

TRANSFORMATIONAL LEADERSHIP AND ACADEMIC PERFORMANCE OF SECONDARY SCHOOLS IN UGANDA

BY

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**A THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL
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OCTOBER, 2023.

DECLARATION

I affirm that this dissertation represents my own original work and has not been published or submitted for any award at any other institution, to the best of my knowledge.

Signed:

A handwritten signature in blue ink, appearing to be 'Sengendo David', written over a light blue grid background.

Date: 12th June 2023

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APPROVAL

This is to certify that this thesis has been compiled under our supervision and is ready for submission to the Directorate of postgraduate studies.

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DEDICATION

I would like to dedicate the successful completion of this research report to my parents. This in honor of my late father, Edward W. Walusimbi, who made carefully considered choices regarding my education, and express gratitude to my mother Dorah Namiiro Walusimbi for her numerous sacrifices to ensure I completed my pre-tertiary education.

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ACRONYMS

UCE	Uganda Certificate of Education
UACE	Uganda Advanced Certificate of Education
PLE	Primary leaving examination
USE	Universal Secondary Education
UPE	Universal Primary Education
TIMSS	Trends in International Mathematics and Science Study
UNEB	Uganda National Examinations Board
PLQ	Principal Leadership Questionnaire
TSI	Texas Success Initiative
SEM	Structural Equation Modelling
SEL	Social Emotional Learning
PLI	Principal Leadership Institute
ISSPP	International Successful School Principalship Project
SLM	School Leadership Management (SLM)
DOS	Director of Studies
PCA	Principal Component Analysis

ABSTRACT

The aim of this thesis was to examine how a leadership style adopted by headteachers influences academic performance in secondary schools. Specifically, the study investigated the influence of transformational leadership attributes on academic performance in public and private secondary schools. Using a positivist research paradigm, the study employed a survey design with a quantitative research method. Data was collected from 312 private and public secondary schools in the central region of Uganda using a MLQ questionnaire. Data analysed using descriptive and inferential statistics with the aid of the SPSS software. Multiple linear regression was conducted to examine how transformational leadership traits influence UCE and UACE academic performance in secondary schools. The findings of the study demonstrated that transformational leadership attributes of headteachers significantly influence academic performance of schools both at UCE and UACE Level. Idealised influence and behavior significantly influenced academic performance at UCE ($\beta=0.191$, $P=0.019$) while at UACE, Idealized influence and behavior ($\beta=0.124$, $P=0.016$) influenced school academic performance in public secondary schools. In Private schools performance at UCE was influenced by Idealized influence and behavior ($\beta=-0.140$, $P=0.024$) and Inspirational motivation ($\beta=0.154$, $P=0.025$) while UACE, performance was influenced by both Idealized influence and behavior ($\beta=-0.144$, $P=0.010$) and Intellectual stimulation ($\beta=0.129$, $P=0.022$). Therefore, headteachers' transformational leadership attributes play a crucial role in determining academic performance in secondary schools at UCE and UACE whether private or public secondary schools. The study recommends that head teachers embrace and adopt transformational leadership attributes to enhance academic performance in schools.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The achievement of academic outcomes in standardized tests plays a crucial role in evaluating classroom success. School leaders employ a triadic school construct encompassing mission formulation, instructional programming, and the promotion of a school-learning culture to attain desired results. Effective teaching by teachers serves as a co-managerial approach to achieve these outcomes and foster successful learning (Bush, 2013). In Uganda, secondary education comprises Ordinary and Advanced levels. The Ordinary level caters for students aged between 12 and 15 years and lasts for four years, while the Advanced level serves students aged between 16 and 19 years and lasts for two years. For many years, secondary schools have been ranked based on student performance in the Uganda Certificate of Education (UCE) and Uganda Advanced Certificate of Education (UACE) examinations, taken after four and six years of secondary education, respectively. Understanding the influence of school leadership on academic performance in secondary schools has implications for maintaining or enhancing performance levels, hence this study. This study examined the impact of transformational leadership dimensions, namely: Idealized influence and behavior, Inspirational motivation, Intellectual stimulation, and Individualized consideration, on the academic performance of secondary schools in Uganda, based on Bass & Avolio's (2004) Transformational Leadership Model.

This chapter provides the background of the study, problem statement, research purpose, objectives, hypotheses, scope of the study, significance of the study, and conceptual framework.

1.1.1 Historical Background

This study on school academic performance traces its origins to the effective schools movement, which began in July 1966 in the USA, following a contentious report by James Coleman and others titled "Equality of Educational Opportunity" (Lezotte, 1995). The findings of Coleman et al. (1966), particularly the debate surrounding whether student achievement is more influenced by their home background or the schools they attend, sparked widespread dissemination and discussion. These debates generated interest among social scientists, educational practitioners, and policymakers, leading to the emergence of the effective schools research movement. Since then, the desire to understand the characteristics and differences between effective and less effective schools has persisted.

Several researchers, including Ron Edmonds, Larry Lezotte, and others, challenged and rejected Coleman's conclusions (Edmonds, 1982; Edmonds & Fredericksen, 1978; Lezotte & Passalacqua, 1978). They disputed the genetic/familial explanations suggested by Coleman (1966) and argued that differences in student performance were more influenced by schools rather than family background. Coleman in his report had claimed that secondary schools had minimal impact on student achievement, with family background being more significant (Andrew & Morefield, 1991). In contrast, proponents such as Ron Edmonds (1979) defined effective schools based on five elements: (i) the principal's emphasis on instructional quality, (ii) a strong instructional focus understood by all, (iii) a conducive and orderly environment for teaching and learning, (iv) teacher behaviors that assume all students can achieve at least adequate mastery, and (v) the use of student test performance for formative assessment.

It is important to note that a common theme across the extensive literature on school performance is the significant contribution of leadership in improving academic outcomes. Research has consistently shown that leaders play a crucial role in school effectiveness and student achievement (Hallinger & Heck, 1998; Leithwood & Riehl, 2005; Witzier, Bosker, & Kruger, 2003; Harrera, 2010). However, despite the wealth of historical evidence on the impact of leadership on school performance, the expectations placed on school leaders have evolved. Today, effective school leaders/principals are required to demonstrate a wide range of executive and administrative skills. The changing landscape of education, demands different types of leadership skills, thus warranting further research.

Leadership itself is a concept with a long history, dating back centuries, and has been associated with terms such as democracy, love, and peace. Consequently, there are diverse definitions and conceptualizations of leadership. According to Northouse (2010), leadership is best understood as the manner in which a person influences a group of individuals to achieve a common goal, making it more suitable for contemporary research studies (Adejumo, 2017).

1.1.2 Theoretical Framework

Within the educational literature, two prominent theoretical frameworks have shaped the discourse on the relationship between leadership and school performance: these frameworks include the instructional leadership model and the transformational leadership model. In the 1980s, researchers predominantly focused on the instructional leadership model to enhance underperforming schools. This type of leadership emphasized the importance of strong and directive leadership centered on curriculum and instruction, which proved effective in

improving student outcomes (Hallinger, 2003; Herrera, 2010). The findings of studies utilizing the instructional leadership model highlighted the critical role of the principal in driving and implementing change in low-performing schools. However, in the 1990s, the instructional leadership model came under criticism for its paternalistic nature, outdated approach, and dependence on compliant followers (Nedelcu, 2013).

The dissatisfaction with the instructional leadership model, coupled with the demands and challenges of contemporary education systems, gave rise to the transformational leadership model as an alternative framework for explaining school performance. This model emerged as a means of reforming schools in the early 1990s, emphasizing autonomy, shared leadership, goal consensus, change agents, organizational learning, and distributed leadership (Herrera, 2010). The advent of the transformational leadership paradigm shifted the focus away from the principal as the sole instructional leader, which had been dominant in the 1980s. According to Oyetunyi (2006), this shift signifies a move from bureaucratic leadership, where the leader directs others and makes decisions on their behalf, to non-bureaucratic leadership, which emphasizes motivation, inclusion, and empowerment of followers.

Consequently, the earlier emphasis on the school overseer as the primary driver of student achievement and effective schools shifted to transformational leaders. These leaders were viewed as change agents and were defined by four critical attributes: charismatic or idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Marks & Printy, 2003; Bass and Avolio, 1994; Lunenburg, 2003; Herrera, 2010). It is through these attributes that

change is fostered within the school organization, driving productivity. The transformational leadership model recognizes the significance of school culture in influencing school performance (Herrera, 2010). Empirical evidence on the transformational leadership model demonstrates that "Transformational leadership practices have a substantial direct and indirect impact on school restructuring initiatives and teacher-perceived student outcomes" (Leithwood, 1994).

The instructional leadership model has faced criticism for its narrow focus on the principal's ability to manage instructional processes and supervision, lacking a multidimensional perspective (Heck et al., 1990). Recent theoretical perspectives, influenced by the changing landscape of education and evolving expectations, advocate for a multidimensional approach to leadership that emphasizes competencies and behaviors. Researchers argue that school leaders need to employ various leadership styles to effectively lead educational organizations in today's context (Dufour & Eaker, 1998; Walters, Marzano, & McNulty, 2004; Herrera, 2010). This suggests that studies incorporating appropriate leadership theories to measure effective school leadership can capture the impact of leadership on school performance.

However, the collective findings from the literature affirm that transformational leadership is the most suitable leadership style for contemporary schools (Anderson, 2017). This leadership approach entails collaboration between leaders and subordinates to identify necessary changes, develop an inspiring vision, and implement the change with the commitment of group members. Gkolia & Belias (2014) argue that unlike traditional and contemporary leadership philosophies that

focus on specific leader qualities, transformational leadership emerges as the most effective leadership category for achieving success in any organization.

1.1.3 Conceptual background

While the relationship between transformational leadership and school performance has been extensively studied in developed countries, there is a lack of empirical evidence in developing countries, particularly for secondary schools (Blanch et al., 2013). The limited research interest in secondary education in developing countries can be attributed to a bias held by policymakers and researchers in the past. Traditionally, due to the higher returns on investment in primary education, most research efforts focused on expanding and improving primary education (Liang, 2002). However, over the past two decades, there has been a significant shift in policy agendas, with increased attention given to secondary and tertiary education.

This study therefore aims at supplementing these efforts but also attempts to bridge this gap by examining the link between transformational leadership and the academic performance of secondary schools.

In assessing the effect of transformational leadership on school performance, two conceptual challenges have been identified in the literature. The first relates to measuring leadership solely from the perspective of the principal or head teacher, overlooking the various roles and responsibilities that leaders have in influencing school performance. The second is measuring academic performance. For example, previous studies have adopted single dimension approaches to measure leadership, focusing on a few isolated attributes of leaders that influence performance. However this study has adopted a multidimensional framework that

captures different attributes of leaders based on teachers' perceptions and assessments in the school context. The focus is on leadership competencies and behavior, moving away from the traditional emphasis on inherent traits of leaders (Gkolia & Belias, 2014). It is important to note that in almost all secondary schools the head teacher holds primary authority in determining how a school is run (Gkolia & Bellas, 2014)

Academic performance refers to how well students handle their studies, cope with assigned tasks, and achieve educational goals (Ankomah, 2002). It is also the ability to apply acquired knowledge and skills when tested, relying on the learner's competence and the school curriculum (Otoo, 2007). Academic performance at the secondary school level serves as an indicator of school effectiveness and has implications for the future prospects of individuals and nations (Aremu & Soka, 2003).

Examinations are commonly used to evaluate school performance, assessing students' capacity to apply their knowledge and skills. Students are assessed through written and oral tests, presentations, homework submissions, and class participation. Performance results are typically expressed as a letter or number grades, allowing for ranking and comparison among students. These grades also serve as a means of holding teachers and schools accountable (Bell, 2012).

By considering these conceptual aspects and adopting a multi-dimensional perspective, this study aims to contribute to the understanding of how transformational leadership influences the academic performance of secondary schools in Uganda.

1.1.4 Contextual background

Building human capital that meets the development needs of countries has been a policy agenda across the globe, particularly in Sub-Saharan Africa. The role of education as an investment in human capital and its impact on social and economic outcomes is well-established in the literature on education and economics. Educated individuals are known to work more effectively and efficiently, devoting more time to productive activities, which ultimately contributes to economic growth (Ritter, 2018). Over the past decades, Sub-Saharan African countries have implemented various policies, such as Universal Primary Education (UPE), Universal Secondary Education, and liberalization and privatization of the education sector, leading to a significant increase in educational levels. Consequently, the number of students accessing primary, secondary, and tertiary institutions of learning has risen substantially (Lewin, 2009). However, alongside this quantitative achievement in school enrollment, there have been significant challenges related to the quality of student performance (Verspoor & Bregman, 2007; Lewin, 2009).

The implementation of UPE in many African countries has created substantial pressure on secondary education. The tremendous growth in primary school enrollment due to UPE has increased the demand for secondary school provision. For instance, in Uganda, the introduction of UPE in 1997 resulted in primary school enrollment levels increasing from 2.8 million in 1996 to over 8.4 million by 2015 (NPA, 2015). To meet the demand for secondary education, private investors in Uganda and the region heavily invested in the provision of secondary education, leading to the proliferation of private secondary schools alongside public ones. However, as consequence, this expansion has resulted in poor and varied academic

performance of schools. By 2003, approximately 85% of secondary school graduates in Uganda had achieved below-standard results (Verspoor, 2006).

Despite the increased demand for secondary education, some public secondary schools, such as St. Peters Tororo, Tororo Girls High School, Teso College, Busoga College Mwiri, and Nabumali High School, among others, have experienced a decline in performance. The liberalization, massive investment, and expansion of private secondary schools has exposed the decline of previously well-performing public schools and contributed to the rise of some private schools. An analysis of the 2017 UCE UNEB results published in the Daily Monitor revealed that out of the top 100 schools, 59 were privately owned institutions (Ahimbisibwe, 2017). Some of these private schools have become more prestigious than traditional secondary schools throughout the country. Notable examples include Seeta High School, St. Mary's Kitende, Uganda Martyrs Namugongo, and St. Peters Nalya Senior Secondary school. The rise and fall of secondary schools across the country has sparked debate on the determinants of secondary school academic performance.

One significant school of thought attributes the rise and dominance of certain private schools to leadership within these secondary schools (Saleem, 2012). This perspective has dominated empirical and theoretical discussions in the education literature. While many factors contribute to school academic performance, effective school leadership is widely regarded as key to success (Leithwood and Seashore, 2004; Portin, 2009; Blanch et al., 2013). Both empirical evidence and practical experience demonstrate that without skilled and committed leaders who shape teaching and learning, creating and sustaining high-quality learning environments becomes challenging (Portin, 2009). School principals are considered

the second most influential factor, after classroom teachers, in student achievement (Condon & Clifford, 2012). Numerous studies in developed countries have shown that high-performing and significantly improving schools are led by strong principals or leaders. A study conducted in the United States called "School Leaders Matter" found that highly effective principals can raise a student's achievement by two to seven months of learning in a single school year, while ineffective principals can lower achievement by the same amount (Blanch et al., 2013).

1.2 Problem statement

Poor academic performance among secondary schools in Uganda is a concern for both government policymakers and educators. Despite some private schools consistently performing well in national examinations, a majority of secondary schools, especially public schools, have recorded low academic performance results. For instance, according to the 2018 UNEB report, out of the 98,524 students who sat for the 2018 UACE exams, 1,489 students failed with an F-grade. In 2017, a total of 1,141 students failed out of 101,269 candidates, and in 2016, 1,363 candidates failed out of 104,234 candidates. The situation is not much different at the UCE level, where a significant number of candidates have been ungraded or failed in recent years. This poor performance has prompted the government to take corrective measures including the renovation, refurbishment and equipping of traditional secondary schools with the aim of creating a more conducive learning environment, construction of new seed secondary schools under the UGift programme, funded by the World Bank, transfer of head teachers in underperforming schools and, in extreme cases, even left some head teachers

undeployed as a punishment, for underperforming. However this approach is practically considered as addressing the issue of poor performance from a general leadership perspective and naturally the problem has persisted. Existing literature indicates that no conclusive studies have been conducted in Uganda to examine the role leaders play in running effective secondary schools. Previous studies on leadership in schools have primarily focused on primary education (Odubaker, 2007; Mpirwe, 2007). The only study in the literature review that made an attempt at secondary education in Uganda was conducted by Crawford (2016). This study examined the relationship between school management quality measures and student test scores, rather than leadership. The continuous poor performance at the secondary level has a direct negative impact on the quality of graduates from tertiary institutions and, consequently, the labor force. Therefore, it is crucial to investigate and establish how leadership, particularly the transformative style, can be utilized to improve academic performance in secondary schools.

Hence, this study plays a vital role in examining and understanding the relationship between transformational school leadership and academic performance in secondary schools, filling the research gap in Uganda's context. By focusing on leadership style rather than general leadership, this research aims to provide insights and recommendations for improving academic performance in secondary schools.

1.3 Objective of the study

The main objective of this research is to examine how a leadership style adopted by school headteachers influences academic performance of secondary schools in Uganda.

1.4 Specific objectives of the study

- i) To investigate the extent to which transformational leadership attributes of headteachers influence UCE and UACE academic performance of secondary schools in Uganda.
- ii) To examine the influence of transformational leadership attributes on UCE and UACE performance of public schools in Uganda.
- iii) To examine the influence of transformational leadership attributes on UCE and UACE academic performance of private secondary schools in Uganda.

1.5 Main Research Question

The main research question underlying this study is; how does a headteachers' adopted leadership style influence academic performance at UCE and UACE in Ugandan Secondary schools?

1.6 Research hypothesis

(1)H₁1: The leadership style adopted by headteachers influences UCE and UACE academic performance of secondary schools in Uganda

H₀1: The leadership style adopted by headteachers has no influence on UCE and UACE academic performance of secondary schools in Uganda

(2) H₁₂: The transformational leadership attributes of head teachers influence UCE and UACE student academic performance in public secondary schools in Uganda.

H₀₂: The transformational leadership attributes of head teachers has no influence on UCE and UACE student academic performance in public secondary schools in Uganda.

(3) H₁₃: The transformational leadership attributes of head teachers influence UCE and UACE student academic performance in private secondary schools in Uganda.

H₀₃: The transformational leadership attributes of head teachers does not influence UCE and UACE student academic performance in private secondary schools in Uganda.

1.7 Scope of the study

1.7.1 Content scope

The study aimed at examining the relationship between transformational leadership attributes and student academic performance. Transformational leadership attributes were considered as the independent variables, while student academic performance was the dependent variable. To assess transformational leadership characteristics, the Multifactor Leadership Questionnaire developed by Bass and Avolio (2004) was utilized. This questionnaire measures three dimensions of leadership, but for this study, only the questions related to transformational leadership attributes were used. The questionnaire consisted of 20 items, rated on a five-point Likert scale ranging from 0 (not at all) to 4 (frequently, if not always).

Within the questionnaire, inspirational motivation, intellectual stimulation, and individual consideration each had four questions, while idealized influence and behavior had eight questions (Hayati et al., 2014; Leapley-Portscheller, 2008). Appendix 1 displays the questionnaire with the extracted questions from the Multifactor Leadership Questionnaire.

Previous studies assessing school leadership have used self-ratings by leaders or evaluations from administrators or teachers. However, research indicates that self-ratings may be biased, and evaluations from administrators can be overly lenient or strict. Therefore, the study employed teacher ratings as the preferred approach. In line with Oliveira and Carvalho's (2018) work, the researcher randomly selected 4-7 teachers from each school to evaluate their head teacher's leadership practices using a customized scale (Gkolia & Belias, 2014). The teachers' responses were aggregated per school, and an average index of the teachers' perceptions of their head teacher's leadership was computed. School academic performance was measured using the Uganda Certificate of Education and Uganda Advanced Certificate of Education results from the three years prior to the study. Additionally, other variables such as school fees per term, school size, number of teachers, gender of the head teacher, student entry cutoff in S.1, and location and ownership variables were considered as potential factors influencing school academic performance.

1.7.2 Geographical Scope

The study was conducted in the Central region of Uganda, which encompasses a significant portion of the secondary school population in the country. According to school statistics from Uganda's Ministry of Education and Sports (MoES), by 2021, there were over 3,000 secondary schools nationwide, and the Central region alone

comprised 1,148 schools, representing more than a third of the total. The selection of this region was based on its diverse composition of high performing, medium, and low performing secondary schools. Additionally, the region includes both rural and urban schools, as well as a vast mix of private and public secondary schools. It also features a considerable number of female-led secondary schools, providing a comprehensive representation of Ugandan secondary schools. Considering these factors, the researcher was convinced that the region would offer a representative snapshot of secondary schools in the country.

