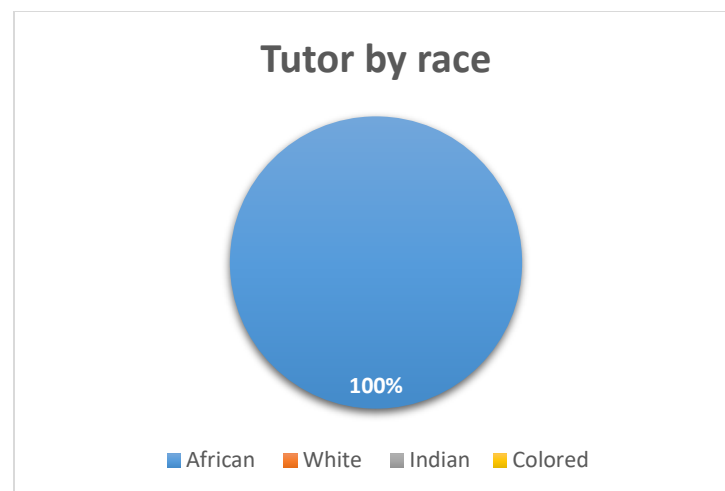


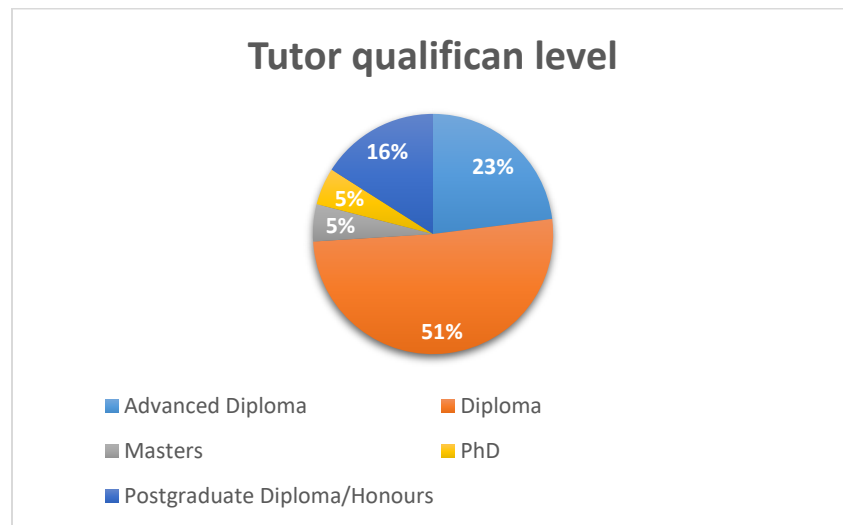
Figure 4.3 of the study level of student participated in the study, and shows that majority of students, 63 percent, were at first year level. Figure 4.3 further shows that 37 percent of students who participated in the study were at second year level

Figure 4.4: Tutor cohort by race



The data presented in figure 4.4 shows that the tutor cohort of participants was comprised, in terms of race, 100 percent Africans. The data suggests that all tutors who participated in the study were of African by race.

Figure 4.5: Tutor qualification level



The data presented in figure 4.5 presents the qualification level of tutors. Figure 4.5 shows that 51 percent of tutors were at diploma level, and 23 percent of tutors were at advanced diploma level. The data further shows that 5 percent of tutors were at postgraduate diploma/honors level, whilst for master's degree it was 5 percent.

4.3.3. Relationship between tutorial interventions and student academic performance

In order to import the data to SPSS, the items needed to be coded before being imported to SPSS. Table 4.1 outlines the description of the constructs which were used in the coding process for SPSS data analyses.