1.8 Significance of the Study

Research conducted elsewhere has shown that the effectiveness of school leaders is a crucial factor in improving student achievement (Branch, Hanushek, & Rivkin, 2012; Coelli & Green, 2012; Dhuey & Smith, 2012). However, there is limited evidence from developing countries regarding effective educational leadership, which could guide policy reforms in this area. Understanding the characteristics of effective school leaders and the impact of transformational leadership on academic performance is important for two reasons. Firstly, parents have high expectations for their children's academic success (Osiki, 2001). Academic failure not only disappoints students and parents but also has significant societal implications, such as a loss of skilled workforce across various sectors of the economy and politics (Babatunde & Olanrewaju, 2014). Secondly, while schools may have secondary objectives, their primary goal is to facilitate academic excellence among students (Adeyemo, 2001). This goal is highly valued by all stakeholders in education. Therefore, understanding the practices that successful school leaders employ to achieve academic excellence is valuable for informing

leadership development interventions and serves as a benchmark for assessing leaders' performance (Leithwood et al., 2006). Leithwood et al. argue that understanding what successful leaders do prompts questions about how and why they are effective, leading to policy reforms and initiatives aimed at improving school performance.

In conclusion, the findings of this study will benefit education policymakers at the ministry level, local government educational managers, school administrators, and managers by providing insights into the leadership attributes that effective leaders in secondary schools employ and how these attributes impact academic performance. The findings will support justifications for reforms in school leadership and training, particularly in underperforming schools. Additionally, future researchers interested in related areas, such as primary and higher education levels, can benefit from the insights gained in this study.

1.9 Justification of the Study

The concept of transformational leadership has gained significant recognition in literature due to its potential in promoting school success. This leadership model has become increasingly relevant in the field of education administration, addressing the current challenges faced by secondary school principals (Gyansah, Ogola, & Guantai, 2020).

School administrators encounter a multitude of issues on a daily basis, including personnel matters, school improvement, instructional concerns, budget constraints, structural changes, and parental involvement. Despite not being directly involved in teaching, the school leader's supportive, collaborative, and non-restrictive behaviors can have a positive impact on students' academic

progress. Hallinger (2010) suggests that school leaders who foster collaborative learning structures, cultivate a culture of collaboration, and develop the leadership capacities of staff and the community indirectly contribute to improved academic achievement among students.

Conversely, academic achievement has garnered significant attention from scholars, parents, policymakers, and planners due to its crucial role in students' lives. The primary objective of schools is to ensure students' academic success. The importance placed on quality education by all stakeholders underscores the significance of this study, which aims to explore the influence of transformational leadership, a desired leadership style, on academic achievement in Ugandan secondary schools.

By investigating the relationship between transformational leadership and academic performance, this study aims to provide valuable insights that can inform educational practices, support policy development, and contribute to enhancing the overall quality of education in Ugandan secondary schools.

1.10 Conceptual Framework

The conceptual framework of this study draws on the established transformational leadership theory pioneered by Bernard Bass in 1985. According to Bass, transformational leaders exhibit four key behaviors or attributes when interacting with their staff or subordinates: idealized influence and behavior, inspirational motivation, individualized consideration, and intellectual stimulation. Extensive research studies have shown that transformational leadership has a positive impact on various aspects of organizational performance, including teacher commitment,

job satisfaction, and overall school success (Anderson, 2017; Gkolia & Belias, 2014).

While empirical research on the effect of school leadership on student achievement has predominantly focused on developed countries, the importance of effective school leaders in driving high-performing schools and improving student outcomes has been well-documented (Ross & Gray, 2006; Condon & Clifford, 2012; Portin, 2009). It has also been observed that the role of school principals has evolved over time, emphasizing the need for instructional leadership and the development of a collaborative team of teachers to deliver effective instruction to every student (Krasnoff, 2015).

Furthermore, studies such as "School Leaders Matter" by Branch et al. (2013) highlight the significance of school leadership by examining the impact of principals on student performance. Effective principals have been found to positively influence student achievement, while ineffective principals have a detrimental effect. This influence extends to various mechanisms, including teacher turnover. Research conducted by Gkolia and Belias (2014) in Greek elementary and secondary schools explored the relationship between transformational leadership and teacher job satisfaction. Their findings indicated that principals with transformational leadership characteristics can enhance the relationships between principals, students, and teachers, as well as foster a positive collegial environment. Similar findings have been reported in other educational studies.

A study conducted in Brazil by Prado de Oliveira and Paes de Carvalho (2018) focused on public school management, leadership, and educational outcomes. The

study revealed a positive correlation between principal leadership and improved academic results in mathematics tests among fifth-grade students. The authors concluded that effective principal leadership creates a conducive institutional climate that supports more effective pedagogical work and, consequently, better student performance.

By integrating these various research findings within the conceptual framework, this study aims to examine the relationship between transformational leadership attributes of head teachers and student academic performance. The study seeks to contribute to the existing body of knowledge on the impact of school leadership on academic outcomes, particularly in the context of Ugandan secondary schools.

Jacobson (2010) conducted a study in the United States focusing on challenging, high-poverty schools to investigate the effects of principal leadership on student achievement and long-term school success. The study drew conclusions from the International Successful School Principalship Project's longitudinal studies (ISSPP) and reviewed leadership literature. The findings indicated that successful principals, regardless of the context, practiced setting direction, developing people, and redesigning the organization.

Seashore, Dretzke, and Wahlstrom (2010) conducted a survey-based study using responses from a national sample of US teachers to explore the impact of specific leadership behaviors on teachers' work and student achievement. The study found that leadership behaviors such as sharing leadership with teachers, developing trust relationships, and providing support for instructional improvement were positively related to teachers' collaboration and classroom practices. Additionally, the study established a positive association between school leaders' behaviors and

student achievement, emphasizing the complementary nature of shared and instructionally focused leadership approaches.

Qualitative studies also provide evidence supporting the role of school leadership in student performance. Adejumo (2017) conducted research in urban and high-poverty contexts, reinforcing previous findings and highlighting the practical application of theoretical leadership approaches. The study recommended strategic professional development for principals as a systematic approach to improving failing schools.

In African countries such as Nigeria, South Africa, Kenya, and Uganda, studies examining school leadership and performance align with findings from developed countries. A study by Akinola Oluwatoyin Bolanle (2013) in Nigeria explored the leadership skills possessed by principals of public secondary schools and their relationship with school effectiveness. The study revealed that principals' leadership skills, including technical, interpersonal, conceptual, and administrative abilities, significantly influenced school effectiveness in terms of student academic achievement.

Zuze and Juan (2018) in South Africa highlighted the need for larger-scale studies linking school leadership management (SLM) to performance. Their study utilized data from the Trends in International Mathematics and Science Study (TIMSS) and concluded that the relationship between SLM and academic achievement varied depending on the socio-economic status of schools and students. The study also noted that independent schools exhibited better SLM practices, potentially due to greater autonomy or higher-quality principals.

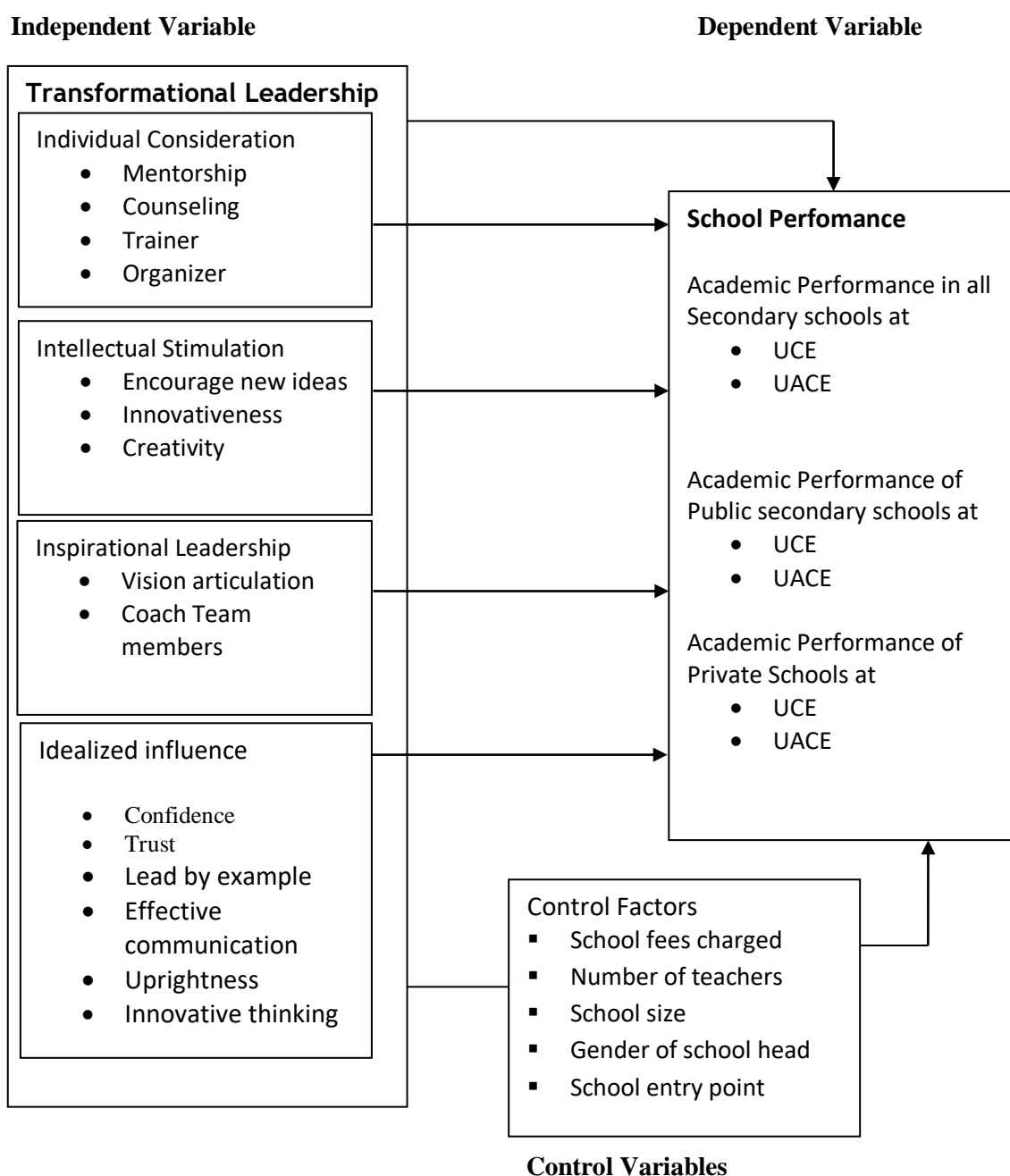
In Kenya, Ndinza (2015) investigated the impact of head teachers' management practices on student academic performance. The study, conducted in Kitui Central District of Kenya, found that supervision, communication, and motivation of teachers by their headteachers influenced students' performance in national examinations. Schools with better management practices achieved better academic results.

In Uganda, Lee Crawford's (2016) study on school management examined the relationship between management quality and student test scores. The study revealed that effective management positively influenced student learning outcomes. It also indicated that better management could be a low-cost strategy for improving learning outcomes, as school fees and resources did not necessarily correlate with management performance in non-elite schools.

The conceptual framework incorporates the dimensions of transformational school leadership, including idealized influence and behavior, inspiration motivation, intellectual stimulation (stimulation of the mind), and individualized consideration (attention). These dimensions describe the leader's characteristics and behaviors in relation to followers. However, the framework also acknowledges the influence of other school factors on the relationship between transformational leadership and student academic performance. Controlling for these factors is crucial in understanding the specific impact of transformational school leadership attributes. Factors such as students' prior academic attainment, as measured by primary leaving exams (PLE), have been found to account for a significant portion of the variation in secondary School test scores.

Overall, the conceptual framework outlines the direct relationship between transformational school leadership attributes and student academic performance while considering the influence of other school factors. By examining this relationship, the study aims to contribute to the understanding of the impact of school leadership on academic outcomes in Ugandan secondary schools.

Figure 1: Conceptual framework showing the relationship between transformational leadership and academic performance of secondary schools



1.11 Conclusion

In this chapter, we discussed the background, problem statement, objectives, hypotheses, conceptual framework, justification and significance of the study. The next chapter delves into the study variables and their interrelationships, providing further insights into the research topic.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this chapter, the study's relevant literature is presented, including the theoretical review, conceptual review, literature review conducted for each objective, and a summary of all the literature reviewed. Additionally, identified gaps and lessons learned are discussed.

2.1 Theoretical Framework

In the literature, various theories have been proposed to explain leadership traits and their impact on organizational outcomes. These theories include David McClelland's Achievement Motivation Theory, which predicts behavior and performance based on an individual's need for achievement, power, and affiliation; Douglas McGregor's Theory X and Theory Y, which explain leadership behavior and performance based on the leader's attitude towards followers; and Kurt Lewin's Leadership Style Theory, which suggests that leaders can either be autocratic or democratic in their approach to followers, among others. Gkolia and Belias (2014) classified leadership theories into traditional and contemporary categories, with traditional theories including the Great Man Theories, Trait-based Theories, Behavioral Theories, Situational Theories, and Contingency Theories, while contemporary theories include Transactional Leadership, Transformational Leadership, Strategic Leadership, Educative leadership, Organizational leadership, and Teacher Leadership.

However, a review of articles published between 1990 and the present reveals that transformational leadership theory is popular and widely used in research studies

to explain performance (Anderson, 2017; Gkolia & Belias, 2014). Gkolia and Belias (2014) provide evidence that the transformational leadership style has a positive impact on teacher commitment, performance, job satisfaction, and overall school success. Given the positive correlations established between the transformational leadership style and employee performance, motivation, and job satisfaction in business organizations, it is a viable approach for educational leaders to consider in transforming schools to meet new stakeholder demands.

The transformational leadership theory, pioneered by Bernard Bass in 1985, describes transformational leaders as those who exhibit four key behaviors when interacting with their staff or subordinates: idealized influence and behavior, inspirational motivation, individualized consideration, and intellectual stimulation. Idealized influence involves the leader providing a vision and a sense of mission while demonstrating total commitment to it. Inspirational motivation entails communicating high performance expectations in an encouraging and enthusiastic manner. Individualized consideration involves coaching, mentoring, and providing feedback tailored to individual needs. Intellectual stimulation entails challenging followers to embrace new ways of thinking and doing things, as well as reevaluating their values and beliefs (Bass, 1985; Gkolia & Belias, 2014).

In the school context, Kenneth Leithwood has been instrumental in advancing the use of the transformational leadership theory. Leithwood demonstrated that transformational leadership positively influences school leadership's ability to facilitate change in school restructuring initiatives and is well-suited to meet the demands of twenty-first-century schools (Leithwood, 1994; Gkolia & Belias, 2014). Leithwood's model for school leadership, developed in 1994, outlines six

dimensions of transformational leadership, that include: identifying and communicating a vision, encouraging acceptance of group goals, providing individualized support, intellectual stimulation, providing an appropriate model, and having high performance expectations.

In school leadership theories and studies, it is generally accepted that successful schools are associated with good leaders (Mwangi, 2015). It is acknowledged that due to the complexity and breadth of leadership skills required, leaders (head teachers) cannot lead alone. Collaboration between schools and districts is essential to achieve high levels of student success. Therefore, leadership theories that focus on the individual may not be effective in meeting the accountability demands and expectations of schools. School leadership team members play a crucial role in the school improvement process (Chrispeels, Burke, Johnson, & Daly, 2008).

Principals or head teachers serve as administrators in school systems and provide school leadership. They are considered chief executive officers responsible for overseeing efforts to achieve the educational goals of the school, including teaching, learning, and the overall development of children and youth. They serve as experts, reform leaders, resource managers, and public communicators. However, successful school leadership requires collaboration with teachers to promote better education for every student. It involves inspiring and assisting others in achieving the school's vision based on ethical and moral principles. Traditional capabilities of school leadership includes, coordination, and assimilation of details, multi-perspective capacity, diplomacy, and core-business competency. Principals must embrace best practices to build and sustain

successful schools. They must develop and implement strategic school improvement plans and provide instructional guidance to improve learning. Effective school leadership involves involving both students and staff in making important decisions about school rules, regulations, and programs through meetings, student councils, clubs, committees, and administrative institutions. Distributed leadership allows highly successful leaders to rely on the management accomplishments made by others within the organization. Principals rely on key teachers and administrative colleagues to provide such leadership (Horde, Steigelbauer, and Hall, 1984). School leaders should encourage and support teachers' professional development through structured teaching sessions, symposiums, and training programs. All school decisions and processes should align with the school's educational policies and philosophy, with the aim of achieving the school's objectives and goals. The administration should foster an idealistic spirit and morale in its efforts to make the school's goals a reality.

2.2 Transformational school leadership attributes

Transformational leaders in the existing literature are described as individuals who strive to enhance relationships with their followers, prioritize the interests and needs of followers, raise awareness and gain acceptance of organizational goals, focus on long-term priorities without compromising values and principles, transcend daily affairs for the sake of long-term goals, and establish opportunistic cultures (Burns, 1978; Brighthouse, 2006; Leapley-Portscheller, 2008). Brighthouse (2006) argues that they align internal structures and systems to reinforce the overarching values and goals of the organization.

Despite variations in the definition of transformational leadership, scholars have identified different characteristics of transformational leaders. Bass (1985) pioneered the definition, emphasizing the impact of leaders on their followers. When followers trust, admire, and respect the leader, they are motivated to surpass initial expectations. According to Bass (1985), transformational leadership goes beyond charisma alone, stating, "Charisma is a necessary ingredient of transformational leadership, but by itself it is not sufficient to account for the transformational process."

In 1994, Leithwood developed a transformational leadership framework specifically for schools, with a primary focus on school principals. To assess the effectiveness of school leaders, Leithwood (1994) proposed a model comprising six attributes of transformational leaders: (1) establishing and communicating a vision, (2) fostering acceptance of group goals, (3) providing personalized support, (4) promoting innovation, (5) serving as a suitable role model, and (6) setting high performance expectations. These characteristics align with transformational leadership behaviors that cultivate a school culture of purpose, commitment, and creativity (Lucas, 2002).

However, the most widely used transformational leadership model in recent empirical education research is the one developed by Bass and Avolio (1997; 2003; 2004). They identified four dimensions of transformational leadership: idealized influence and behavior, inspirational motivation, intellectual stimulation, and individualized consideration. These dimensions are adopted in the current study.

2.3 The effect of school leadership on student achievement

Research on the impact of school leadership on student success has been growing, with many studies conducted in developed countries. In these countries, it has been found that high-performing schools are often led by strong principals who exhibit transformational leadership qualities. These principals are associated with higher student achievement and other positive school outcomes such as teacher efficacy and commitment.

A study by Vidoni et al. (2007) focused on the school leadership question and its effect on student results in 18 nations. The findings revealed that in more centrally controlled school systems, a managerial focus by the head-teacher is effective in reducing the achievement gap related to students' socio-economic status. On the other hand, in more decentralized systems, leadership specialization is more beneficial. The study also highlighted that school systems characterized by local control or in transition present a mixed picture.

Krasnoff (2015) emphasized the changing role of school leadership, stating that principals are no longer just building managers but need to be instructional leaders who can develop effective teaching teams. Effective instructional leadership is crucial for creating and sustaining a high-quality learning environment. Krasnoff also noted that challenging schools are often led by inexperienced and ineffective principals, while effective principals tend to stay longer in challenging schools. The study recommended that principals receive training, acquire skills, and gain experience in instructional leadership to improve student learning outcomes.

Branch et al. (2013) conducted a study titled "School Leaders Matter" that estimated the individual contributions of principals to student achievement. The study found that highly effective principals can increase a student's achievement by up to seven months in a single school year, while ineffective principals can have the same opposite effect. The study also highlighted the influence of principals on student achievement through mechanisms such as teacher turnover.

Gkolia and Belias (2014) examined the impact of transformational leadership on teacher job satisfaction in Greek schools. Their study revealed that principals with transformational characteristics can improve the relationship between the principal, students, and teachers, as well as foster positive relationships among colleagues. These principals can also create a conducive educational environment that enhances teachers' working conditions.

Mehndroo and Vandana (2020) investigated the impact of motivation on academic achievement and found a significant correlation between inspirational motivation indicators and student academic achievement. Similarly, Wentzel and Wigfield (2014) conducted a study on academic and social motivational influences on student achievement. Their findings highlighted the positive influence of inspirational motivation by head teachers on student performance.

Studies conducted in Brazil, the United States, and China have also shown the positive effects of school leadership on student outcomes. For example, Prado de Oliveira and Paes de Carvalho (2018) found that principal leadership promotes an improved institutional climate, which leads to improved student performance in Brazilian schools. In the United States, Jacobson (2010) examined the effects of principal leadership on student achievement and found that successful principals

exhibit practices such as direction setting, developing people, and redesigning the organization. Hahm and Sun (2020) explored the individualized consideration of professors and its impact on the personal growth of Chinese students studying abroad in Korea. The study found that individualized consideration positively influenced students' personal growth, and perceived school support strengthened this influence.

In Africa, limited studies have explored the relationship between school leadership and performance. However, evidence from studies conducted in Nigeria, South Africa, Kenya, and Uganda aligns with findings from developed countries. For instance, Akinola Oluwatoyin Bolanle (2013) found that the leadership skills possessed by principals in Nigeria were positively related to school effectiveness in terms of student academic achievement. Similarly, in another study conducted by Ogbonnaya, Izuagba, and Chukwudebelu (2020) discovered a positive relationship between transformational leadership style and students' academic achievement.

In order to effectively implement a transformational leadership style, Alesa (2021) emphasizes the need for the active involvement of staff in changing their mindset about work. However, excessive changes happening simultaneously can lead to disarray and confusion within unified systems, causing employees to overlook standard protocols and best practices. Transformational leaders, in their pursuit of motivating everyone in the school to change, may overlook critical considerations regarding the timing and context for each change.

The foundation of the transformational leadership model lies in the leaders' ability to exert significant influence and shape their employees' thinking (Ndinza, 2015). Encouraging employees to adopt a shared mindset for promoting school success can

create challenges when it comes to raising concerns or identifying potential issues (Condon & Clifford, 2012). When transformational leaders condition everyone to think in a certain way, it becomes harder to recognize any negative aspects of school administration procedures, leading to a lack of checks and balances (Nasuuna, 2019).

Osuji, Chinyere, and Amaewhule (2021) identified several challenges faced by head teachers in their transformational leadership style in public senior secondary schools in Rivers State of Nigeria. These challenges include inadequate management support, improper planning, issues with organizational culture, improper organizational structure, lack of training programs for professional growth, bureaucratic bottlenecks in the school system, lack of school plant maintenance, insufficient teaching-learning facilities, and inadequate funding of the school system.

To ensure the effectiveness of transformational leadership, continuous communication between the head teacher and staff as well as students is essential (Gkolia et al., 2014). Transformational leaders need to demonstrate their involvement in the school by modeling good behavior to motivate teachers and students. However, maintaining constant communication can be time-consuming, especially in large schools where the head teacher may have various responsibilities and limited time (Krasnoff, 2015). Establishing open lines of communication with every staff member and student can be challenging, if not impossible (Alesa, 2021).

Effective transformational leadership revolves around inspiring and garnering commitment (Osuji et al., 2021). It also requires personal authenticity and self-

awareness regarding any fundamental flaws that may limit leadership capacity. Leaders face greater challenges today due to increased environmental complexity and the evolving nature of organizations (Riaz & Haider, 2010). Transformational head teachers invest time in helping their team members develop their professional skills and abilities, as well as assisting students in realizing their academic potentials in various disciplines. However, this may inadvertently lead to favoritism, as some teachers receive more attention based on their departmental importance (Mwangi, 2015). Such favoritism can result in uneven staff development and internal conflicts arising from perceived lack of recognition and appreciation (Jacobson, 2011).

Another challenge of transformational leadership lies in the expectation that head teachers possess likable and charismatic personalities that resonate with their staff (Laubscher, 2008). Relying on specific personality traits within the team can undermine the recognition and promotion of more reserved individuals. Additionally, changes in staff and shifts in personality dynamics can further complicate the leadership dynamics (Smith, Francis, & Harper, 2015).

Meziobi and Nzokurum (2014) highlight the inadequacy of training programs and practices for head teachers, coupled with their reluctance to avail themselves of professional development opportunities. This behavior not only negatively impacts educational leadership in Nigeria but also affects student performance, particularly in public schools.

Riaz and Haider (2010) assert that leaders face increasingly complex challenges due to the changing nature of schools and their environments. Oragwu and Nwabueze (2015) add that challenges inhibiting effective transformational

leadership for enhanced performance in the educational sector include the absence of performance indicators and measurable benefits, insufficient management support, improper planning, coordination, and evaluation, lack of skills or knowledge among head teachers and staff, issues with school culture, and improper school structures.

2.4 Conclusion and Research Gaps

In conclusion, the literature review reveals that there are limited empirical studies conducted in African countries, with a majority of them employing quantitative research methods. The utilization of qualitative or mixed methods is relatively low. The synthesis of theoretical and empirical literature collectively indicates a causal relationship between school leadership and academic achievement. This suggests that enhancing the quality of principals is crucial for improving school outcomes, making it a significant objective for educational policy reforms in many developing countries struggling with low academic performance.

However, the study by Choi and Gil (2017) cautions that when examining the association between school leadership and academic achievement, it is important to carefully consider how the effect is determined. Previous studies suggest that various school leadership models can enhance student academic achievement, although the extent of the effect remains uncertain. Moreover, most studies have remained descriptive in nature, limiting the establishment of causal relationships. Therefore, there is a need for robust evidence to fill these gaps.

Choi and Gil (2017) further argue that studies capable of establishing causal relations between leadership and academic achievement are relatively new and scarce. The evidence obtained from these studies often lacks generalizability

(limited external validity) as they are location-specific, focus on specific competencies such as mathematics and language, and primarily concentrate on primary education. Consequently, there is a strong need for additional research to address these limitations and provide more comprehensive evidence.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Philosophy

In this study, the positivist research philosophy was chosen due to its suitability for explaining relationships between phenomena. The objective was to establish a consistent relationship between leadership and performance variables across different contexts and over time. Mugenda, O and Mugenda, A (2003) observe that Positivism is a philosophy that emphasizes observation and reasoning as tools for understanding behavior. In the social sciences, positivists employ scientific methods akin to those used in natural sciences to study social phenomena, treating them as value-free and subject to scientific explanation. Positivism encompasses various schools of thought, including empiricism, naturalism, behaviorism, scientism, determinism, and reductionism. It also reflects a deterministic philosophy in which causes determine effects or outcomes. As such, researchers pursue an objective understanding of the social world. According to Modell, S (2005) the positivist research philosophy favors the use of survey questionnaires for data collection and statistical analysis for hypothesis testing in order to explain relationships and reach valid and generalizable conclusions. Additionally, the positivist approach quantifies and measures observable phenomena, transforming them into scientific evidence. This enables the researcher to utilize standardized, valid, and reliable scientific methods, with the aim of objectively generalizing the findings from the sample to the population.

3.2 Research Design and Methodology

According to Cresswell, J.W. (2014) the broad research approach involves a plan or proposal to conduct research and involves the intersection of philosophy, research design and specific method. A research design establishes the framework for data collection and analysis. It refers to the work plan, schedule, or process involved in developing an empirical test to support or refute a knowledge claim. Simply put, a research design is a detailed plan outlining how a research study will be conducted, including operationalizing variables, selecting a sample, collecting data, and analyzing results. Mellinger and Hanson, (2017) observe that a researcher must weigh the advantages and drawbacks of each type of research to determine which design is best for their specific research questions or hypotheses. Given that this study aimed to quantitatively examine the relationship between transformational leadership attributes and academic performance in secondary schools, a survey research design was considered the most appropriate. This type of design allows for collection of data about multiple characteristics of a specific group of people, with the data taking the form of numerical measurements of the variables of interest.

The study employed a quantitative research method, which facilitated the investigation of the relationship between the independent variables (transformational leadership attributes) and dependent variable (academic performance). According to Punch (1998) quantitative methods are used because they are relatively low in cost and time requirements, as well as their ability to collect a large amount of relevant data that can be subjected to statistical analysis techniques for greater representativeness. The collected data is then used to assess cause-and-effect relationships. Unlike qualitative methods that raise

concerns about the researcher's influence on the collected data and the participants, quantitative methods involve highly structured data extraction techniques that limit researcher maneuvering during the problem investigation, hence their adoption for this study.

3.3 Study Population

The study population comprised all secondary schools in Uganda, with the school being the unit of analysis. According to data from Uganda's Ministry of Education and Sports in 2021, there were over 3,000 secondary schools in the country. However, to minimize data collection costs while ensuring representative data on school leadership and academic performance variables, the study focused on the central region of Uganda. The central region was chosen because it encompasses a majority of high, medium, and low performing schools, and has a good number of both public and private Secondary schools. Additionally, the region includes schools in both rural and urban settings and has a relatively equal distribution of male and female-led secondary schools. Appendix 9 presents data obtained from the Ministry of Education, which indicates that the central region comprises a total of 1,148 schools, accounting for more than one-third of the secondary school population in the country. These schools formed the target population from which a random sample of secondary schools was selected.

3.4 Sample size and selection

As noted by Mugenda and Mugenda (2003), studying the entire targeted population is not feasible, necessitating the selection of a sample. The study's sample size was

determined using Yamane's (1967) simplified sample size formula, which is provided below. The Yamane sample size formula is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where n= sample size

N= population size

e= level of precision (0.05)

$$n = \frac{1148}{1 + 1148(0.05 \times 0.05)}$$

$$n = \frac{1148}{3.87}$$

n = 296.6, approximately 297 secondary schools.

In this formula, the sample size 'n' represents the number of subjects chosen from the population size 'N,' which in this case was 1,148 secondary schools from the central region.

However, it is important to consider the potential for low response rates in studies of this nature, which may require adjusting the sample size to account for non-responses. Research in management surveys often faces response rates below 100% due to various factors, including participant non-cooperation. To address this, oversampling between 40% and 50% has been recommended (Hashim, 2010; Salkind, 1997). In this study, a 5% non-response rate was anticipated, and the final sample size was adjusted accordingly using the following formula:

Final sample size = effective sample size / (1- expected non-response rate)

As a result, the final sample size of schools chosen, assuming a 5% non-response rate, was:

$$n = \frac{297}{1-5\%} = 312$$

3.5 Sampling techniques and procedure

The study focused on secondary schools in the central region of Uganda, and a multi-stage sampling technique was employed to select the sample.

From a total of 312 schools, Convenience sampling was used to select 156 public and 156 private schools for inclusion into the sample depending on ease of access. The sampling process involved three stages. Firstly, the secondary schools in the central region were divided into two categories: public and private. Secondly, within each category, schools were conveniently selected depending on the easiest to access by the researcher this ensured representation from both types of schools. In the third stage, within each selected school, a random sample of 3-7 teachers was chosen to respond to the school leadership section of the questionnaire. To maintain fairness and reduce bias, a list of teachers present on the visitation day was generated, and a simple random sampling method was used to select the required number of teachers. If the number of teachers present was limited, a minimum of 3 teachers were selected, whereas if the number was higher, 7 teachers were chosen. This approach aimed to capture a diverse range of perspectives from each school. The remaining sections of the questionnaire, focusing on academic performance and other school-related factors, were completed by the school Director of Studies (DOS). This sampling strategy allowed for comprehensive data collection from a representative sample of secondary schools in the central region of Uganda.

3.6 Variables and Measurement

For the assessment of head teachers' transformational leadership practices, between 3 and 7 teachers were randomly selected from each school. The respondents used a scale provided in Appendix II to evaluate their head teacher's leadership. In contrast to previous studies, this research followed the approach used by Oliveira & Carvalho (2018) by relying on teacher ratings instead of administrator assessments. This decision was based on the recognition that administrators have exhibited leniency or strictness biases in past evaluations. Aggregating the teachers' responses for each school, an average index was computed to gauge the teachers' perceptions of their head teachers' transformational leadership qualities. Additionally, data on the Uganda Certificate of Education (UCE) and Uganda Advanced Certificate of Education (UACE) results from the three years preceding the study, along with other school performance factors, were collected from the school Directors of Studies (DOS).

3.7 Operational Definitions and Measurement

Transformational leadership, as defined by Bass (1985), emphasizes the impact of leaders on their followers. When followers trust, admire, and respect their leader, they are motivated to exceed their expectations. Charisma is considered a necessary aspect of transformational leadership, but it alone cannot fully explain the transformational process.

Academic performance, also known as academic achievement or scholastic functioning, refers to the ability to succeed in tests based on what has been taught (Otoo, 2007). It is influenced by curriculum content, the intellectual capacity of learners, and their overall competence. Exams are commonly used to evaluate

school performance, assessing the application of acquired knowledge and skills (Yeboah, 2014).

Previous studies examining the relationship between transformational leadership and school performance have identified two conceptual challenges: measuring leadership from the perspectives of principals or head teachers, and defining academic performance. Earlier research often adopted a single-dimensional approach, focusing on isolated personal traits of administrators and neglecting the various roles and responsibilities that leaders fulfill, which impact school performance. In contrast, this study adopted a multi-dimensional framework that captures different attributes of leaders based on teachers' perceptions and assessments within the school context. The chosen framework focused on leadership competencies and behavior rather than inherent traits emphasized in traditional leadership models. Notably, the head teacher plays a crucial role in determining how a school operates (Gkolia & Belias, 2014). Hence, this study specifically explored the relationship between transformational leadership attributes/traits (independent variables) and student academic performance (dependent variable) within schools.

To measure transformational leadership attributes, the Multifactor Leadership Questionnaire developed by Bass and Avolio (2004) was employed. This questionnaire assesses three types of leadership: transformational, transactional, and laissez-faire. However, for this study, only the questions related to transformational leadership attributes were used. The assessment of leaders' transformational leadership attributes involved 20 items measured on a five-point Likert scale ranging from 0 (not at all) to 4 (frequently, if not always). Within the

multifactor leadership questionnaire, the dimensions of inspirational motivation, intellectual stimulation, and individual consideration each comprised four questions, while the idealized influence attribute included eight questions (Hayati et al., 2014; Leapley-Portscheller, 2008). The specific questions from the Multifactor Leadership Questionnaire are presented in Appendix II.

Regarding academic performance, the study employed the Uganda National Examinations Board (UNEB) Grading System. For the Uganda Certificate of Education (UCE), the minimum academic achievement was measured as the 4th grade, while for the Uganda Advanced Certificate of Education (UACE), a minimum of two principle passes was considered as the minimum academic achievement.

Overall, the study aimed to explore the relationship between transformational leadership attributes and student academic performance, adopting a comprehensive framework and employing a reliable measurement tool for assessing leadership qualities and academic achievements.

3.8 Data collection methods

(a) Questionnaire Data Collection

To gather data from the participants, structured survey questionnaires were employed. The choice of structured questionnaires was based on their ability to ensure response confidentiality while saving time. Additionally, they are widely utilized in social science and educational research.

A researcher-administered questionnaire was preferred to maximize the response rate and save time and resources on follow-ups, as suggested by Bryman and Bell (2007). To ensure a higher response rate, in some schools, the face-to-face data

collection method was employed, allowing the researcher to interact directly with the participants. The questionnaire was presented to the participants, and once they completed it in the presence of the researcher, it was collected. However, it should be acknowledged that this method was time-consuming. As stated by Amin (2005), a disadvantage of questionnaires is their typically low response rate.

(b) Document Study

Gall (1989) emphasizes the importance of documentary evidence as it offers a comprehensive account of facts intertwined with opinions, facilitating cross-referencing with current findings. The aim of the documentary study was to determine the schools' actual performance. To achieve this, a request was made for copies of the summary of Uganda Certificate of Education (UCE) and Uganda Advanced Certificate of Education (UACE) results documents for the past three years. The obtained results were analyzed to identify the students who passed and failed each year, providing insights into school performance.

3.9 Validity and reliability

In every study, researchers must be mindful of potential threats to external and internal validity that may impact the study's quality. In the case of this study, both external and internal validity were considered to be very important. External validity refers to the extent to which the findings of a study can be generalized to different populations, contexts, and timeframes, while internal validity refers to the degree of confidence in the researcher's conclusions about the causal relationship between variables (Chen, 2012).

To address threats to internal and external validity, various controls were implemented throughout the research process, including research design, data collection, analysis, and interpretation. In quantitative research, particular attention is given to construct validity, which examines whether theoretical concepts are adequately represented by empirical measures and operational definitions (Modell, 2005). However, the study did not encounter any issues regarding content validity as a standardized research tool, the MLQ, was employed. The face validity of the instruments was ensured through several measures, such as reviewing similar studies, consulting experts in the field, colleagues, and research supervisors.

Prior to the actual field study, a pre-test was conducted using 30 survey questionnaires among non-sampled schools in the central region. The purpose of the pre-test was to determine if respondents could comprehend the questions and provide the required information in a timely manner. Additionally, it helped estimate the average length of time needed to complete the questionnaire, aiding in the planning process. Another assumption made in this study was that all teachers answered the questionnaire questions honestly.

By addressing these validity concerns and conducting a thorough pre-test, the study aimed to enhance the reliability and accuracy of the data collected.

3.9.1 Validity of research instrument

Following data collection, the construct validity of the questionnaire was assessed through statistical analysis, specifically employing factor analysis. Principal Component Analysis (PCA) was utilized in the factor analysis to determine the validity of the data collected from the field regarding different variable

constructs. This analysis served as evidence for the content validity of the questionnaire.

Table 1: Factor loadings for study variables

Idealized influence and behavior	
Item	Factor loadings
Instills pride in me for being associated with him or her.	0.694
Goes beyond self-interest for the good of the group.	0.719
Acts in ways that build respect.	0.676
Displays a sense of power and confidence.	0.699
Discusses my most important values and beliefs.	0.675
Specifies the importance of having a strong sense of purpose.	0.740
Considers the moral and ethical consequences of decisions.	0.742
Emphasizes the importance of having a collective sense of mission.	0.702
Eigen values	3.991
Total variance explained (%)	49.888
Kaiser-Meyer-Olkin (KMO) value	0.876
Bartlett's test of Sphercity	3072.410***
Inspirational motivation	
Talks optimistically about the future.	0.766
Talks Enthusiastically about what needs to be accomplished.	0.723
Articulates a compelling vision for the future.	0.832
Expresses confidence that goals will be achieved.	0.779

Eigen values	2.409
Total variance explained (%)	60.223
Kaiser-Meyer-Olkin (KMO) value	0.762
Bartlett's test of Sphercity	1166.481***

Intellectual stimulation

Re-examines the appropriateness of critical assumptions.	0.740
Seeks differing perspectives when solving problems.	0.832
Gets others to look at problems from many different angles.	0.832
Suggests new ways of looking at how to complete assignments.	0.776

Eigen values	2.532
Total variance explained (%)	63.301
Kaiser-Meyer-Olkin (KMO) value	0.783
Bartlett's test of Sphercity	1369.400***

Individualized consideration

Spends time teaching and coaching.	0.594
Treats others as individuals rather than just a group member.	0.773
Considers an individual's needs, abilities, and aspirations of others.	0.843
Helps others to develop their strengths.	0.772

Eigen values	2.259
Total variance explained (%)	56.468
Kaiser-Meyer-Olkin (KMO) value	0.710
Bartlett's test of Sphercity	1042.104***

N = 1079, **P<0.001

The above table presents the results of the factor analysis conducted on the study parameters. The Kaiser-Meyer-Olkin (KMO) measure assesses the sampling adequacy, indicating whether the provided responses are suitable for analysis.

KMO values close to 0.5 are considered satisfactory, while values between 0.7 and 0.8 are acceptable, and values above 0.9 are excellent. As shown in the table, the KMO values obtained are above 0.7, indicating their acceptability.

The Bartlett's test examines the interrelationship between variables. It tests the null hypothesis that the correlation matrix is an identity matrix, with diagonal elements equal to 1 and off-diagonal elements close to 0. In the table, all Bartlett's test coefficients are significant at the 99% level of significance ($P < 0.001$). This suggests that the correlation matrix does not represent an identity matrix, and the null hypothesis cannot be rejected.

Since the KMO values for all constructs exceed 0.7 and the Bartlett's test of Sphericity is significant, it confirms that the data satisfies the assumptions for factor analysis and can be subjected to factorization.

Furthermore, the factor loadings for each construct are above 0.5, indicating evidence of the constructs' unidimensionality in the study. This suggests that the constructs used to measure the respective variables are valid.

Overall, the results of the factor analysis support the construct validity of the study's measures, indicating that the collected data effectively represents the intended variables.

3.9.2 Reliability of study variables

In quantitative research, instrument reliability refers to the consistency of an instrument in measuring what it intends to measure. According to Bernstein (1994), a Cronbach's Alpha reliability coefficient of 0.7 or higher indicates satisfactory internal consistency. Although the data collection instrument utilized

in this study was a standard tool previously employed in successful studies conducted in Brazil (Oliveira & Carvalho, 2018), an assessment of variable reliability was performed, and the results are presented below.

Table 2: Cronbach Alpha Coefficients of study variables

Variable	Number of items	Cronbach Alpha coefficient (α)
Idealized influence and behavior	08	0.854
Inspirational motivation	04	0.766
Intellectual stimulation	04	0.805
Individualized consideration	04	0.699

The table above shows that the Cronbach's Alpha coefficients are more than the minimum required value (0.7), indicating that the variables have a high level of internal consistency.

3.10 Data management and analysis

After collecting the data, a Multiple Linear Regression (MLR) analysis was conducted using the SPSS software to examine the relationship between transformational leadership and academic performance, while controlling for extraneous variables. The data analysis involved several steps.

First, composite scores were created at the school level by combining the items from multi-item scales, following factor analysis and reliability tests. The reliability of the data was assessed using Cronbach's alpha test.

Next, descriptive univariate analyses were performed to examine the frequency distributions and measures of central tendency for the variables.

Bivariate analysis was then conducted to explore the associations between the independent and dependent variables using correlational analysis and scatter plots.