Table 4.1: Construct codes

Code	Construct description
TAP1	How often do you attend tutorials?
TAP2	Tutorials assist students to cope with the academic demands of university
TAP3	Tutorials are helpful by providing preparation strategies to prepare for tests and exams
TAP4	Tutorials help students to get good marks in assignments
TAP5	Overall, I get better marks when I have attended tutorial sessions prior to writing a test or exam
TAP6	I am more confident to take the exam or test when I attended tutorial session prior to the test or exam

Table 4.2: Tutorial interventions and student academic performance

Correlations

(Persron's)			
Constructs	Pearson correlation (r)	Sig. (2-tailed)	N
TAP1→TAP5	.500**	.000	120
TAP2→TAP3	.807**	.000	120
TAP2→TAP4	.734**	.000	120
TAP2→TAP5	.726**	.000	120
TAP5→TAP3	.688**	.000	120
TAP3→TAP6	.578**	.000	120
TAP1→TAP6	.300**	.000	120

The results presented in table 4.2 show that there is a strong and positive relationship between TPA1 and TPA5 (N=120, $r=0.500^{**}$, $P=0.000$), and it is 2-tailed significant. This means that tutorial attendance has a positive effect on students getting better marks for tests and exams. The results in table 4.2 further indicate that there is a strong positive relationship between TPA2 and TPA3 (N=120, $r=0.807^{**}$, $P=0.000$), and it is 2-tailed significant. This infers that tutorials assist students to cope with the academic demands of university and are helpful by providing preparation strategies to prepare for tests and exams. According to Baleni et al (2016), tutorial interventions in higher education provide students with extra academic support with regard to the subject matter and thus improves their academic performance. Table 4.2 illustrates that there is a strong and positive relationship between TPA2 and TPA4 (N=120, $r=0.734^{**}$, $P=0.000$), and it is 2-tailed significant. This suggest that tutorials assist students to cope with the academic demands of university and help students to get good marks in assignments. On the same trajectory of significance, TPA2 correlates significantly and positively with TPA5 (N=120, $r=0.726^{**}$, $P=0.000$, 2-tailed significance). This alludes that tutorials assist students to cope with the academic demands of university as students are able to get better marks when they have attended tutorial sessions prior to writing a test or exam. Horn *et al* (2009) and Mckay, (2013) underline that one of the key objectives of tutorial interventions is to assist first year students to transition into higher education smoothly through the provision of tutorial interventions.

Data displayed in table 4.2 further shows the results on the correlation between TAP5 and TAP3 (N=120, $r=0.688^{**}$, $P=0.000$, 2-tailed significance), which suggest that there is a significant and positive relationship between preparation strategies for tests and exams provided by tutorials and students getting better marks when they have attended tutorial sessions prior to writing a test or exam. The relationship between studying strategies provided by tutorials and student confidence prior taking the exam or test when they have attended tutorial sessions seem positive and strong (TAP3 →TAP6: N=120,

$r=0.578^{**}$, $P=0.000$, 2-tailed significance). According Baleni et al (2016) tutorial interventions in higher education provide students with extra academic support with regard to the subject matter, including studying strategies. However, the relationship between tutorial attendance and student confidence prior taking exams or tests is positive but not significant (TAP1→TAP6: $N=120$, $r=0.300^{**}$, $P=0.000$, 2-tailed significance). In overall, the results presented in table 4.2 confirm the hypothesis (H_1) that there is a significant positive relationship between tutorial interventions and student academic performance, as the $P=0.000$ for all constructs. Furthermore, the results suggest that there that there is a congruence between literature and findings.

4.3.4 Relationship between support for tutors and tutor performance

Table 4.3 outlines the description of the constructs which were used in the coding process for SPSS data analysis.

Table 4.3: Construct codes

Code	Description
TS1	Overall, the department provides adequate support for tutors throughout the semester
TS2	Overall, my supervisor provide useful feedback on my tutorial skills
TS3	Overall, I perform my duties better when the department provides support
TS4	The support provided by the department throughout the semester contributes positively to my performance as a tutor
TS5	The support and guidance provided by my supervisor throughout the semester contributes positively to my performance as a tutor
TS6	The feedback I receive from my supervisor makes me improve my tutorials

Table 4.4: Support for tutors and tutor performance

Correlations (Pearson's)			
Constructs	Pearson correlation (r)	Sig. (2-tailed)	N
TS1→TS2	.518**	.000	61
TS1→TS4	.691**	.000	61
TS2→TS5	.702**	.000	61
TS4→TS5	.726**	.000	61