Finally, multiple linear regression analysis was employed to determine the nature and strength of the relationships between transformational school leadership attributes, academic performance, and other school factors. Various regression models were utilized to estimate the impact of transformational school leadership on academic performance.

The details of these regression models and their outcomes will be presented and discussed in the subsequent sections.

$$SP_i = \beta_0 + \beta_1 IFB_i + \beta_2 IM_i + \beta_3 IS_i + \beta_4 IC_i + \varepsilon_i \dots \dots \dots (1)$$

$$SP_i = \beta_0 + \beta_1 IFB_i + \beta_2 IM_i + \beta_3 IS_i + \beta_4 IC_i + \beta_5 OSF_i + \varepsilon_i \dots \dots \dots (2)$$

Where; SP_i - Academic achievement at school i

IFB_i -Idealized school influence and behavior i IM_i -Inspirational school motivation i

IS_i -Intellectual stimulation in the classroom

IC_i - Individualized school consideration

OSF_i -Variable Control

E -Error The influence of other elements not included in the model is represented by this term.

The constant coefficient is 0 and the slope coefficients are 1-5.

3.11 Ethical consideration

Educational research is influenced by various socio-political factors, and researchers must navigate this complex environment. To address these influences, the researchers adhered to research guidelines, including obtaining informed consent from participants and authorisations from various institution authorities.

As this study used a quantitative approach, the data was presented in aggregated form to maintain anonymity and minimize ethical concerns. The researcher followed procedural requirements such as obtaining an introductory letter from the School of Postgraduate Studies at Uganda Christian University.

Institutional approval was secured from the Uganda Christian University Research Ethical Committee and the National Council of Science and Technology.

Prior arrangements were made to obtain authorization from the school administrations where the study took place using a letter of introduction from the ministry of Education and Sports (MoES).

Informed consent was obtained from participants, ensuring their voluntary participation and protection against coercion. The study upheld the rights of privacy, informed consent, and the right to refuse participation.

Individual informed consent was sought from all respondents, and their agreement to participate was documented through their signatures.

Last but not least important, the researcher made arrangements to ensure all field visits were Covid-19 compliant. For example the researcher wore his mask and sanitized and asked all respondents to sanitize and wear masks provided by the researcher

By adhering to ethical guidelines and obtaining informed consent, the researchers aimed to protect the rights and well-being of the participants while conducting the study in an ethical manner.

CHAPTER FOUR

RESULTS OF THE STUDY

4.1 Introduction

The aim of this study was to investigate the influence of transformational school leadership characteristics on the academic performance of secondary schools in Uganda. Additionally, the researcher examined the role of organizational factors as potential mediators in school performance at Ordinary and Advanced levels. This chapter presents the statistical findings obtained from the data collected and analysis process.

The chapter commences with a pre-analysis data screening procedure to address missing responses and outliers. Descriptive statistics were employed to examine the patterns and trends in the variables of interest. In order to fulfill the research objectives, both descriptive statistics and multiple regression analyses were conducted. The statistical significance of all inferential analyses was assessed at the conventional level of $\alpha = .05$.

The study focused on evaluating the impact of transformational school leadership characteristics, including individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior, on academic performance. Moreover, the researcher investigated organizational-level factors such as school fees, school ownership, school entry levels, school entry points at Senior One, the number of teachers involved in teaching, and the gender of the school head as potential intervening variables influencing school performance at both Ordinary and Advanced levels.

4.2 Response rate

A total of 1,248 questionnaires were distributed to teachers, while 312 questionnaires were distributed to Directors of Studies across 312 schools. From the Directors of Studies, 212 questionnaires were returned, resulting in a response rate of 67.9%, which is considered internationally acceptable as it surpasses the recommended 50% rate suggested by Mugenda and Mugenda (2003). Similarly, from the respondent teachers, 867 questionnaires were returned, yielding a response rate of 69.53%, also meeting the criteria for international acceptability.

Out of the total respondents, 39 participants did not provide any responses in the academic performance section of the questionnaire. Additionally, outliers were identified through the standardization of scores, and any z-scores exceeding +2.5 standard deviations from the mean were removed from the analysis (Tabachnick & Fidell, 2013). A total of 13 outliers were identified and subsequently eliminated from further analysis.

After these reductions, the final sample comprised 815 participants, representing a response rate of 65.3%. According to Mugenda and Mugenda (1999), the response rates indicate that data was collected from a substantial number of respondents relative to the target population, thus enhancing the reliability of the data and its findings. The high response rate can be attributed to the effective data collection strategies employed by the researcher.

4.3 Characteristics of Participants

The respondents, who were teachers, were asked to provide information regarding their gender, age group, highest level of education completed, main teaching subject, and the length of time they had been with the school. Descriptive

statistics were used to analyze and present the demographic characteristics of the participants.

The majority of the respondents were below 40 years of age (n=622, 76.3%). Among the sample, a majority were males (n=583, 71.5%). The most common educational attainment among the participants was a Bachelor's Degree (n=529, 72.4%), and a significant portion identified themselves as science teachers (n=519, 63.7%). In terms of job tenure, most participants had been in their current teaching position for 1-9 years (n=644, 79.0%). A detailed breakdown of the frequencies and percentages for each demographic category can be found in table 3.

Table 3: Demographic Characteristics of the Participants

Variable	Frequency (n=815)	Percent
<i>Age</i>		
<30	338	41.5
30-39	284	34.8
40-49	140	17.2
50-59	52	6.4
>60	1	0.1
<i>Gender</i>		
Male	583	71.5
Female	232	28.5
<i>Education Level</i>		
Diploma	176	21.6
Bachelors Degree	590	72.4
Masters Degree	49	6.0
<i>Main teaching subject</i>		
Arts	296	36.3
Sciences	519	63.7
<i>Teaching Tenure</i>		
<1	75	9.2
1-9	644	79.0
10-19	78	9.6
>20	18	2.2

Source: Primary data 2022

4.4 School Characteristics

In terms of the school structure, the majority of the participants were from schools that offered both O and A levels (n=729, 89.4%). Private schools had a higher representation among the participants (n=424, 52.0%). Most of the schools were led by male heads (n=604, 74.1%), and the majority of the school heads had been in their position for 5 years or less (n=479, 58.8%). A significant number of schools had at least forty teachers involved in teaching (n=596, 73.1%). Regarding student admissions into senior one over the past three years, the majority of the students were placed in grade two and three (n=740, 80.8%), and a higher proportion of schools had a school fee payment of 500,000 Uganda shillings or less (n=589, 72.3%). Descriptive statistics for these variables can be found in Table 4.

Table 4: School Administration Structure Characteristics

<i>Variable</i>	<i>Frequency</i>	<i>Percent</i>
<i>School entry levels</i>		
O' Level	86	10.6
Both O & A Level	729	89.4
<i>School Ownership</i>		
Private	424	52.0
Public	391	48.0
<i>Gender of the school head</i>		
Male	604	74.1
Female	211	25.9
<i>School Head duration of Service</i>		
1-5	479	58.8
6-10	194	23.8
11-15	104	12.8
>15	38	4.7
<i>Number of involved in teaching</i>		
1-20	193	23.7
21-40	403	49.4
41-60	164	20.1
>60	55	6.7
<i>Average amount students pay in school fees</i>		
1-500000	589	72.3
500001_1000000	197	24.2
1000001-1500000	20	2.5
>1500000	8	1
<i>Average senior one entry points past three years</i>		
Grade one	52	6.4
Grade two	400	49.1
Grade three	340	41.7
Grade four	23	2.8

Source: Primary Data 2022

4.5 School Infrastructure

The findings presented in Table 5 indicate that 495 schools (61%) had 1-10 standard classrooms, and the majority of their students were provided with chairs and tables (n=769, 94.4%). Most of the schools had access to electricity, clean water, and clean sanitary toilets (n=810, 99.4%, n=812, 99.6%, n=908, 98.4% respectively). Furthermore, a significant number of sampled schools had a library facility (n=727, 89.2%) as well as a science laboratory (n=776, 95.2%). Detailed frequencies and percentages of the school infrastructure can be found in Table 5.

Table 5: School Infrastructure

<i>Variable</i>	<i>Frequency</i>	<i>Percent</i>
<i>Number of standard classrooms</i>		
1_10	495	61
11_20	217	27
21_30	89	11
>30	14	2
<i>Students have a table and chair</i>		
Yes	769	94.4
No	46	5.6
<i>School has Electricity</i>		
Yes	810	99.4
No	5	.6
<i>School has clean water</i>		
Yes	812	99.6
No	3	.4
<i>School has clean sanitary toilets</i>		
Yes	802	98.4
No	13	1.6
<i>School has a library</i>		
Yes	727	89.2
No	88	10.8
<i>School has a science laboratory</i>		
Yes	776	95.2
No	39	4.8

Source: Primary data 2022

Table 6: Descriptive statistics for transformational leadership attributes

Descriptive Statistics			
Variable	N	Mean	Std. Deviation
Idealized influence and behavior	815	3.0238	.75257
Inspirational motivation	815	2.9804	.86118
Intellectual stimulation	815	2.9034	.84025
Individualized consideration	815	2.9025	.86991
Valid N (listwise)	815		

Source: Primary data 2022

The responses regarding transformational leadership attributes were obtained using a Likert scale ranging from 1 to 5. The findings in table 6 show that all four constructs scored a mean higher than the average of 2.5. For example, Idealized influence and behavior had a mean score of 3.02, Inspirational motivation scored 2.98, Intellectual stimulation scored 2.90, and Individualized consideration scored 2.90. These high mean scores indicate that respondents agreed that head teachers often demonstrated transformational leadership behaviors to impact school performance.

4.6. The Influence of Transformational Leadership attributes on academic performance in secondary schools.

The first objective of the study was to examine the influence of head teachers' transformational leadership attributes on the academic performance of secondary schools in Uganda. Additionally, it was hypothesized that a headteacher's transformational attributes does not influence students' academic achievement. To address this objective and validate the hypothesis, respondents were requested to rate elements of transformational leadership using a Likert scale ranging from 1 to 5. Using multiple regression analysis, the collected data was analyzed to

determine the influence of transformational leadership attributes of headteachers on student academic achievement, at UCE and UACE.

4.6.1 The influence of transformational leadership attributes of headteachers' on UCE school performance

To examine the influence of organizational characteristics, transformational leadership attributes, on UCE school performance, multiple linear regressions were performed. Before conducting the analysis, several assumptions were tested to ensure the validity of the model. The assumption of normality was assessed using a normal probability plot and histogram, which indicated that the data closely followed the diagonal trend line, suggesting normal distribution (refer to Figure 2 and 3).

Homoscedasticity, the assumption of equal variance, was evaluated through a residuals scatter plot. The plot showed a random scatter of data points, supporting the assumption of homoscedasticity (see Figure 4). Furthermore, the absence of multicollinearity was examined using variance inflation factors (VIF). The VIF values, displayed in Table 9, were found to be below 10, indicating no violation of the assumption of multicollinearity. The VIF measures the correlation between predictors in the model, and values exceeding 10 would suggest high multicollinearity (Stevens, 2009).

By satisfying these assumptions, the model's validity was ensured, allowing for the reliable analysis of the influence of organizational characteristics, transformational leadership attributes, on UCE school performance.

Figure 2: Histogram of Transformational attributes influence on UCE performance

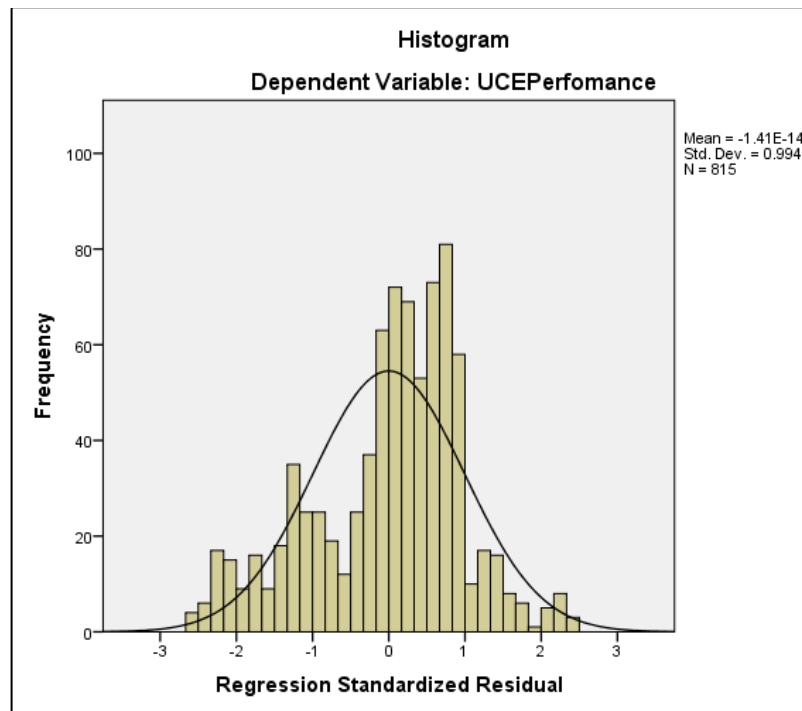


Figure 3: Normal P-P plot with Transformational leadership attributes influence on UCE performance

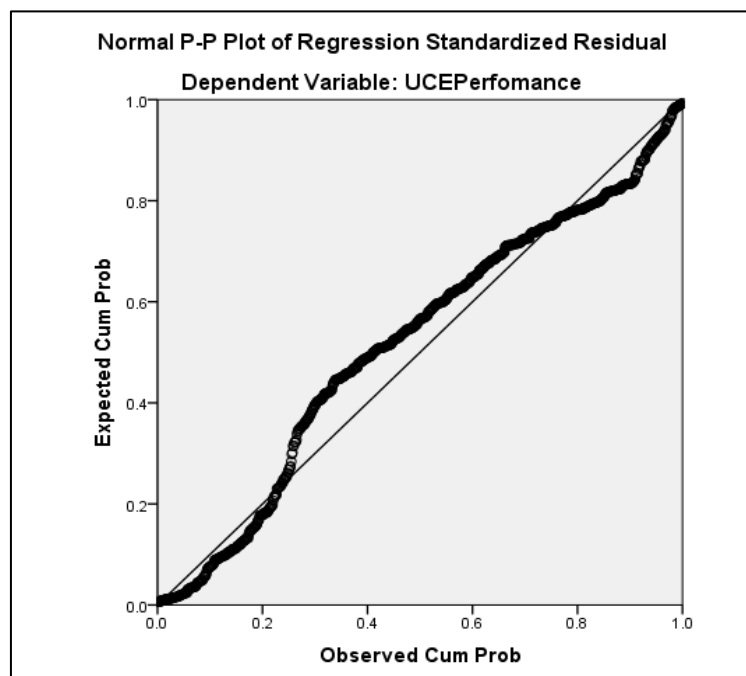
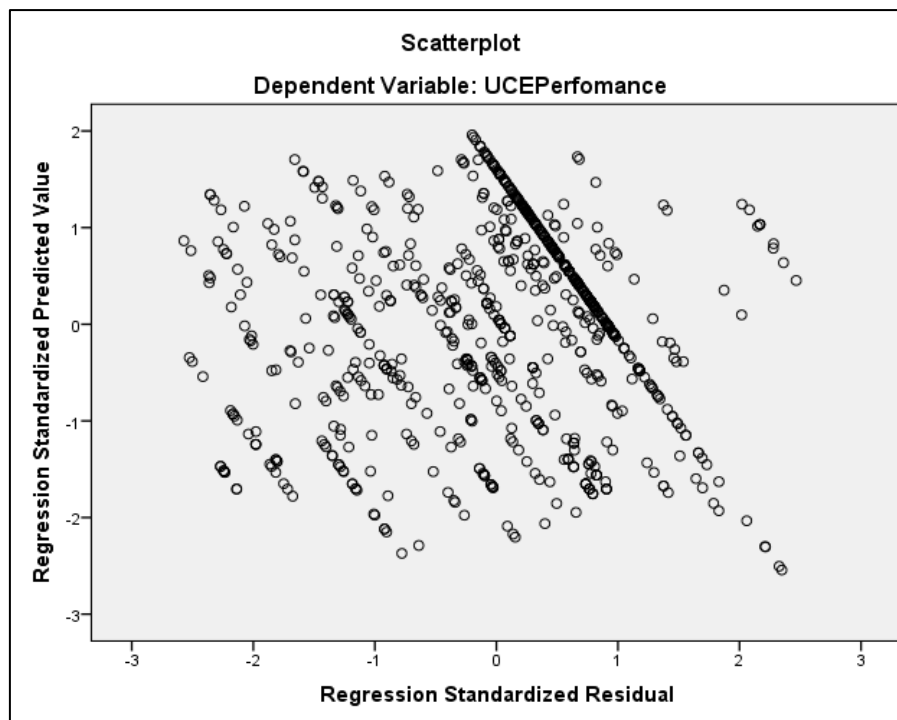


Figure 4: Residuals scatter plot to test homoscedasticity with transformational leadership attributes influence on academic performance



The findings from the multiple regressions, as shown in Table 7, reveal the influence of transformational leadership attributes on UCE performance. The results indicate statistical significance ($P < 0.05$) for the regressions. In the initial section, the R^2 value was 0.226, and with the inclusion of transformational leadership attributes, the influence improved in model 2 with an R^2 value of 0.245. These results suggest a significant influence of transformational leadership attributes on UCE school performance, indicating that these attributes have an influence on academic outcomes.

Table 7: Transformational leadership attributes influence on UCE school performance

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.475 _a	.226	.220	.01287	.226	39.248	6	808	.000
2	.495 _b	.245	.236	.01274	.019	5.117	4	804	.000

a. (Constant) School entry levels, School entry points, School ownership, Gender of school head, School fees, Number of Teachers Involved

b. Predictors include: (constant), school admission levels, school entry points, school ownership, gender of school head, school costs, number of teachers involved, individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior.

c. UCEPerformance is a dependent variable.

Source: Primary data 2022

Based on the results presented in Table 7, Model 1 has an R Square value of .226, indicating that the grouped scores of school entry levels, school entry points, school ownership, gender of school head, school fees, and number of teachers involved in teaching influence the variance in student achievement at UCE secondary by 22.6%. When incorporating transformational leadership attributes (individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior) in Model 2, the R Square value increased to 0.245, accounting for 24.5% of the variance in secondary school performance at the O level. The statistical influence in both models was significant, suggesting that collectively, transformational leadership attributes and school characteristics are significant influencers of secondary school achievement at UCE.

To test the study hypothesis, an analysis of variance (ANOVA) was conducted. The results of the multiple linear regression are presented in Table 8 below.

Table 8: ANOVA Testing the influence of transformational Leadership attributes and UCE performance

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.039	6	.006	39.248	.000 ^b
	Residual	.134	808	.000		
	Total	.173	814			
2	Regression	.042	10	.004	26.076	.000 ^c
	Residual	.130	804	.000		
	Total	.173	814			

a. UCE Performance is a dependent variable.

b. Predictors: (constant), school admission levels, school entry points, school ownership, gender of school head, school fees, number of teachers involved

c. School admission levels, school entry points, school ownership, gender of school head, school fees, number of teachers individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior

Source: Primary data 2022

Table 8 results reveal $F = 39.248$, $P = .0.000$ and $F = 26.076$, $P = 0.000$ for the first and second blocks, respectively. This suggests that transformative leadership characteristics influence school achievement at Uganda's UCE. The null hypothesis is thus rejected.

Table 9: Coefficients for Influencing UCE School performance in Uganda

Model	Standardized Coefficients			Collinearity Statistics	
	Beta	t	Sig.	Tolerance	VIF
1 (Constant)		573.197	.000		
School entry points	.115	3.247	.001	.758	1.319
School fees paid	.432	12.332	.000	.781	1.281
Number of Teachers Involved	.044	1.187	.236	.690	1.449
Gender of school head	-.082	-2.548	.011	.931	1.074
School Ownership	-.194	-5.621	.000	.803	1.245
School entry levels	-.189	-5.601	.000	.841	1.189
2 (Constant)		536.345	.000		
School entry points	.102	2.880	.004	.749	1.335
School fees	.423	12.093	.000	.767	1.303
Number of Teachers Involved	.038	1.014	.311	.673	1.486
Gender of school head	-.086	-2.682	.007	.912	1.097
School Ownership	-.196	-5.716	.000	.796	1.257
School entry levels	-.197	-5.835	.000	.821	1.218
Idealized influence	.179	3.609	.000	.383	2.608
Inspirational motivation	-.109	-2.432	.015	.471	2.123
Intellectual stimulation	.041	.883	.377	.436	2.292
Individualized consideration	-.038	-.966	.334	.611	1.635

Source: Primary Data 2022

The findings presented in Table 9 above reveal the significance of the independent variables as indicated in the Sig column, which contains the corresponding p-values. The hypothesis being tested for each variable is whether the coefficient (B) is equal to zero after controlling for other variables. For instance, the relationship between school fees paid and UCE performance is assessed by removing the effects of other variables. The model shows that the standardized beta coefficients for school entry points, and school fees paid was 0.102 and 0.423 suggesting that holding all other factors constant, a unit increase in school entry points and school fees results to .102 and .423 increase in UCE performance in Uganda thus the statistical significance of $P=0.004$ and $P<0.001$ respectively.