Data in Table 4.4 shows that there is a significant and positive relationship between TS1 and TS2 ($N=61$, $r=0.518^{**}$, $P=0.000$), and it is 2-tailed significant. The data further shows a positive and significant

correlation between the support provided by the department and tutor performance (TS1→TS4, N=61, $r=0.619^{**}$, $P=0.000$, 2-tailed significance). TS2 →TS5 (N=61, $r = .702^{**}$, $P=0.000$) is 2-tailed significance, and indicates that there is a positive and significant relationship between supervisor feedback on tutorial skills and tutor performance. The data displayed in table 4.4 underline that TS4→TS5 (N=61) is correlated at $r=0.619^{**}$ ($P=0.000$) and is 2-tailed significance, inferring a significant and positive relationship between support provided by the department throughout the semester and tutor performance. The data presented in table 4.4 shows congruence with the hypothesis that there is a significant and positive relationship between support for tutors and tutor performance, thus confirming the hypothesis. The p-value ($P=0.000$) of all the constructs fail to confirm the null hypothesis. The significance of tutor training is underscored by Staub and Hunt (1993). Literature shows that tutors can be able to carry out their responsibilities more effectively as a result of training, and thus contribute positively to their performance (Waltz, 2019).

4.3.5 Relationship between tutor performance and student academic performance

Table 4.5: Tutor performance and student academic performance

Correlations (Pearson's)			
Constructs	Pearson correlation (r)	Sig. (2-tailed)	
TAP5 →TS3	.217	.094	
TAP5 →TS4	.199	.125	
TAP5 →TS5	.158	.225	

Table 4.5 illustrates data related to the correlation between tutor performance and student academic performance. The result shows that TAP5→TS3 is correlated at $r=0.217$ and $P=0.094$, which is $>.50$, suggesting that there is a weak relationship between TAP5 and TS3. Table 4.5 also indicates that the coefficient of TAP5→TS4 is $r=0.217$ with a p-value of $P=0.094$, which also suggests a weak relationship between TAP5→TS4. The correlation for TAP5→TS5 is presented in table 4.5 as $r=0.217$ ($P=0.094$), also suggesting a weak relationship between the two constructs. In overall, the results presented in table 4.5 indicate a failure to reject the null hypothesis, thus inferring that the hypothesis that there is a significant and positive relationship between tutor performance and student academic performance is rejected.

4.4 Conclusion

Chapter four presented the results of the study, the descriptive statistical analysis and discussions of the findings. The results were analysed, interpreted and presented under each objective, and also discussed using literature. The chapter further presented the biographical information in frequencies using pie charts.

5. CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the overall findings of the present study, encompassing the findings of the literature review and primary research undertaken which guide the conclusions and recommendations. The conclusions drawn from the findings are assessed in the degree of satisfaction of the aim, objectives and research questions of the study. The chapter includes the final conclusion with a discussion on the scope for further research based upon the findings of the study.

The study was underpinned by the following objectives;

- Objective 1: To determine the relationship between tutorial interventions and student academic performance, which is aligned to H_1 .

- Objective 2: To determine the effects of support for tutors on the performance of tutors when conducting tutorial sessions, which is aligned to H₂.
- Objective 3: To determine relationship between tutor performance and student academic performance outcomes, which is aligned to H₃.

5.2 Summary of findings

This section provides a synopsis of the findings of the study. These are discussed as the summary emanating from the discussion and synthesis of quantitative and quantitative data in section 4.2.

5.2.1 Tutorial interventions and student academic performance

The findings presented in 4.3.3 and table 4.2 support the hypothesis that there is a significant positive relationship between tutorial interventions and student academic performance. The Pearson's correlation coefficient for all construct was found to be significant and 2-tailed (TAP1→TAP5= 0.500**;
TAP2→TAP3=0.807**;
TAP2→TAP4=0.734**;
TAP2→TAP5=0.726**;
TAP5→TAP3=0.688**). The P value for all the constructs is $P=0.000$. The results have further shown a congruence between literature and findings.