Further, the standardized beta coefficients for Gender of school head, school ownership, school entry levels were -0.086, -0.196 and -0.197. This implies that, a

unit increase in Gender of school head, school ownership, school entry levels results in the decrease in performance at UCE by 8.6%, 19.6% and 19.7% correspondingly. The results were statistically significant at $p=0.007$, $P<0.001$ and $p<0.001$ respectively.

Regarding the relationship between transformational leadership attributes and UCE performance, the results show that the standardized beta coefficients for Idealized Influence and Inspirational Motivation were 0.179 and -0.109 respectively. This suggests that a unit increase in Idealised influence increases academic performance at UCE by 17.9% while an increase in a unit of Inspirational Motivation decreases UCE performance by 10.9% in Uganda. The study also found the P-value for Idealized Influence and Inspirational Motivation were $P<0.001$ and $P=0.015$ which are less than the significance level of 0.05. This implies that Idealized Influence and Inspirational Motivation were found to have a significant influence on UCE performance in Uganda.

4.6.2 The influence of transformational leadership attributes on UACE school performance

To examine the influence of transformational leadership attributes of headteachers on school performance further, a multiple linear regression analysis was conducted to determine the predictive relationship between the control variables and transformational leadership attributes on UACE school performance. Before the analysis, the assumptions of multicollinearity, normality, and homoscedasticity were assessed. Table 12 demonstrates that the assumption of multicollinearity was met as the variance inflation factors were below 10. The

assumptions of normality and homoscedasticity were confirmed by examining the histogram and scatter plots (refer to Figures 5, 6, and 7).

Figure 5: Histogram of Transformational attributes influence on UACE School performance

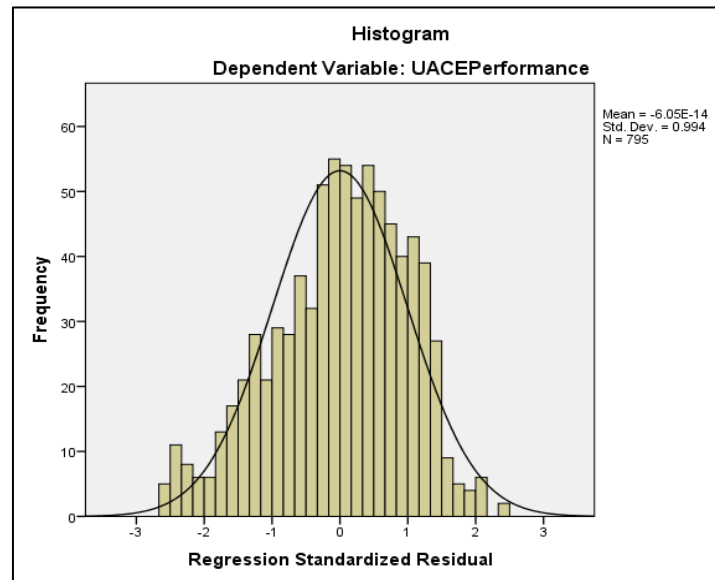


Figure 6: Normal P-P plot with Transformational leadership attributes influence on UACE School performance

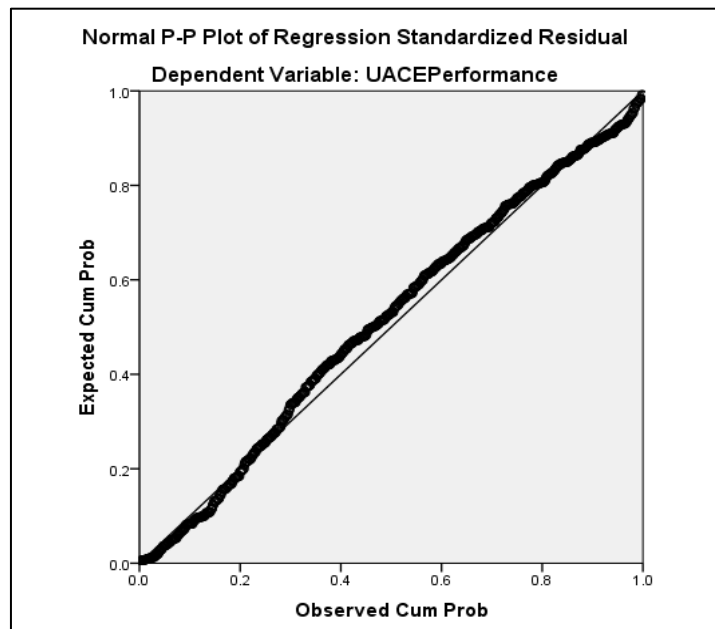
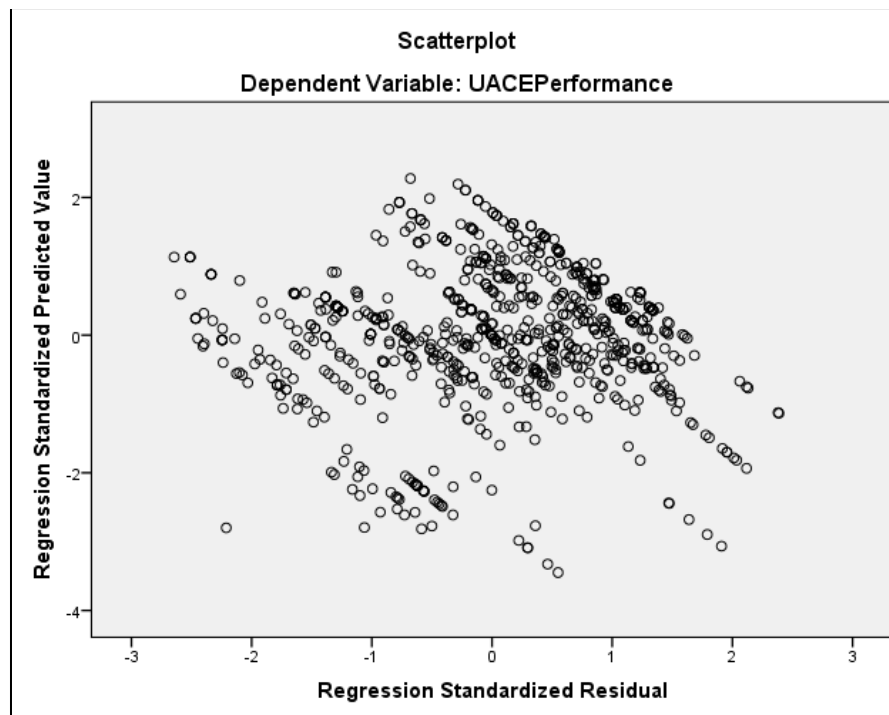


Figure 7:Residuals scatter plot to test homoscedasticity with transformational leadership attributes influence on UACE School performance



According to the results of the multiple regression analysis, control factors were significant predictors of UACE school performance ($R^2 = 0.284$ and $P=0.000$). Transformational leadership traits were incorporated with control factors in section 2 of the model, and R^2 improved to 0.333 and $P= 0.000$. In secondary schools, transformational leadership characteristics were statistically significant in influencing UACE school success. Table 10 shows this.

Table 10: Influence of Transformational leadership attributes on UACE school performance

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
						F	df1	df2	Sig. F Change
1	.533 ^a	.284	.278	.17920	.284	51.994	6	788	.000
2	.576 ^b	.332	.323	.17353	.048	14.099	4	784	.000

a. Predictors: (Constant), Number of teachers involved, Schools paid, Gender of school head , School entry levels, School ownership, School entry points
b. Predictors: (Constant), Number of teachers involved, Schools paid, Gender of school head , School entry levels, School ownership, School entry points, individualized consideration, inspirational motivation, intellectual stimulation, idealized influence and behavior
c. Dependent Variable: UACE Performance

Source: Primary Data 2022

The results in Table 10 indicate that the combination of Number of teachers involved in teaching, Schools fees paid, Gender of school head, School entry level, School ownership, and School entry points explains 28.4% of the variance in UACE school performance. When the transformational leadership attributes (inspirational motivation, intellectual stimulation, idealized influence, and behavior) were included in Model 2, the R Square increased to 0.332, indicating that 33.2% of the variance in UACE school performance is accounted for by both the control factors and transformational leadership attributes.

The addition of transformational leadership attributes contributes an additional 4.8% of the variance in UACE school performance, beyond what is explained by the control factors alone.

To test the study hypothesis, an analysis of variance (ANOVA) was conducted. The results of the multiple regression are presented in Table 11.

Table 11: ANOVA testing the influence of transformational Leadership attributes on UACE performance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.018	6	1.670	51.994	.000 ^b
	Residual	25.305	788	.032		
	Total	35.323	794			
2	Regression	11.716	10	1.172	38.910	.000 ^c
	Residual	23.607	784	.030		
	Total	35.323	794			

a. UACE Performance is a dependent variable.

b. Predictors: (constant), number of teachers involved, school funding, gender of principal, school entry levels, school ownership, and school entry points

c. Predictors: (constant), number of teachers involved, school funding, gender of principal, school admission levels, school ownership, school entry points, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior

Source: Primary Data 2022

Table 11 results reveal $F = 51.994$, $P = .0.000$ and $F = 38.910$, $P = 0.000$ for the first and second blocks, respectively. This implies that transformational leadership attributes and UACE school performance in Uganda have a strong link. The null hypothesis is thus rejected.

Table 12: Coefficients for predicting UACE School performance in Uganda

Coefficients							
	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		Std. Error	Beta	t	Sig.	Tolerance	VIF
Model	B						
1 (Constant)	1.356	.052		26.239	.000		
School entry points	-.005	.001	-.139	-3.946	.000	.729	1.372
Schools paid	-2.086E-7	.000	-.192	-5.607	.000	.779	1.284
School entry levels	.132	.012	.356	10.841	.000	.841	1.189
School ownership	.088	.014	.207	6.070	.000	.780	1.283
Gender of school head	.008	.003	.085	2.700	.007	.921	1.086
Number of teachers involved	.001	.000	.119	3.269	.001	.681	1.468
2 (Constant)	1.196	.055		21.617	.000		
School entry points	-.005	.001	-.146	-4.268	.000	.727	1.375
Schools paid	-2.159E-7	.000	-.198	-5.960	.000	.770	1.299
School entry levels	.129	.012	.347	10.824	.000	.830	1.205
School ownership	.091	.014	.216	6.513	.000	.774	1.292
Gender of school head	.005	.003	.056	1.813	.070	.904	1.106
Number of teachers involved	.001	.000	.089	2.490	.013	.667	1.498
idealized	-.002	.013	-.008	-.179	.858	.415	2.411
inspirational	.022	.010	.087	2.110	.035	.501	1.994
intellectual	.040	.011	.156	3.642	.000	.465	2.149
individual	.004	.009	.017	.481	.630	.649	1.542

a. UACE Performance is a dependent variable.

Source: Primary data 2022

The results presented in Table 12 indicate that the Sig column displays the p-values for each independent variables. The hypothesis being tested is that the coefficient (B) is equal to 0 after accounting for the other variables. For instance,

when examining the influence of a specific transformational leadership attribute on UACE school performance, other factors are held constant.

The standardized beta coefficients for school entry points, and school fees paid were -0.146 and -0.198 suggesting that holding all other factors constant, a unit increase in school entry points and school fees results to 10.2% and 42.3% decrease in UACE performance in Uganda thus the statistical significance of $P < 0.001$ which is less than 0.05 significance level.

Further, the standardized beta coefficients for school entry levels, school ownership and number of teachers involved were 0.347, 0.216 and 0.089. This implies that, a unit increase in school entry level, school ownership, school entry levels results in the increase in performance at UACE by 34.7%, 21.6% and 8.9% in Uganda correspondingly. The results of all variables were statistically significant at $P < 0.001$.

Regarding the influence of transformational leadership attributes on UACE performance, the results show that the standardized beta coefficients for Inspirational Motivation and Intellectual stimulation were 0.087 and 0.156 respectively. This suggests that a unit increase in Inspirational Motivation and Intellectual stimulation increases academic performance at UACE by 8.7% and 15.6% correspondingly in Uganda. The study also found the P-value for Inspirational Motivation and Intellectual stimulation were $P = 0.035$ and $P < 0.001$ which are less than the significance level of 0.05. This implies that Inspirational Motivation and Intellectual stimulation have a significant influence on UACE performance in Uganda

4.7 Influence of transformational leadership attributes on academic performance of public secondary schools in Uganda

The study sought to investigate the influence of transformational leadership attributes on the academic performance of public schools in Uganda. Additionally, it was hypothesized that transformational leadership attributes of head teachers does not influence student academic achievement in public schools.

To accomplish this objective and validate the hypothesis, participants were asked to rank various elements of transformational leadership using a Likert scale ranging from 1 to 5. Based on the research hypothesis, the obtained results were subjected to multiple regression analyses to determine the influence of headteachers' transformational leadership attributes on student academic achievement UCE and UACE levels in public secondary schools.

4.7.1 Influence of transformational leadership attributes on UCE academic performance of public secondary schools

In order to assess the influence of headteachers' transformational leadership attributes on the academic performance of public secondary schools, multiple linear regression analyses were conducted to examine the influence of these attributes on school performance at the Uganda Certificate of Education (UCE) and Uganda Advanced Certificate of Education (UACE) levels. The predictor variables included control factors such as the number of teachers involved, school fees paid, gender of the school head, school entry levels, school ownership, and school entry points. Additionally, the transformational leadership attributes of individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior were included in the analysis.

Before conducting the analyses, several assumptions were examined to ensure the validity of the model. The assumptions of normality, homoscedasticity, and multicollinearity were tested. Normality was assessed visually through normal probability plots and histograms, indicating that the data closely followed the diagonal trend line and exhibited no significant skewness. The assumption of homoscedasticity was met, as the data showed a random scatter pattern in the plot. Multicollinearity was assessed using variance inflation factors, which were found to be below 5, indicating the absence of multicollinearity (Table 15).

Figure 8: Histogram of Transformational attributes influence on UCE School performance in Public schools

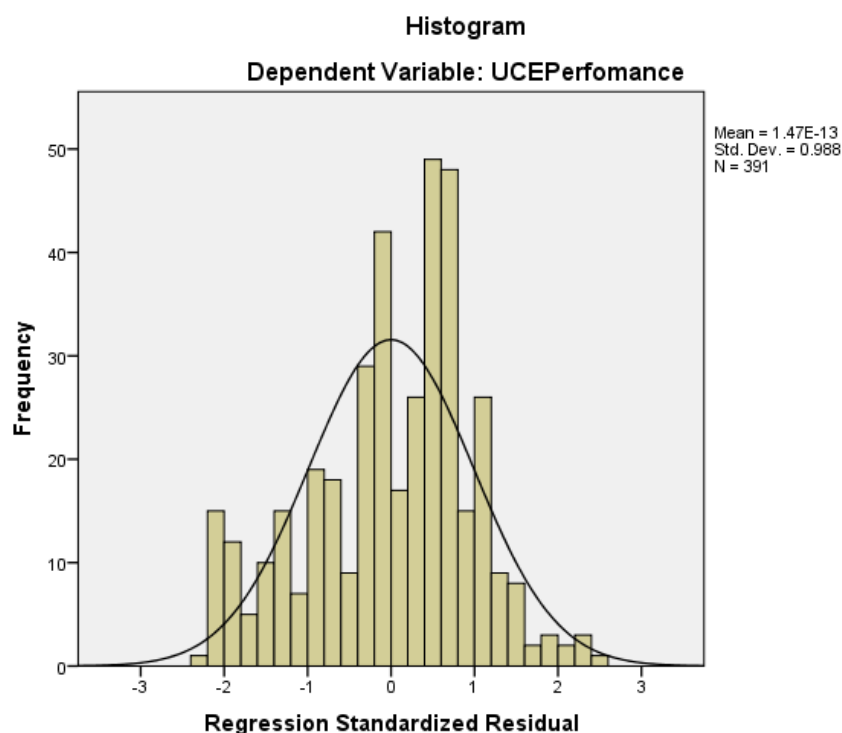


Figure 9:Normal P-P plot with Transformational leadership attributes influence on UCE School performance in Public schools

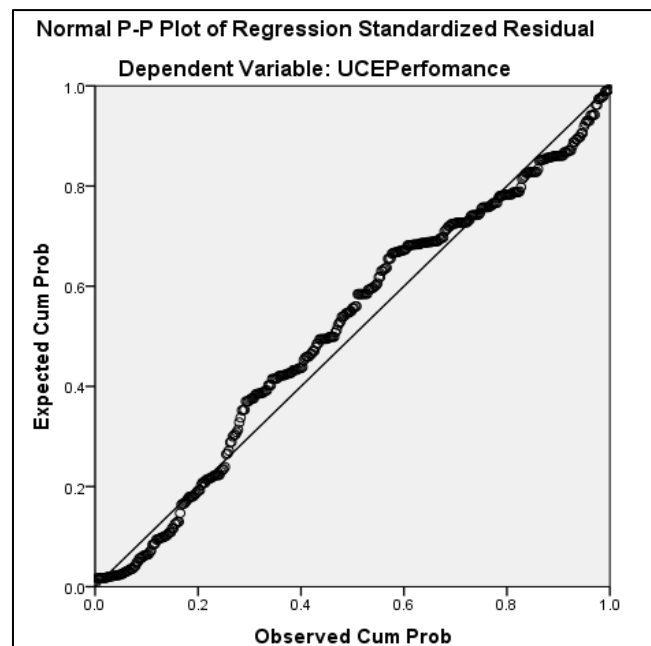


Figure 10:Residuals scatter plot to test homoscedasticity with transformational leadership attributes influence on UCE performance in public schools

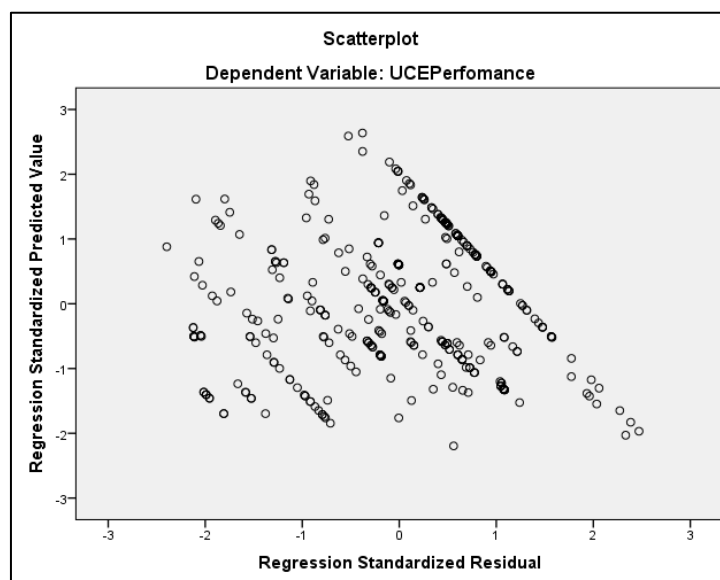


Table 13 below summarizes the multiple linear regression results of transformational leadership characteristics as predictors of UCE success in public secondary schools.

Table 13: Influence of Transformational leadership attributes on UCE performance in public schools

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.501 ^a	.251	.241	.01262	.251	25.825	5	385	.000
2	.531 ^b	.282	.265	.01243	.031	4.045	4	381	.003

a. School admission levels, gender of school head, school fees, number of teachers involved, and school entry points are all constant predictors.

b. School admission levels, gender of school head, school fees, number of teachers involved, school entry points, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior are all predictors.

c. UCE Performance is a dependent variable.

Source: Primary data 2022

Based on the results presented in table 13, model 1 demonstrates an R Square value of 0.251, indicating that the combined effects of school entry levels, gender of the school head, school fees paid, number of teachers involved, and school entry points account for 25.1% of the variance in UCE performance in public schools. When transformational leadership attributes (individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior) were added in model 2, the R Square value increased to 0.282 (28.2%), indicating that these variables collectively explain an additional 3.1% of the variance in UCE performance. This suggests that the inclusion of transformational leadership attributes significantly influence UCE school performance in public secondary schools ($P=0.03$).

To further investigate this influence, an analysis of variance (ANOVA) was conducted to test the study hypothesis. The results of the multiple regressions are presented in table 14.

Table 14:ANOVA testing the influence of headteachers’ transformational Leadership attributeson UCE performance in public schools

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.021	5	.004	25.825	.000 ^b
	Residual	.061	385	.000		
	Total	.082	390			
2	Regression	.023	9	.003	16.599	.000 ^c
	Residual	.059	381	.000		
	Total	.082	390			

a. UCE Performance is a dependent variable.

b. School admission levels, gender of school head, school fees, number of teachers involved, and school entry points are all constant predictors.

c. School admission levels, gender of school head, school fees, number of teachers involved, school entry points, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior

Source: Primary data 2022

Table 14 results reveal $F = 25.85$, $P = .0.000$ and $F = 16.599$, $P = 0.000$ for the first and second blocks, respectively. This implies that transformative leadership attributes influence UCE school performance in public secondary schools. The null hypothesis is thus rejected.