5.2.2 Support for tutors and tutor performance

Findings presented in 4.3.4 support the hypothesis that there is a significant and positive relationship between support for tutors and tutor performance. The p-value $P=0.000$ of all the constructs fail to confirm the null hypothesis, and the Pearson's correlation coefficient for all constructs significant and 2-tailed (TS1→TS2=0.518**;
TS1→TS4=0.691**;
TS2→TS5=0.702**;
TS4→TS5=0.726**), showing a strong correlation for all constructs.

5.2.3 Tutor performance and student academic performance

Findings show that the data failed to reject the null hypothesis and thus the hypothesis that there is a significant and positive relationship between tutor performance and student academic performance is rejected. The P value for all constructs is >0.05 (TAP5→TS3: $P=0.94$; TAP5→TS4: $P=0.125$; TAP5→TS5: $P=0.225$), attesting to a weak evidence against the null hypothesis.

5.3 Conclusions of the study

This section provides a general conclusion of the study, and whether the objectives of the study enshrined in the problems statement was achieved. On objective 1, to determine the relationship between tutorial interventions and student academic performance, the study has fulfilled this objective. In this regard, H₁

was accepted and attested by findings and correlations coefficient and P values of constructs. The study further sought to determine the effects of support for tutors on the performance of tutors when conducting tutorial sessions as encapsulated in objective 2 and H₂. The objective was achieved in this regard, as data strongly supported H₁. Objective 3 of the study endeavored to determine relationship between tutor performance and student academic performance outcomes underpinned by H₃. Findings did not support H₃, and as such the study found no positive and significant between tutor performance and student academic performance outcomes underpinned. It can thus be deduced that the objectives of the study were successfully achieved.

5.4 Recommendations of the study

5.4.1 Recommendations for practice

The recommendation of the study for practice are as follows;

- The findings show that student academic performance benefits from tutorial interventions and they assist students with assimilation to higher education. The recommendation therefore is that these interventions should be strengthened to reach more students, owing to the challenges of low pass rates and throughput rates in higher education institutions.
- Tutor support has been vindicated by findings as a positive contribute to the performance of tutors. The recommendation therefore is that institutions should provide adequate tutor support for tutors.

5.4.2 Recommendation for future research

The study was limited to a small sample and conducted within a short period of time. Future research could focus on a longitudinal study with a larger sample to determine the exact type of tutorial interventions appropriate for different levels of study for students.

5.5 Conclusion

As the last chapter of the study, chapter five entailed summary of study findings, study conclusion as well as recommendations for practice and future research. The chapter indicates that the objectives of the study were successfully achieved.

REFERENCES

- Ashwin, P. 2006. Variation in academics' accounts of tutorials. *Studies in Higher Education* 31(6): 651–665.
- Babbie, E. and Mouton, J. 2012. *The Practice of Social Science Research*. Cape Town: Oxford.
- Badat, S. (2010). *The challenges of transformation in higher education and training institutions in South Africa*. Paper Commissioned by the Development Bank of Southern Africa, 56 pp. Retrieved [2 May 2020] from www.ru.ac.za/media/rhodesuniversity/content/vc/documents/The%20Challenges%20of%20Transformation%20in%20Higher%20Education%20and%20Training%20Institutions%20in%20South%20Africa.pdf.
- Baleni, L.S., Malatji, K.S and Wadesango, N. 2016. The Influence of Peer Tutoring on Students' Performance in a South African University. *Journal of Communication*. 7(1): 127-133.
- Bertram, C. and Christiansen, I. 2014. *Understanding Research; an Introduction to Reading Research*. Pretoria: Van Schaik publishers.
- Bertram, C. and Christiansen, I. 2014. *Understanding research: An introduction to reading research*. Pretoria: Van Schaik.
- Bhorat, H., Mayet, N. and Visser, M. (2010). Student graduation, labour market destinations and employment earnings. In M. Letseka, M. Cosser, M. Breier and M. Visser (Eds.) *Student Retention & Graduate Destination: Higher Education & Labour Market Access & Success*. chap. 7, pp. 97 – 124. Pretoria: HSRC Press.
- Bhorat, H., Mayet, N. and Visser, M. (2010). Student graduation, labour market destinations and employment earnings. In M. Letseka, M. Cosser, M. Breier and M. Visser (Eds.) *Student Retention & Graduate Destination: Higher Education & Labour Market Access & Success*. chap. 7, pp. 97 – 124. Pretoria: HSRC Press.