Table 15: Coefficients for Determining UCE performance in Public schools

Model	Coefficients					Collinearity Statistics	
	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.		
1 (Constant)	1.988	.005		411.554	.000		
School entry points	.000	.000	.184	3.513	.000	.709	1.410
School Fees paid	3.263E-8	.000	.465	9.853	.000	.872	1.147
Gender of school head	-.004	.001	-.118	-2.623	.009	.967	1.034
Number of Teachers Involved	3.904E-5	.000	.058	1.140	.255	.749	1.336
School entry levels	-.008	.001	-.254	-5.255	.000	.830	1.205
2 (Constant)	1.985	.005		406.281	.000		
School entry points	.000	.000	.153	2.905	.004	.683	1.465
School Fees paid	3.108E-8	.000	.443	9.202	.000	.812	1.231
Gender of school head	-.006	.002	-.184	-3.810	.000	.812	1.232
Number of Teachers Involved	1.833E-5	.000	.027	.526	.599	.700	1.428
School entry levels	-.007	.001	-.245	-5.066	.000	.808	1.238
idealized	.003	.001	.191	2.355	.019	.286	3.497
inspirational	.000	.001	-.013	-.178	.859	.367	2.725
intellectual	.001	.001	.045	.639	.523	.382	2.617
individual	-.001	.001	-.078	-1.415	.158	.618	1.619

a. UCE Performance is a dependent variable.

Source: Primary data 2022

The results presented in table 15 indicate that the Sig column contains the p-values for each independent variable. The hypothesis being tested for each variable is whether the coefficient (B) is equal to zero when controlling for other variables. For instance, when examining the contribution of individual transformational leadership attributes to UCE public school performance, other factors are held constant.

The standardized beta coefficients for school entry points, and school fees paid were 0.153 and 0.443 suggesting that holding all other factors constant, a unit increase in school entry points and school fees results to 15.3% and 44.3% increase in UCE performance in public schools in Uganda thus the statistical significance of $P < 0.001$ and $P = 0.004$ which is less than 0.05 significance level.

Further, the standardized beta coefficients for gender of school head and school entry levels were -0.184 and -0.245. This entails that, a unit increase in gender of school head and school entry levels results in a decrease in performance at UCE by -18.4%, and 24.5% in public schools in Uganda correspondingly. The results show a statistical significance of $P < 0.001$ which is less than 0.05 significance level.

Regarding the influence of headteachers' transformational leadership attributes on UCE performance, the results show that the standardized beta coefficients for Idealised influence and behavior was 0.191 suggesting that a unit increase in Idealised influence and behavior increases academic performance at UCE by 19.1% in public schools in Uganda. The study also found that the P-value for Idealised influence and behavior was $P = 0.019$ which is less than the significance level of 0.05. This implies that Idealised influence and behavior significantly influence UCE performance in public schools in Uganda

4.7.2 Influence of transformational leadership attributes on UACE academic performance of public secondary schools.

To explore the influence of transformational leadership attributes (individualized consideration, inspirational motivation, intellectual stimulation, idealized influence and behavior) on UACE performance of public secondary schools, multiple regressions were conducted. These regressions aimed to establish the

influence of the aforementioned attributes on school performance at UACE in public secondary schools.

Prior to conducting the analysis, the assumptions of normality, homoscedasticity, and multicollinearity were examined to ensure the validity of the model. Normality was assessed through visual examination of a normal probability plot and histogram. The data closely followed the diagonal trend line and showed no significant skewness, indicating adherence to the assumption of normality (refer to Figure 11 and 12). Homoscedasticity was confirmed by observing a random scatter of data points in the plot (see Figure 13). Furthermore, the absence of multicollinearity was supported by variance inflation factors below 5, as shown in Table 18.

Figure 11: Histogram of Transformational attributes influence on UACE School performance in Public schools

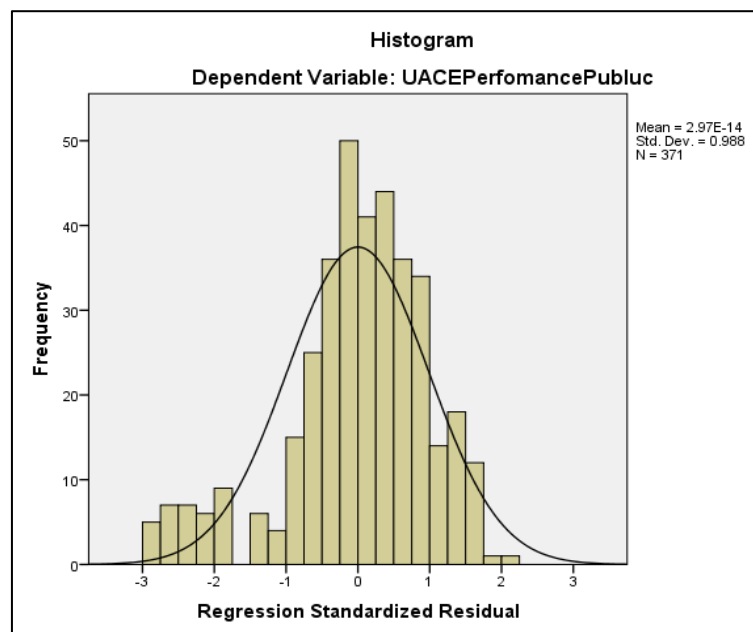


Figure 12:Normal P-P plot with Transformational leadership attributes influence on UACE School performance in Public schools

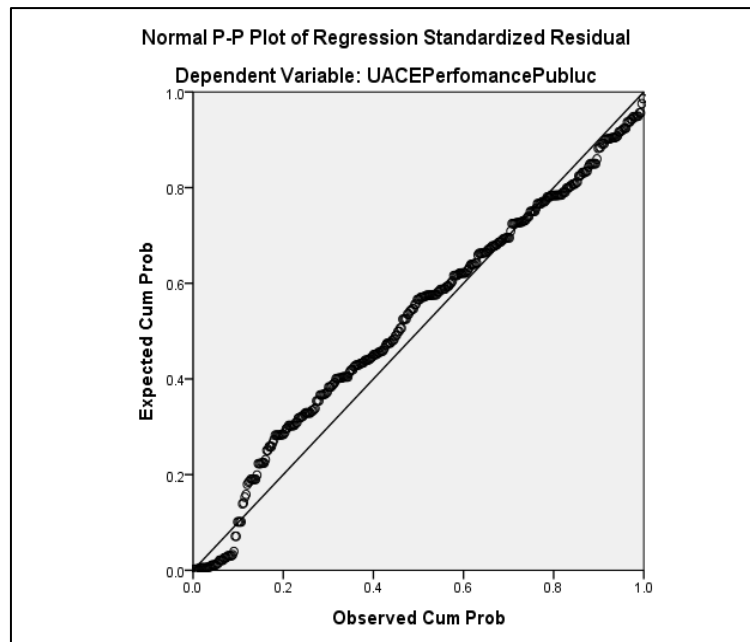


Figure 13:Residuals scatter plot to test homoscedasticity with transformational leadership attributes influence on UACE performance in public schools

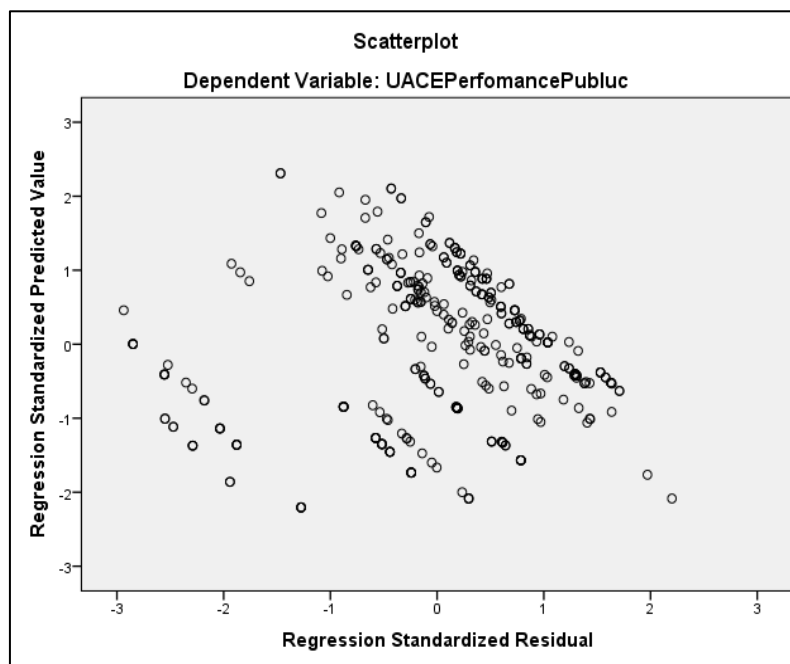


Table 16 summarizes the multiple regression results of transformational leadership characteristics as predictors of UACE success in public secondary schools.

Table 16: Transformational leadership attributes influence on UACE performance in public schools

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
						F	Change	df1	Sig. F Change
1	.505 ^a	.255	.245	.17390	.255	25.038		5	.000
2	.585 ^b	.343	.326	.16429	.087	11.991		4	.000

a. School admission levels, gender of school head, school fees, number of teachers involved, and school entry points are all constant predictors.

b. School admission levels, gender of school head, school fees, number of teachers involved, school entry points, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior are all predictors.

c. UACE Performance is a dependent variable.

Source: Primary data 2022

The results presented in table 16 demonstrate that the R Square value is 0.225, indicating that the organizational factors such as School entry level, Gender of school head, School fees paid, Number of Teachers Involved in teaching, and School entry points collectively account for 22.5% of the variance in UACE performance in public schools. However, with the inclusion of transformational leadership attributes (individualized consideration, inspirational motivation, intellectual stimulation, idealized influence and behavior) in model 2, the R Square value increased to 0.343 (34.3%), indicating that the variables in the model account for a higher percentage of the variance in UACE performance of public schools.

The total change in R Square between the two models indicates that the addition of transformational leadership attributes contributes an additional 8.7% of variance in UACE performance, beyond what is accounted for by the control

factors. In both models 1 and 2, the independent variables were statistically significant influencers of UACE performance ($P < 0.005$).

To further investigate the influence, an analysis of variance (ANOVA) was conducted to test the study hypothesis. The results of the multiple regressions are presented in table 17.

Table 17: ANOVA testing the influence of headteachers' transformational Leadership attributes on UACE performance in public schools

ANOVA ^a					
Model		Sum of Squares	df	Mean Square	F Sig.
1	Regression	3.786	5	.757	25.038 .000 ^b
	Residual	11.039	365	.030	
	Total	14.825	370		
2	Regression	5.081	9	.565	20.915 .000 ^c
	Residual	9.744	361	.027	
	Total	14.825	370		

a. UACE Performance is a dependent variable.

b. School admission levels, gender of school head, school fees, number of teachers involved, school entry points are all constant predictors.

c. School admission levels, gender of school head, school fees, number of teachers involved, school entry points, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior are all predictors.

Source: Primary data 2022

The findings presented in table 17 indicate that the F-values for the first and second blocks are 25.038 ($P = 0.000$) and 20.915 ($P = 0.000$), respectively. These results suggest that transformational leadership attributes of headteachers significantly influence UACE school performance in public secondary schools. Based on these findings, the null hypothesis is rejected, indicating that transformational leadership attributes influence UACE school performance.

Table 18:Coefficients for Determining UACE performance in Public schools

Model	Coefficients					Collinearity Statistics	
	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.		
	B		Beta			Tolerance	VIF
1 (Constant)	1.853	.091		20.409	.000		
School entry points	.004	.002	.137	2.482	.014	.670	1.492
School Fees	-3.084E-7	.000	-.315	-6.385	.000	.838	1.193
Gender of school head	.100	.020	.231	4.982	.000	.953	1.049
Number of Teachers Involved	.003	.000	.292	5.613	.000	.752	1.330
School entry levels	-.097	.028	-.169	-3.459	.001	.857	1.167
2 (Constant)	1.666	.091		18.391	.000		
School entry points	.003	.002	.106	2.016	.045	.655	1.527
School Fees	-3.496E-7	.000	-.357	-7.477	.000	.798	1.253
Gender of school head	.057	.021	.131	2.730	.007	.794	1.259
Number of Teachers Involved	.002	.000	.250	4.915	.000	.706	1.416
School entry levels	-.088	.027	-.154	-3.308	.001	.835	1.197
Idealized	.038	.020	.144	1.919	.056	.325	3.076
Inspirational	.015	.015	.065	.968	.334	.408	2.449
Intellectual	.011	.015	.049	.758	.449	.428	2.338
Individual	.028	.012	.124	2.418	.016	.688	1.454

a. UACE Performance is a dependent variable.

Source: Primary data 2022

The results presented in table 18 indicate that the p-values for each of the independent variables are shown in the Sig column. The hypothesis being tested is that the coefficient (B) is 0 after controlling for the other variables.

The model results show that the standardized beta coefficients for school entry points, Gender of school head and number of teachers were 0.106, 0.131 and 0.250 suggesting that holding all other factors constant, a unit increase in school entry points, Gender of school head and number of teachers results to 10.6%, 13.1% and 25.0% increase in UACE performance in public schools in Uganda thus the statistical

significance of $P=0.045$, $P=0.007$ and $P<0.001$ which are less than 0.05 significance level.

Further, the standardized beta coefficients for school fees paid and School entry levels were -0.357 and -0.154. This entails that, a unit increase in school fees paid and School entry levels results in the decrease in performance at UACE by 35.7%, and 15.4% in public schools in Uganda correspondingly. The results show a statistical significance of $P<0.001$ and $P=0.001$ respectively which is less than 0.05 significance level.

Regarding the influence of transformational leadership attributes on UACE performance, the results show that the standardized beta coefficients for Individualised influence was 0.124 suggesting that a unit increase in Individualised influence increases academic performance at UACE by 12.4% in public schools in Uganda. The study also found that the P-value for Individualised influence was $P=0.016$ which is less than the significance level of 0.05. This implies that Individualised influence was found to significantly influence UACE performance in public schools in Uganda

4.8 Influence of transformational leadership attributes on academic performance of private secondary schools in Uganda

The study's third objective aimed to investigate the influence of transformational leadership attributes on academic performance in private secondary schools in Uganda. The hypothesis proposed that transformational leadership attributes of head teachers has no influence on student academic achievement. To accomplish this objective and validate the hypothesis, participants were asked to rank elements of transformational leadership using a Likert scale ranging from 1 to 5.

Utilizing multiple regression analysis, the obtained results were analyzed to determine the influence of headteachers' transformational leadership attributes on student academic achievement at UCE and UACE levels in private secondary schools in Uganda.

4.8.1 Influence of transformational leadership attributes on UCE academic performance of Private secondary schools

In order to evaluate the influence of headteachers' transformational leadership attributes on the academic performance of private secondary schools, multiple regression analyses were employed to determine the influence of these attributes on school performance at UCE level. The predictor variables included control factors such as the number of teachers involved, school fees paid, gender of the school head, school entry levels, school ownership, and school entry points, as well as transformational leadership attributes, namely individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior.

Prior to conducting the analysis, several assumptions were tested to ensure the validity of the model. The normality assumption was assessed through visual examination of normal probability plots and histograms. The data demonstrated compliance with this assumption as it closely followed the diagonal trend line and exhibited no significant skewness (refer to Figure 14 and 15). The assumption of homoscedasticity was confirmed by observing a random distribution of data points in the scatter plot (see Figure 16). Furthermore, the absence of multicollinearity was confirmed by examining the variance inflation factors, which were found to be below 5 (see Table 21).

Figure 14: Histogram of Transformational attributes influence on UCE School performance in Private schools

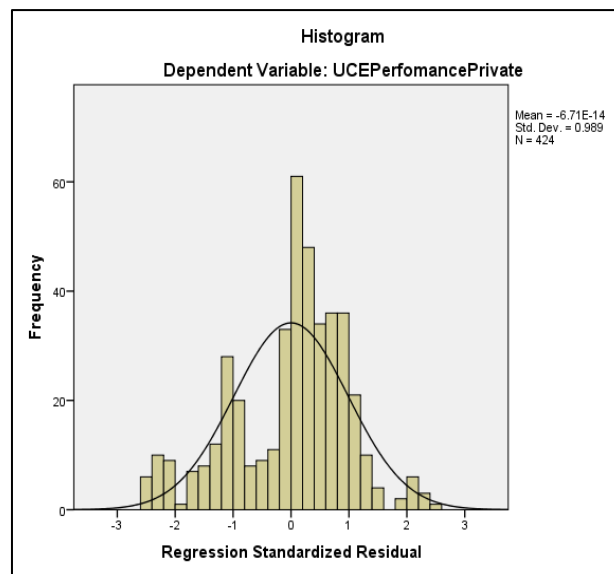


Figure 15: Normal P-P plot with Transformational leadership attributes influence on UCE School performance in Private schools

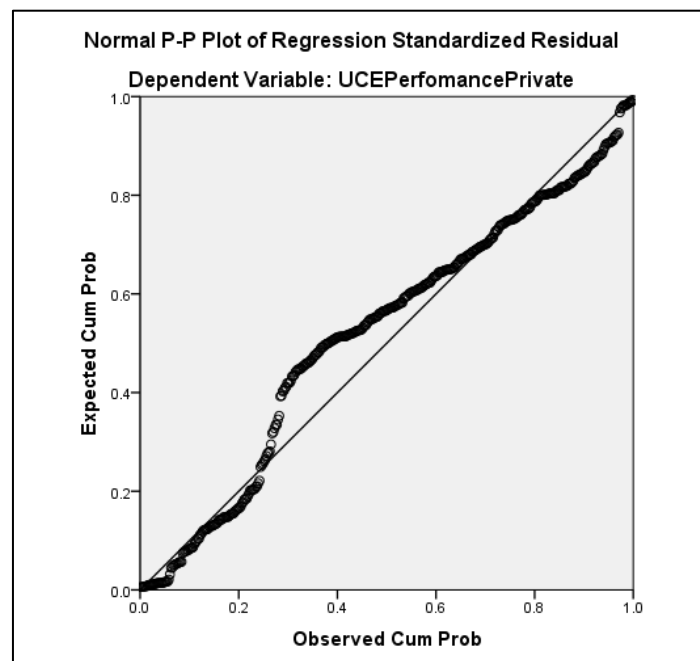


Figure 16: Residuals scatter plot to test homoscedasticity with transformational leadership attributes influence on UCE performance in Private schools

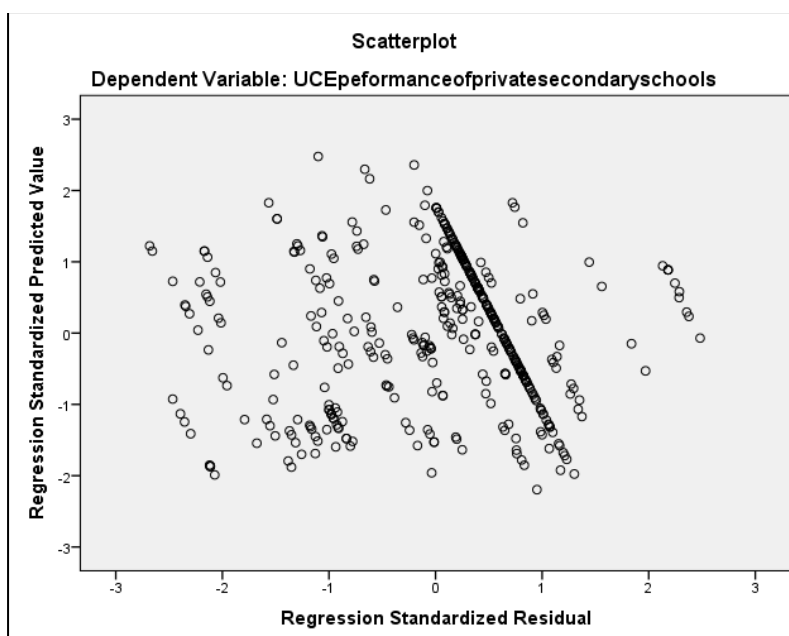


Table 19 below summarizes the multiple regression results of transformational leadership characteristics as predictors of UCE performance in private secondary schools.

Table 19: Transformational leadership attributes influence on UCE performance in Private schools

Model Summary									
Model	R	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics				Sig. F Change
					F	Change	df1	df2	
1	.340 ^a	.116	.105	.01291	.116	10.924	5	418	.000
2	.368 ^b	.135	.116	.01283	.020	2.350	4	414	.054

a. (Constant) predictors, levels, head, points, involvement, fees

b. Levels, head, points, involved, fees, intellectual, inspirational, individual, idealized are all predictors.

c. UCE Performance is a dependent variable.