- Bryman, A. 2012. Social research methods. New York: Oxford University Press.
- Bryman, A., Bell, E., Hirschsohn, P., Dos Santos, A., Du Toit, J., Masenge, A., Van Aardt, I. & Wagner, C. 2014. Research methodology: Business and management contexts. Cape Town: Oxford University Press.
- Chinyamurindi, C. 2019. Factors Influencing Employee Job Satisfaction in the Organisation. Data Collection tool developed for University of Fort Hare.
- De Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. 2011. *Research at grass roots for the social sciences and human service professions*. 4th edition. Pretoria: Van Schaik.
- du Plooy-Cilliers, F. 2014. Research Paradigm and Traditions. In Du Plooy-Cilliers, F., Davis, C., and Bezuidenhout, R. Eds. 2014. Research Matters. Cape Town: Juta.
- Faroa, D.B. (2017). Considering the role of tutoring in student engagement: Reflections from a South African University. *Journal of Student Affairs in Africa*, 5(2), 1-15.
- Gammon, J.S. 2005. A study to ascertain the effect of structured student tutorial support on student stress, self-esteem and coping. *Nurse Education in Practice*, 5(5): 161-171.
- Hammersley, M. (2013). *What is Qualitative Research?* London and New York: Bloomsbury.
- Hof, S. 2014. Does private tutoring work? The effectiveness of private tutoring: A nonparametric bounds analysis. *Education Economics*, 22(4), 347–366.
- Horn, P.M., & Jansen, A.I. 2009. Tutorial Classes – Why Bother? An Investigation into the Impact of Tutorials on the Performance of Economics Students. *South African Journal of Economics*, 77(1), 179-189.
- Horn, P.M., & Jansen, A.I. 2009. Tutorial Classes – Why Bother? An Investigation into the Impact of Tutorials on the Performance of Economics Students. *South African Journal of Economics*, 77(1), 179-189.
- Karan, H. 1996. The tutor recipe book: Ingredients for successful and healthy tutoring for the tutor and the tutee. In Gier T. & Karan H. (Ed.), *Tutor Training Handbook*. Anchorage: College Reading and Learning Association.
- Layton, D. (2013). A Social Realist account for the tutorial system at the University of Johannesburg. Unpublished PhD thesis. Rhodes University, South Africa.
- McKay, T. 2013. Embedding academic support within an academic discipline: A teaching model. *South African Journal of Higher Education*, 27(3), 682–695.

- McKay, T. 2016. Do tutors matter? Assessing the impact of tutors on first-year academic performance at a South African university. *Journal of Student Affairs in Africa*. 4(1). 53-64.
- Miles, D.A. 2017. Workshop: Confessions of a Dissertation Chair Part 1: The Six Mistakes Doctoral Students Make with the Dissertation. Presented at the 5th Annual 2017 Black Doctoral Network Conference in Atlanta, GA on October 26-29 2017.
- Newton, R. & Rudestam, K. 2007. *Surviving Your Dissertation: A Comprehensive Guide to Content and Process*. 3rd Ed. Thousand Oaks, CA: Sage.
- Newton, R. & Rudestam, K. 2007. *Surviving Your Dissertation: A Comprehensive Guide to Content and Process* (3rd Ed). Thousand Oaks, CA: Sage.
- Ng, W.K. and Kong, S.L.. (2008). Training of Distance Education Tutors at Wawasan Open University: One Semester Later. *The Quarterly Review of Distance Education*, Volume 9(1), 2008, pp. 85–96.
- Pather, Subethra, Norodien-Fataar, Najwa, Cupido, Xena, & Mkonto, Nosisana. (2017). First year students' experience of access and engagement at a University of Technology. *Journal of Education (University of KwaZulu-Natal)*, Vol 69, pp 161-184.
- Pather, Subethra, Norodien-Fataar, Najwa, Cupido, Xena, & Mkonto, Nosisana. (2017). First year students' experience of access and engagement at a University of Technology. *Journal of Education (University of KwaZulu-Natal)*, Vol 69, pp 161-184.
- Penprase B.E. (2018) *The Fourth Industrial Revolution and Higher Education*. In: Gleason N. (eds) *Higher Education in the Era of the Fourth Industrial Revolution*. Palgrave Macmillan, Singapore.
- Penprase B.E. (2018) *The Fourth Industrial Revolution and Higher Education*. In: Gleason N. (eds) *Higher Education in the Era of the Fourth Industrial Revolution*. Palgrave Macmillan, Singapore
- Pham, L. 2018. A Review of key paradigms: positivism, interpretivism and critical inquiry. School of Education, Adelaide University.
- Rahman, S. 2017. The advantages and disadvantages of using qualitative and quantitative approaches and methods in language “testing and assessment” research: A literature review. *Journal of Education and Learning*, 6 (1):102-112.
- Saunders, M., Lewis, P. and Thornhill, A. 2012. *Research Methods for Business Students*. Sixth Edition. England: Pearson Education Limited.

Saunders, M., Lewis, P. and Thornhill, A. 2012. *Research Methods for Business Students*. Sixth Edition. England: Pearson Education Limited.

Scott B. Waltz (2019) Tutor training for service learning: impact on self-efficacy beliefs, *Mentoring & Tutoring: Partnership in Learning*, 27(1), 26-43.

Shirley Bennett, S. and Marsh, D. 2002. Are We Expecting Online Tutors to Run Before they Can Walk? *Innovations in Education and Teaching International*. IETI 39,1. 14-20.

Staub, D., and Hunt, P. (1993). "The effects of social interaction training on high school peer tutors of schoolmates with severe disabilities." *Exceptional Children* 60/1: 41-57.

Tutor Manual. 2020. Mangosuthu University of Technology.

Vygotsky, L. 1997. *Interaction Between Learning and Development*. Cambridge: Harvard University Press.

[Annexure A: Letter of permission to conduct the study](#)

21 August 2020

REF: RD1/03/2020

Mr. P. Sithole
TLDC
Mangosuthu University of Technology

Dear Mr. Sithole

PROTOCOL: An assessment of the effectiveness of Tutorials: The case of Undergraduate Students at a University of Technology

The MUT Research Ethics Committee considered your application at their meeting held on 10 August, 2020. It is my pleasure to inform you that permission to conduct the research project above was granted.

The approval is valid for two year from 01 September 2020. Any changes to the project must immediately be brought to the attention of the MUT Research Ethics Committee.

Your acceptance of this approval denotes your compliance with South African National Research Ethics Guidelines (2004) and the MUT Research Ethics Policy, Procedures and Guidelines.

Good luck with your research.
Yours sincerely,



Dr Anette Mienie
Director: Research

Annexure B: Explanatory information sheet and Consent form for Participants

To whom it may concern,

My name is Phillemon Sithole and I am a student at the IIE. I am currently conducting research under the supervision of Mr. Mnisi about the effectiveness of tutorial interventions on student academic performance. The objective of the study is to investigate whether tutorial interventions are effective in improving student academic performance by determining the relationship between tutorial interventions and student academic performance. I hope that this research will enhance our understanding of the relationship between the two variables and the factors have impact the effectiveness of tutorial interventions.

I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.

What will I be doing if I participate in your study?

I would like to invite you to participate in this research because you are an undergraduate students or a tutor in the department of department of Public Administration. If you decide to participate in this research, I would like to voluntarily complete and return the questionnaire. The questionnaire will take between 10 to 15 minutes to complete

Are there any risks/ or discomforts involved in participating in this study?

Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about your views on whether tutorial interventions are effective in improving student academic performance. If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating.

Do I have to participate in the study?

- Your inclusion in this study is completely voluntary;
- If you do not wish to participate in this study, you have every right not to do so;
- Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.

Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. I would like to ask your permission to record the interviews, but only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at IIE will have access to your interview information. I would like to use quotes when I discuss the findings of the research but I will not use any recognisable information in these quotes that can be linked to you.

What will happen to the information that participants provide?

Once I have finished all interviews, I will write summaries to be included in my research report, which is a requirement to complete my Postgraduate Diploma in Higher Education. You may ask me to send you a summary of the research if you are interested in the final outcome of the study.