Source: Primary data 2022

The results presented in table 20 demonstrate that in model 1, the R-square value is 0.116. This indicates that the combined influence of school entry levels, gender of the school head, school fees paid, number of teachers involved, school entry points, and the joint scores account for 11.6% of the variance in UCE performance among private schools.

Upon the introduction of transformational leadership attributes (individualized consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior) in model 2, the R-square value increased to 0.135 (13.5%), indicating that the variables in the model explain an additional 2.0% of the variance in UCE performance beyond the initial five variables. However, it is noteworthy that the increase in variance explained is not statistically significant, as the p-value associated with the transformational leadership attributes is 0.054. This suggests that the transformational leadership attributes did not have a significant influence on UCE performance in private secondary schools.

To further investigate this influence, an analysis of variance (ANOVA) was conducted to test the hypothesis. The results of the ANOVA (F-test) are presented in table 20.

Table 20:ANOVA testing the influence transformational Leadership and UCE performance in Private schools

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.009	5	.002	10.924	.000 ^b
	Residual	.070	418	.000		
	Total	.079	423			
2	Regression	.011	9	.001	7.192	.000 ^c
	Residual	.068	414	.000		
	Total	.079	423			

a. UCE Performance is a dependent variable.

b. (Constant) predictors, levels, head, points, involvement, fees

c. School admission levels, gender of school head, school entry points, number of teachers involved, school fees paid, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior are all predictors.

Source: Primary Data 2022

The results presented in table 20 indicate that for both the first and second block, the F-values are statistically significant. In the first block, the F-value is 10.924 with a p-value of 0.000, while in the second block, the F-value is 7.192 with a p-value of 0.000. These findings suggest that headteachers' transformational leadership attributes influence UCE school performance in private secondary schools.

Based on these results, the null hypothesis, which states headteachers' transformational leadership attributes does not influence UCE school performance in private schools, is rejected. The findings support the alternative hypothesis, indicating that there is indeed a significant relationship between transformational leadership attributes and UCE performance in private secondary schools.

Table 21: Coefficients for Determining UCE performance in Private schools

Model	Coefficients					Collinearity Statistics	
	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.		
	B	Error	Beta			Tolerance	VIF
1 (Constant)	1.979	.005		384.286	.000		
School entry level	.000	.000	.115	2.085	.038	.696	1.437
School fees paid	2.780E-8	.000	.367	6.469	.000	.657	1.523
Gender of school head	.000	.000	-.063	-1.237	.217	.826	1.211
Number of teachers involved	.000	.000	.105	1.936	.054	.718	1.393
School entry points	-.003	.001	-.156	-2.913	.004	.739	1.352
2 (Constant)	1.977	.006		348.413	.000		
School entry level	.000	.000	.110	1.999	.046	.687	1.457
School fees paid	2.884E-8	.000	.381	6.717	.000	.649	1.540
Gender of school head	.000	.000	-.072	-1.413	.158	.808	1.238
Number of teachers involved	.000	.000	.090	1.655	.099	.708	1.412
School entry points	-.003	.001	-.174	-3.224	.001	.715	1.399
Idealized Influence	.003	.001	.154	2.271	.024	.456	2.193
Inspirational Motivation	-.002	.001	-.140	-2.244	.025	.534	1.872
Intellectual Stimulation	.001	.001	.066	.968	.334	.454	2.201
Individualized consideration	.000	.001	-.021	-.341	.733	.548	1.824

a. UCE Performance is a dependent variable.

Source: Primary data 2022

The results in table 21 provide p-values for each of the independent variables. The hypothesis being tested is whether the coefficient (B) is equal to zero after controlling for the other variables. The model results show that the standardized beta coefficients for school entry level and school fees paid were 0.110, and 0.381 suggesting that relaxing all other factors constant, a unit increase in school entry level and school fees paid results in 11.0% and 38.1% increase in UCE performance in

private schools thus the statistical significance of $P=0.046$ and $P<0.001$ respectively which are less than 0.05 significance level.

Additionally, the standardized beta coefficient for school entry points was -0.174 suggesting that, a unit increase in school entry points results in the decrease in performance at UCE by 17.4% in private schools. The results also show that school entry points is statistically significant ($P<0.001$) in influencing UCE academic performance in private schools.

Concerning the relationship between transformational leadership attributes and UCE performance, the results show that the standardized beta coefficients for Idealized influence and Inspirational motivation was 0.154 and -0.140 respectively suggesting that a unit increase in Idealized influence increases academic performance at UCE by 15.4% in private schools in Uganda while a unit increase in Inspirational motivation decreases academic performance at UCE by 14.0%. The study also found that the P-value for Idealized influence and Inspirational motivation were $P=0.024$ and $P=0.025$ which is less than the significance level of 0.05. This implies that Idealized influence and Inspirational motivation found to have a significant influence on UCE performance in private schools.

4.8.2 Influence of transformational leadership attributes on UACE academic performance of private secondary schools.

To assess the influence of headteachers' transformational leadership attributes on UACE academic performance in private secondary schools, multiple regressions were conducted to determine the influence on the attributes and private schools performance at UACE. The influencer variables included individualized

consideration, inspirational motivation, intellectual stimulation, idealized influence, and behavior.

Prior to the analysis, several assumptions were tested to ensure the validity of the model. Normality was examined through a visual assessment of the normal probability plot and histogram. The data closely followed the diagonal trend line and exhibited no skewness, indicating that the normality assumption was met (refer to Figure 17 and 18). Homoscedasticity, which refers to the equal variance of the error terms, was examined through a scatter plot. The data points were randomly scattered, indicating that the assumption of homoscedasticity was met (refer to Figure 19). Furthermore, the absence of multicollinearity, the condition where independent variables are not highly correlated, was assessed by examining the variance inflation factors (VIF), which were found to be below 5 (refer to Table 24).

These tests ensure that the assumptions of normality, homoscedasticity, and multicollinearity were satisfied, establishing the validity of the model for analyzing the influence of transformational leadership attributes on academic performance in private secondary schools.

Figure 17: Histogram of Transformational attributes influence on UACE School performance in Private schools

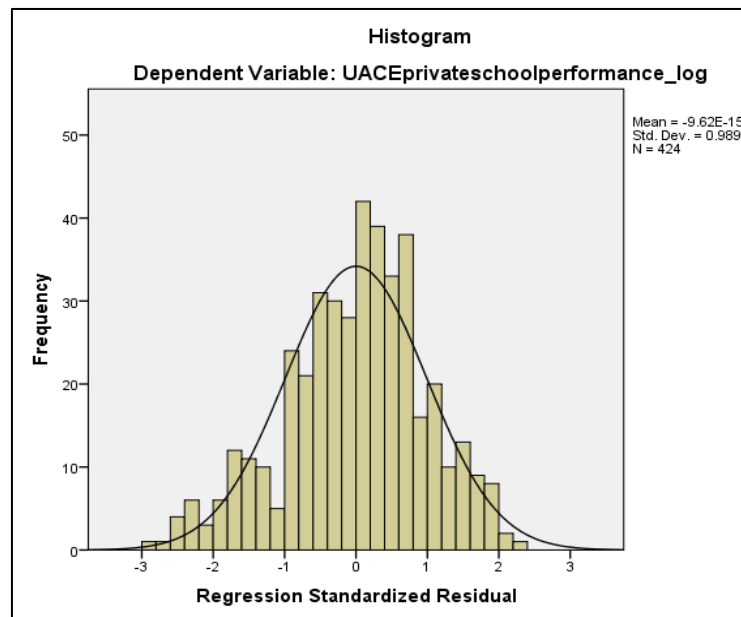


Figure 18: Normal P-P plot with Transformational leadership attributes influence on UACE School performance in Private schools

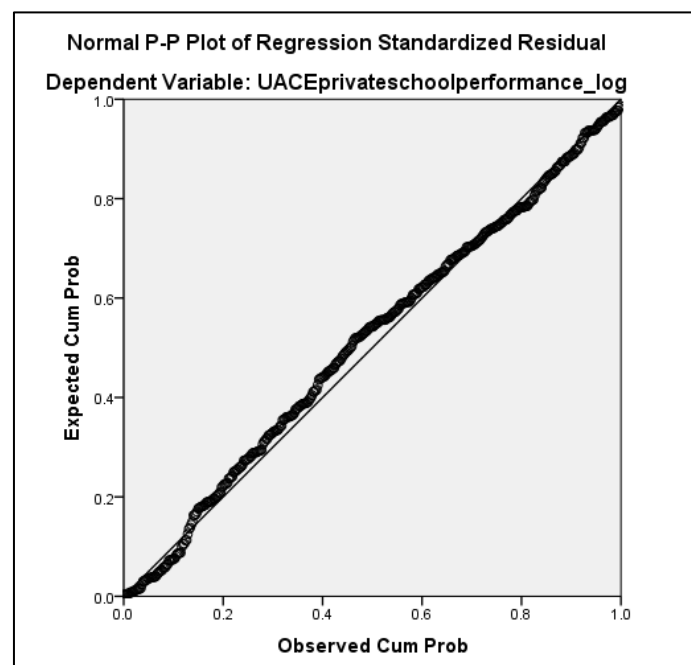


Figure 19: Residuals scatter plot to test homoscedasticity with transformational leadership attributes influence on UACE performance in Private schools

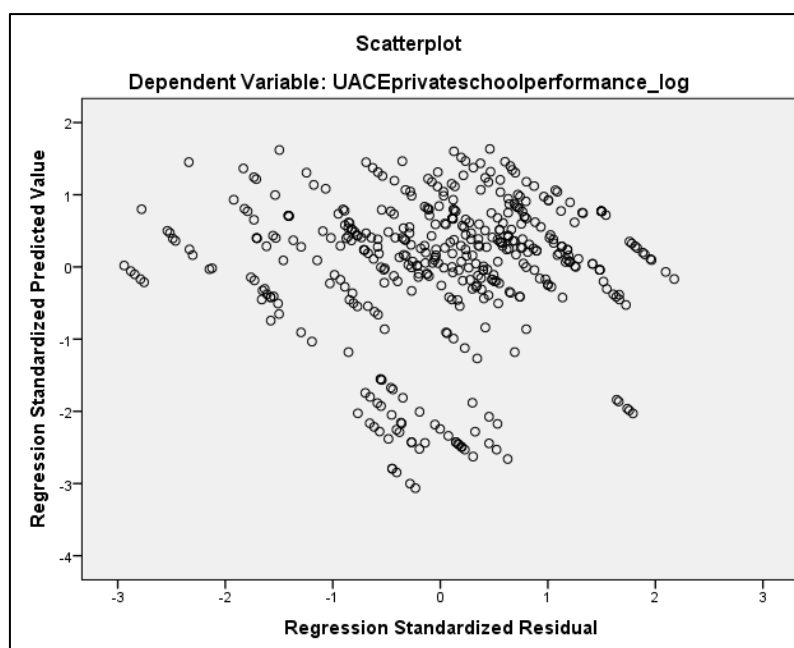


Table 22 summarizes the multiple regression results of transformational leadership characteristics as predictors of UACE success in private secondary schools.

Table 22: Transformational leadership attributes influence on UACE performance in Private schools

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change in R Square	Change in F	df1	df2	Sig. F Change
1	.616 ^a	.379	.372	.17075	.379	51.077	5	418	.000
2	.629 ^b	.396	.383	.16922	.017	2.895	4	414	.022

a. (Constant) predictors, levels, head, points, involvement, fees
b. Levels, head, points, involved, fees, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior are all predictors.
c. UACE Performance is a dependent variable.

Source: Primary Data 2022

The results presented in table 23 below demonstrate that the introduction of transformational leadership attributes significantly influenced UACE performance

in private secondary schools. The ANOVA (F-test) reveals a significant relationship, with F-values of 11.275 and 9.602 for the first and second model, respectively ($P < 0.001$). This indicates a strong association between transformational leadership attributes and UACE school performance.

In model 1, the control factors of School entry levels, Gender of school head, School fees paid, Number of Teachers Involved, and School entry points were significant influencers of UACE performance in private schools ($P < 0.005$). Model 2, which includes the transformational leadership attributes, further improves the prediction power. The R Square value increased to 0.396, meaning that 39.6% of the variance in UACE performance is accounted for by all the variables in the model.

The total R square change of 1.7% indicates that the addition of transformational leadership attributes explains additional variance in school performance beyond what is accounted for by the control factors alone. This suggests that the transformational leadership attributes of headteachers have a significant influence on UACE performance in private secondary schools, as evidenced by the statistically significant P-value of 0.022.

The analysis of variance confirms the rejection of the null hypothesis, further supporting the conclusion that transformational leadership attributes of headteachers influence UACE school performance in private secondary schools.

Table 23: ANOVA testing the relationship between transformational Leadership and UACE performance in Private schools

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.446	5	1.489	51.077	.000 ^b
	Residual	12.186	418	.029		
	Total	19.632	423			
2	Regression	7.777	9	.864	30.178	.000 ^c
	Residual	11.855	414	.029		
	Total	19.632	423			

a. UACE private school performance is the dependent variable.

b. (Constant) predictors, levels, head, points, involvement, fees

c. Levels, head, points, involved, fees, individualized consideration, inspiring motivation, intellectual stimulation, idealized influence, and behavior are all predictors.

Source Primary Data 2022

The results presented in table 23 revealed that headteachers' transformational leadership attributes influence UACE school performance in private secondary schools. The ANOVA (F-test) demonstrates significant F-values of 51.077 and 30.178 for the first and second blocks, respectively ($P < 0.001$). This indicates a substantial and statistically significant influence of headteachers' transformational leadership attributes on UACE performance in private schools.

The rejection of the null hypothesis is supported by the analysis, which confirms the presence of a meaningful influence of transformational leadership attributes on UACE school performance in private secondary schools. The obtained F-values and associated p-values provide strong evidence in favor of this influence, highlighting the importance of transformational leadership in driving academic outcomes.

Table 24: Coefficients for Determining UACE performance in Private schools

Model	Coefficients					Collinearity Statistics	
	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.		
1 (Constant)	1.414	.066		21.324	.000		
School entry level	-.009	.002	-.247	-5.390	.000	.696	1.437
School fees paid	-1.398E-7	.000	-.119	-2.527	.012	.657	1.523
Gender of school head	.007	.003	.102	2.436	.015	.826	1.211
No of teachers involved	.003	.001	.162	3.591	.000	.718	1.393
School entry points	.147	.014	.483	10.867	.000	.739	1.352
2 (Constant)	1.362	.073		18.715	.000		
School entry level	-.008	.002	-.231	-5.067	.000	.687	1.457
School fees paid	-1.463E-7	.000	-.125	-2.655	.008	.649	1.540
Gender of school head	.006	.003	.095	2.259	.024	.808	1.238
No of teachers involved	.003	.001	.163	3.622	.000	.708	1.412
School entry points	.151	.014	.496	11.088	.000	.715	1.399
idealized influence	-.044	.017	-.144	-2.575	.010	.456	2.193
inspirational motivation, ,	.017	.014	.064	1.244	.214	.534	1.872
intellectual stimulation	.035	.015	.129	2.308	.022	.454	2.201
individualized consideration	.004	.013	.016	.315	.753	.548	1.824

a. UACE private school performance is the dependent variable.

Source: Primary Data 2022

The results presented in table 24 indicate the p-values for each of the independent variables. The hypothesis tested for each variable is whether the coefficient (B) is equal to zero after controlling for other variables. The model results show that the standardized beta coefficients for gender of the school head, number of teachers involved, and school entry points were 0.095, 0.163 and 0.496 suggesting that relaxing all other factors, a unit increase in gender of the school head, number of

teachers involved, and school entry points results in 9.5%, 16.3%, and 49.6% increase in UACE performance in private schools thus the statistical significance of $P=0.024$, $P<0.001$ and $P<0.001$ respectively which are less than 0.05 significance level.

In addition, the standardized beta coefficient for school entry level and School fees paid was -0.231 and -0.125 respectively. This suggested that, a unit increase in school entry level and School fees paid results in the decrease in performance at UACE by 23.1% and 12.5% correspondingly in private schools. The results also show that school entry level and School fees paid are statistically significant ($P<0.001$ and $P=0.008$) in influencing UACE academic performance in private schools.

Concerning the transformational leadership attributes influence on UACE performance, the results show that the standardized beta coefficients for Idealized influence and Intellectual stimulation was -0.144 and 0.129 respectively suggesting that a unit increase in Idealized influence decreases academic performance at UACE by 14.4% in private schools in Uganda while a unit increase in Intellectual stimulation increases academic performance at UACE by 12.9%. The study also found that the P-value for Idealized influence and Intellectual stimulation were $P=0.010$ and $P=0.022$ which is less than the significance level of 0.05. This implies that Idealized influence and Intellectual stimulation were significant influencers of UACE performance in private schools.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter provides an overview and analysis of the research findings, encapsulating the summary and discussion of the study.

5.2 Influence of headteachers' transformational leadership attributes on academic performance

The study was designed to determine transformational leadership attributes of head teachers influence on academic performance of secondary schools in Uganda. Like this study hypothesized transformational leadership attributes of the head teachers influence student academic achievement. The results of the of the multiple regression model demonstrated that, collectively transformational leadership traits are significant influencers of academic performance of secondary schools at UCE and UACE.

The scores in Table 7, 8 and 9, showed that transformational leader attributes of headteachers are strongly influence academic achievement collectively. Individual analysis showed that, Idealized influence and behavior ($P < 0.001$) and inspirational motivation ($P = 0.015$) were significant influencers of UCE performance. The findings further revealed that a unit increase in Idealised influence increases academic performance at UCE by 17.9% while and increase in a unit of Inspirational Motivation decreases UCE performance by 10.9% in Uganda. This implies that Idealized Influence positively influence school performance while Inspirational Motivation negatively influence school performance. These findings echo results reported by previous researchers. For example, Marks & Printy(2003), Bass and

Avolio(1994),Lunenburg (2003) and Harrera (2010) who construed that transformational leadership attributes fostered change in the school organization to drive productivity. Recent research by Harrera (2010) also notes that the transformational leadership model presents school culture as a powerful and significant factor in school performance. The findings of this study as well prove, the evidence of the transformational leadership model which states that “Transformational leadership practices have a substantial direct and indirect impact on school restructuring initiatives and teacher-perceived student outcomes.

Consistent with the above arguments, the results of this study are related to those in Brazil, by Paes de Carvalho’s and others (2018) whose results of the analysis of the linear regression having as a dependent variable the academic results of fifth-grade students in mathematics tests and school’s average SEL as the control variable, showed that the index created (PLI) is positively correlated with the school’s learning outcomes. Similar to this study transformational leadership traits of head teachers appear to improve institutional climate for more effective pedagogical work, which, in turn, is conducive to a better student performance at UCE.

Concerning UACE performance in secondary schools, the results of the data analysis indicate that transformational leadership traits are strong strongly related to academic achievement at UACE as the findings in table 10, 11 and 12 revealed. As hypothesized, in this study, the null hypothesis was rejected confirming that transiformalional leadership traits of headteachers influence performance in secondary schools.

A closer look at individual leadership trait revealed that transformational leadership attributes of inspirational motivation ($P=0.035$) and intellectual stimulation ($P<0.001$), were significant influencers of UACE secondary school performance. The standardized beta coefficients for Inspirational Motivation and Intellectual stimulation were 0.087 and 0.156 respectively implied that a unit increase in Inspirational Motivation and Intellectual stimulation increases academic performance at UACE by 8.7% and 15.6% correspondingly. These findings prove the transformational leadership theory, which views school leaders as change agents and therefore would espouse the four critical characteristics or attributes: captivation or idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Marks & Printy, 2003; Bass and Avolio, 1994; Lunenburg, 2003; Harrera, 2010).

Similarly, the organizational/control factors that were considered alongside transformational leadership traits. Results in table, 7, 10, revealed that control factors alongside transformational leadership traits influence secondary school achievement by 24.5% and 33.3% at UCE and UACE respectively the statistical relationship was strong ($P=0.000$). These findings are in agreement with previous studies. For instance, Leithwood and Seashore, 2004; Portin, 2009; Branch et al, 2013 acknowledge that although many factors are responsible for school academic performance, decent school leadership is widely regarded as the key to a successful school.

While transformational leadership traits together with organizational characteristics were significant influencers of academic achievement at UCE and

UACE, the findings of this study revealed that different attributes of leadership are significant at both levels. Idealized influence and behavior ($P=0.000$) and inspirational motivation ($P=0.015$) were significantly related to UCE performance whereas at UACE, it was inspirational motivation ($P=0.035$) and intellectual stimulation ($P=0.000$). This implies that leadership attributes are significant at all levels though what is applicable at UCE may not necessarily apply at UACE. This is in line with observations by Anderson (2017), who observed that though literature collectively concludes that transformational leadership is the most appropriate leadership style for today's schools, application is by a leader who collaborates with subordinates to identify needed change, develops a vision to guide the change through inspiration, and implements the change in concert with committed members of a group.