What happens if I have more questions about the study?

Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed.

My contact details are as follows:

Phillemon Sithole

The contact details of my supervisor are as follows:

Mr. Sifiso Mnisi

Consent Form for participants

I, _____, agree to participate in the research conducted by
(your name) about (insert aim of research/ brief summary of exactly what you are researching)

This research has been explained to me and I understand what participation in this research will involve.

I understand that:

1. I agree to be interviewed for this research.
2. My confidentiality will be ensured. My name and personal details will be kept private.
3. My participation in this research is voluntary and I have the right to withdraw from the research at any time. There will be no repercussions should I choose to withdraw from the research.
4. I may choose not to answer any of the questions that are asked during the research interview.
5. I may be quoted directly when the research is published, but my identity will be protected.

Signature: _____

Date: _____

Consent form for audio-recording/ video recording

I, _____, agree to allow (your name) to audio record my interviews as part of the research about the effectiveness of tutorial interventions on student academic performance. The objective of the study is to investigate whether tutorial interventions are effective in improving student academic performance by determining the relationship between tutorial interventions

and student academic performance. I hope that this research will enhance our understanding of the relationship between the two variables and the factors have impact the effectiveness of tutorial interventions.

This research has been explained to me and I understand what participation in this research will involve. I understand that:

1. My confidentiality will be ensured. My name and personal details will be kept private.
2. The recordings will be stored in a password protected file on the researcher's computer.
3. Only the researcher, the researcher's supervisor and possibly a transcriber (who will sign a confidentiality agreement) will have access to these recordings.

Signature: _____

Annexure C: Questionnaire

SECTION A: BIOGRAPHICAL INFORMATION

Gender	Male	Female			
Ethnicity/Race	African	Colored	Indian	White	
Level of study	First year	Second year	Third year		

SECTION B: MAIN QUESTIONNAIRE

For each of the statements below, please mark with an **X** the number that best describes how much you agree or disagree with the statement: Strongly Disagree (SD) Disagree (D) Neutral (N) Agree (A) Strongly Agree (SA)

I strongly disagree	I disagree	I am not sure	I agree	I strongly agree
1	2	3	4	5

	TUTORIAL INTERVENTIONS					
		SD	D	N	A	SA
TAP1	How often do you attend tutorials?					
TAP2	Tutorials assist students to cope with the academic demands of university					
TAP3	Tutorials are helpful by providing preparation strategies to prepare for tests and exams					
TAP4	Tutorials help students to get good marks in assignments					
TAP5	Overall, I get better marks when I have attended tutorial sessions prior to writing a test or exam					
TAP6	I am more confident to take the exam or test when I attended tutorial session prior to the test or exam					

Questionnaire for Tutors

SECTION A: BIOGRAPHICAL INFORMATION

Gender	Male	Female				
Highest Qualification	Diploma	Advanced Diploma	B Tech	Postgraduate Diploma/Honours	Masters	PhD

SECTION B: MAIN QUESTIONNAIRE

For each of the statements below, please mark with an **X** the number that best describes how much you agree or disagree with the statement: Strongly Disagree (SD) Disagree (D) Neutral (N) Agree (A) Strongly Agree (SA)

	TUTOR SUPPORT					
		SD	D	N	A	SA
TS1	Overall, the training is provided for tutors before the they assume their responsibilities					
TS2	The training assist tutors to understand the dynamics of teaching and learning					
TS3	The department provides orientation for tutors					
TS4	Overall, the department support provides adequate support for tutors throughout the semester					
TS5	Overall, my Supervisor provides useful feedback on my tutoring skills					
TS6	My Supervisor provides adequate support and guidance throughout the semester					
	TUTOR PERFORMANCE	SD	D	N	A	SA
TP1	Overall, I perform my tutorial duties better when the department provides support					
JP2	The orientation provided by the department for tutors is helpful to understand the expectations of tutoring					
JP4	Overall, the support provided by the department throughout the semester positively contributes to my performance as a tutor					
JP5	The support and guidance provided by my supervisor throughout the semester contributes positively to my performance as a tutor					
JP6	The feedback provided by my Supervisor has improves my performance as a tutor					