The research results put together are in agreement with previous studies, for instance, Portin (2009), opines that both empirical studies evidence and practice show that without a skilled and committed leader to help shape teaching and learning, there is a slim chance of creating and sustaining high-quality learning environments. Consistent with other findings, Condon & Clifford, 2012 argued that school principals are second only to classroom teachers as the most influential school factor in student achievement. Like results of this study, a high-performance and secondary schools can be influenced by strong transformational leadership traits by heads of schools.

5.3 Influence of transformational leadership attributes on academic performance of public schools

The second objective of the study was to examine the Influence of transformational leadership attributes on UCE and UACE performance of public schools in Uganda. Results from this study as shown in table 13 and 15 revealed that transformational leadership attributes ($P=0.003$) strongly influence academic performance at UCE in public schools. Correspondingly, the findings rejected that null hypothesis and held that headteachers' transformational leadership traits influence UCE academic performance

The findings revealed that Idealized influence and behavior ($P=0.019$) was a strong influencer of school performance at UCE. Consequently, the coefficients for Idealised influence and behavior was 0.191 suggesting that a unit increase in Idealised influence and behavior increases academic performance at UCE by 19.1% in public schools. Consistent with other scholars, Ogbonnaya, Izuagba, and Chukwudebelu (2020), Kitur, Choge, and Tanui (2020), Musyoki et al. (2021), Ngunyi (2018) in their studies based in Nigeria and Kenya found a positive and statistically significant relationship between attributes of transformational leadership and student performance in public schools.

As far as UACE academic performance in public secondary schools were concerned, results of multiple linear regression analysis(table 16) showed that transformational leadership attributes can influence school performance by 8.7% with a strong statistical significance ($P<0.001$).Consequently, the coefficient for Individualized influence was 0.124, which implied that a unit increase in Individualized influence increases academic performance at UACE by 12.4% hence

positively influencing school UACE performance in public schools. Hence, the null hypothesis was rejected and confirmed that headteachers transformational leadership traits influence UACE school performance in public secondary schools. This proves the Transactional leadership theory pioneered by Bernard Bass in 1985 who described transformational leaders as those that exhibit four transformational leadership behaviors/attributes when they interact with their staff or subordinates on a daily basis. These leaders as review of articles published between 1990 to date, opine that transformational leadership theory is popular and more research studies have used it to explain academic performance. Anderson (2017), and Gkolia & Belias (2014) also posts a similar argument that transformational leadership has a positive impact on teacher commitment, performance, job satisfaction, and other factors that contribute to overall school success.

The findings are also in line with recent research, for instance Musyoki and others, 2021, found a positive and statistically significant influence of the principal's transformational traits especially individualized consideration on students' academic performance in Kenya at Kenya Certificate of Secondary Education in Public Secondary Schools." Similarly Ngunyi (2018) discovered that the Principals' individual consideration had a statistically significant positive correlation with the students' academic performance of public secondary school students in Lari Sub-county, Kiambu County.

The findings also showed that transformational leadership traits together with control factors are significant influencers of achievement both at UCE and UACE. Clearly, table 15 and 18, show that while all control factors of School fees paid,

school entry points, gender of school head, school level number of teachers were significant influencers at UACE, the same could not apply to UCE where numbers of teachers involved in teaching was not a significant predictor of academic achievement. In same way, while Idealized influence and behavior was a significant influencer at UCE, individualized consideration was the influencer at UACE in public secondary schools. The findings reecho a general consensus in school leadership theories and studies that successful schools are associated with good leaders (Mwangi, 2015). Indeed the findings accept that leaders (head teachers) cannot lead alone due to the complexity and breadth of leadership skills required for the job. They therefore, unleash their transformational leadership traits and work together as they coordinate units of change, which generates student success/ academic achievement in public schools.

Additionally, grouped transformational leadership traits and control factors scores cannot fully explain school performance. Findings show that, that 28.2% and 34.3% (table 13 and 16) of the variance in school performance at UCE and UACE respectively is explained by transformational leadership variables as well as the controls factors. The findings therefore acknowledge other forces that drive school academic performance in public secondary schools. This study's findings are in line with Branch et al, 2013 who stated that alongside transformational leadership attributes on student academic performance, there is influence of other school factors. Controlling for these factors is therefore critical in determining the impact of transformational school leadership attributes or traits on academic performance.

5.4 Influence of transformational leadership attributes on academic performance of private Secondary schools

This study also set out to examine the influence of headteachers' transformational leadership attributes on academic performance of private Secondary schools in Uganda. Findings from table 18 revealed that there is no significant relationship between transformational leadership attribute and academic achievement in private secondary schools at UCE. However further statistical analysis of variance rejected the null hypothesis as revealed in table 19.

A closer look at coefficients of academic achievement showed that transformational leadership attributes of Idealized influence and behavior ($P=0.024$) and inspirational motivation ($P=0.025$) were statistically significant influencers of UCE performance in private secondary schools. In addition the coefficients for Idealized influence and Inspirational motivation were 0.154 and -0.140 this implied that a unit increase in Idealized influence increases academic performance at UCE by 15.4% in private schools in Uganda while a unit increase in Inspirational motivation decreases academic performance at UCE by 14.0%.

This implies that the head teachers' idealized influence influence student performance positively at UCE in private schools while and inspirational motivation influence UCE performance negatively in private schools. The results are in tandem with studies, for example Muriuki, Nzinga, and Chiroma (2022) concur with these findings, in their qualitative review of the Influence of Teacher Transformational Leadership on Students' Academic Performance in Kirinyaga County Secondary School expressed that transformational leadership components (Idealized Influence, Individual consideration, inspirational motivation, and Intellectual Stimulation) had a significant positive influence on KCSE performance.

According to findings from table 18, transformational leadership attributes together with control factors approximately explain 13.5% of the variance in academic performance at UCE in private schools in Uganda. The implication of this finding is that a significant proportion of academic achievement in private schools is explained by other factors. The findings are contrary to other studies in Africa which found all attributes of transformational leadership are strongly related to academic achievement like, Ogbonnaya, Izuagba, and Chukwudebelu (2020), Kitur, Choge, and Tanui (2020), Musyoki et al. (2021) and Ngunyi (2018) who concur that the relationship between all the four attributes of transformational leadership and student performance in private schools are strongly significant.

The weak significance may be due to that fact transformational leadership attributes are not consistently practiced in private schools. Similar concerns were raised by Makgato, & Mudzanani(2019), Mora-Whitehurst (2013), Sammons, Davis, Day, & Gu (2014) Woods & Martin, (2016) Young et al.(2017), through their literature that indicates an evident relationship between effective head teachers' transformational leadership attributes and advanced student achievement, researchers found transformational leadership behaviors were not consistently and pervasively implemented in secondary schools.

The findings are also in line with other scholars who acknowledged that while transformational leadership traits are significant, they ought to be utilized while controlling other factors. This concurs with Branch et al (2013), who stated that alongside transformational leadership attributes on student academic performance, there is influence of other school factors. Controlling for these

factors is therefore critical in determining the impact of transformational school leadership attributes or traits on academic performance.

The results of multiple regression analysis also revealed that transformational leadership traits are significant influencers of UACE school academic performance in Ugandan private secondary schools. Findings in table 22 indicate that control factors combined with transformational traits account for 39.6% ($P=0.022$) of the variation in UACE academic performance in private schools. Consequently, the null hypothesis was therefore rejected. Headteachers' transformational leadership attributes significantly influence school performance at UACE in private schools.

Therefore, the head teacher talking optimistically about the future, enthusiastically about what needs to be done, articulating a compelling vision for the future, and expressing confidence that goals will be met positively and statistically significantly influence student UACE performance in private secondary schools. The study findings are in agreement with recent research of Mehndroo and Vandana (2020) who authored that there was a significant relationship between motivation and student academic achievement. The results are also in line with earlier research by Wentzel and Wigfield (2014) while studying academic and social motivational influences on students' academic achievements concluded that inspirational motivation of head teachers significantly influence students' performance. Also similar conclusions were noted by Steinmayr, Weidinger, Schwinger, and Spinath (2019) in Germany who discovered that inspirational motivation positively influences student performance in a study of 345 11th and 12th grade students from Germany's highest academic track (Gymnasium). Similar discoveries were revealed in this study among private schools in Uganda

A closer look at coefficients of academic achievement showed that all organizational/control factors (School entry level, School fees paid, School entry points number of teachers involved in teaching and Gender of school head) in this study were significantly related to academic achievement at UACE in private secondary schools. While transformational leadership attributes of Idealized influence and behavior ($P=0.010$, $B=-0.144$) and intellectual stimulation ($P=0.022$, $B=0.129$) were significant influencers of performance in private secondary schools. This also implied that a unit increase in Idealized influence decreases academic performance at UACE by 14.4% in private schools, while a unit increase in Intellectual stimulation increases academic performance at UACE by 12.9%. Hence idealized negatively influences school performance while Intellectual stimulation positively influences school performance at UACE in private schools. The findings are similar to those in research studies like, Kitur, Choge, and Tanui (2020) who conducted a study on the relationship between Principals' transformational leadership style and secondary school students' academic performance in Bomet County Kenya and noted a statistically significant positive relationship between the principals' idealized influence and students' academic performance in KCSE. The results also concur with Ndinza (2015) in a descriptive survey in Kenya's Kitui County, where findings showed that the management practices of head teachers in terms of supervision, communication, and motivation influenced students' academic performance in national examinations.

Next, the findings indicate that the factors considered in this study only account for 39.6% of the variance in UACE performance in private schools. This implies that the remaining gap is the contribution of other factors. This line of thought is in

agreement with Zuze and Juan (2018) who argued that although a strong leader is important, effective leadership relies on support from multiple sources.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents a summary of the empirical investigation, suggests recommendations and indicates the study's limitations.

6.2 Conclusions

The study aimed to determine the extent to which transformational school leadership characteristics influence academic performance in Ugandan secondary schools. Specifically the study investigated the extent to which transformational leadership attributes of head teachers influence academic performance of secondary schools in Uganda; examined the Influence of transformational leadership attributes on academic performance of public schools in Uganda; examined the influence of transformational leadership attributes on academic performance of private Secondary schools in Uganda. The study found out that the transformational leadership attributes are determinants of performance in schools both at Uganda Certificate of Education and Uganda Advanced Certificate of Education.

Overall, the results from this study provide further support for the transformational leadership theory as the review of articles published between 1990 to date, reveal that transformational leadership theory is popular and more research studies have used it to explain performance (Anderson, 2017; Gkolia&Belias, 2014). In support of the theory, the association of transformational

leadership attributes with academic performance was significant. This was irrespective of whether UCE or UACE and private or government owned school. To the researcher's knowledge, this is the first cross-national study to assess the influence of leadership traits on student academic achievement.

The study pointed out that across all sections organizational factors divulged greater influence on academic achievement than transformational leadership attributes. Leadership traits though collectively had significant influence, there is no section in which all four dimensions were individually significant influencers of academic achievement. This can be attributed to the dynamic environment in which school heads operate or as Young and others in 2017 observed through their research that transformational leadership behaviors were not consistently and pervasively implemented in secondary schools.

On the basis of the findings of this study, there were no significant differences in the contribution of transformational leadership attributes. In both UCE and UACE, the influence of leadership traits were more or less the same be it in private or public secondary school.

6.3 Recommendations

Consistent with the setbacks observed, the reviewed literature and the analysis made from the empirical findings as participants suggested, the researcher considers the following recommendations relevant in the process of improving the relationship between transformational leadership attributes and academic achievement of secondary schools in Uganda.

Transformational leadership is the best answer to the heightened competitiveness in public and private schools in Uganda and globally because there international schools operating in Uganda. School heads who ought to be transformational leaders have to demonstrate higher levels of performance and employee satisfaction, attributes necessary for survival in the current competitive education sector. In order to improve, head teachers need to examine what they do in the context of what transformational leadership embodies.

Transformational leadership is based on belief in others, that each member of the team has valuable contributions to make. Head teachers must therefore their strategy to empower each one on their team and streamline them into the school culture, so they must consider what will work for the teachers. If necessary one-on-one coaching to those who can improve with additional attention.

The Ministry of Education and Sports (MoES) should specifically introduce and institute transformational leadership programs to properly equip school leaders with the knowledge required, perceptions, abilities, and expertise that are affiliated with the model of transformational leadership. Furthermore, the MoE should make sure that suitable and pertinent research findings, such as those that this research revealed on transformational leadership in schools, are used to benefit secondary education in Uganda.

Head teachers have to possess a clear vision and mission, consistent values, high standards, and a strong sense of purpose, as well as self-confidence and the ability to gain the trust and respect of both staff and students. They must also demonstrate the importance of the human element in development and progress

by attending to individuals' needs, harnessing their potential, and assisting individuals in self-improvement and achievement.

Head teachers must be open to new ideas and approaches in order to do their jobs effectively. This entails using charisma to influence the team's motivation and enthusiasm, demonstrating exemplary behavior, inspiring, and providing creative encouragement and intellectual stimulation.

Individual characteristics such as the ability to focus, pay attention, change, and take risks must be demonstrated by head teachers by establishing consistency between words and actions. They must also set an example in managing workloads and demonstrate the ability to communicate and reach out to others by demonstrating empathy and maintaining a high level of harmony and cooperation among group members in order to boost morale.

6.4 Limitations

The data collection process for the study experienced delays due to the impact of the COVID-19 pandemic. As a result, the research project extended beyond the initially projected timeline, causing overlaps with other programs and making the overall process more exhaustive than expected.

Gathering data from secondary schools proved to be a challenging task. The schools regarded their information as confidential and were hesitant to disclose it to external parties. Research assistants were even associated with tax officials, which further hindered the willingness of schools to provide the required information.

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Appendix 1: Informed Consent Form

Title: Transformational School Leadership and Academic Performance of Secondary Schools in Uganda

Subject: Invitation to Participate in a Study on Transformational School Leadership and Academic Performance in Uganda

Dear [Recipient's Name],

I hope this message finds you well. My name is Sengendo David, a student at Uganda Christian University. I am currently conducting a study entitled "Transformational School Leadership and Academic Performance of Secondary Schools in Uganda," and I would like to request your participation in this research endeavor.

Study Procedures:

The study will focus on teachers from both private and public secondary schools located within central Uganda. The research procedure involves the use of self-administered questionnaires. Participants will be provided with the questionnaires, which they can fill out independently. Once completed, the questionnaires will be collected for analysis.

Benefits:

By participating in this study, you will contribute valuable insights that can improve the administration of secondary schools in Uganda. The findings are expected to benefit school leaders, supervisors, such as District Education Officers (DEOs), and the Ministry of Education and Sports, providing them with valuable information on enhancing school performance.

Risks:

I assure you that there are no risks associated with this study. All data will be aggregated and analyzed collectively, ensuring that no links to individuals or specific schools are identifiable.

Confidentiality:

Please rest assured that all information provided will be treated with the utmost confidentiality and securely stored. Confidentiality is of the utmost importance, and your identity and the identity of your school will be kept strictly confidential throughout the study.

Voluntary Participation:

Your participation in this study is entirely voluntary. Should you choose to participate, you retain the right to withdraw at any time during the research process. However, once the questionnaires are collected and aggregated, it may be challenging to withdraw individual responses.

Compensation for Time and Travel:

While I am genuinely grateful for your willingness to participate, please note that no financial inducements will be provided for your time and travel.

Contact Information:

If you have any concerns or inquiries regarding this study, please feel free to contact me directly at telephone number 0701515856/0772515856. Alternatively, you may reach out to the UCUREC chairperson at 0772 405 357 or the UCUREC Administrator at 0775 737627.

Statement of Informed Consent:

I, [Your Name], of [Your Institution], having been fully informed and understanding the nature of the study, hereby provide my voluntary agreement to participate in the research entitled "Transformational School Leadership and Academic Performance of Secondary Schools in Uganda."

Participant's Signature: _____ Date:

Researcher's Name: _____ Date:

_____ Signature: _____

UCU REC Approval & Contacts:

UCUREC Chairperson:

Prof. Peter Waiswa

Signature: _____ Date: _____

Phone: +256772 405 357

Email: pwaiswa@musph.ac.ug

Appendix 2: Survey Questionnaire:

Introduction:

My name is [Your Name]. I am participating in an educational study conducted by PhD Student Sengendo David from Uganda Christian University (UCU). The purpose of this study is to explore the effect of transformational school leadership on academic performance in secondary schools within central Uganda. Although there may be no direct personal benefit to you, your participation in this research will provide valuable insights into educational leadership. The findings will inform efforts to improve school leadership practices in Uganda.

Please be assured that all the information you provide will be treated with the highest level of confidentiality and solely used for academic purposes. Your participation in this study is entirely voluntary. If you or any other teachers in your school choose not to participate or decide to withdraw from the study at any point, there will be no penalty or loss of benefit. The research findings will be published, but your identity and the identities of other participants will be kept confidential. Participating in this study poses no foreseeable risks to you or other teachers.

Thank you for considering participating in this study. Your contribution is greatly appreciated.

Sincerely,

Sengendo David

PhD Student

Uganda Christian University

Thank you very much for your cooperation.

Interview Information	
Questionnaire number	
Questionnaire code	
Interviewer name	
Interview date	
Supervisor name	
Supervision date	
District	
County	
Sub county	
Village	
Name of school	

1.0 Teacher Characteristics

No	Questions and Filters	Response	Go to
101	Age of the teacher (in completed years)		
102	Gender of teacher	Male.....1 Female2	
103	What is your highest level of education teacher?	Diploma Level.....1 Degree Level.....2 Masters Level.....3 PhD Level.....4 Other:specify.....5	
104	What is your main teaching subject or subjects?	
105	How long have you been teaching in this school? (in complete years or months if less than one year)		

2.0 School characteristics

No	Questions and Filters	Response	Go to
200	What levels of education does this school have?	0'level Only.....1 A'level Only.....2 Both levels3	
201	What is the ownership of the school?	Private.....1 Public.....2	
202	What is the gender of the head teacher?	Male.....1 Female2	
203	How many teachers are directly involved in teaching in this school?		
204	How many years has the head teacher been the head of this school?		
205	How many classrooms are in the school		
206	How many of these are considered to be of up to standard for use?		
207	Do all students have a table and Chair to sit?	Yes.....1 No.....2	
208	Does the school have electricity?	Yes.....1 No.....2	
209	Does the school have a clean water source?	Yes.....1 No.....2	
210	Does the school have clean sanitary toilet?	Yes.....1 No.....2	
211	Does the school have a library?	Yes.....1 No.....2	
212	Does the school have a science laboratory?	Yes.....1 No.....2	
213	In the last three years, what is		

	average entry points for S.1 students for this school		
214	In a school term, how much does one student usually have to pay in school fees in Uganda shillings?		

3.0 School performance in last 3 years

3.1 UCE performance

No	Questions and Filters	Response	Go to
300	In last three years, how many students participated in the UNEB examinations for O'level	2016..... 2017..... 2018.....	
301	How many of these students passed the exams in.....	<div> <div>2016</div> <div>2017</div> <div>2018</div> </div> <div> <div>First grade</div> <div>... ..</div> </div> <div> <div>Second grade</div> <div>..... ..</div> </div> <div> <div>Third grade</div> <div>..... ..</div> </div> <div> <div>Fourth grade</div> <div>..... ..</div> </div>	

3.2 UACE performance

No	Questions and Filters	Response	Go to
300	In last three years, how many students participated in the UNEB examinations for UACE	2016..... 2017..... 2018.....	
301	How many of these students got at least 2 principle passes	2016 2017 2018	

4.0 School leadership attributes

This section is used to describe the leadership style of your head teacher in this school as you perceive it. Answer all items on this section. If an item is irrelevant, or if you are unsure or do not know the answer, leave the space blank. Please judge how frequently each statement fits the person you are describing using the following rating scale:

Not at all=0, Once in a while=1, Sometimes=2, Fairly often=3, Frequently, if not always=4

Items	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
Idealized influence (attribute) statements					
Instills pride in me for being associated with him or her.					
Goes beyond self-interest for the good of the group.					
Acts in ways that build respect.					
Displays a sense of power and confidence.					
Idealized behavior statements					

Discusses my most important values and beliefs.					
Specifies the importance of having a strong sense of purpose.					
Considers the moral and ethical consequences of decisions.					
Emphasizes the importance of having a collective sense of mission.					
Inspirational motivation statements					
Talks optimistically about the future.					
Talks Enthusiastically about what needs to be accomplished.					
Articulates a compelling vision for the future.					
Expresses confidence that goals will be achieved.					
Intellectual stimulation statements					
Re-examines the appropriateness of critical assumptions.					
Seeks differing perspectives when solving problems.					
Gets others to look at problems from many different angles.					
Suggests new ways of looking at how to complete assignments.					

Individual consideration statements					
Spends time teaching and coaching.					
Treats others as individuals rather than just a group member.					
Considers an individual's needs, abilities, and aspirations of others.					
Helps others to develop their strengths.					

Thank you for time

Appendix 3: Covid-19 Transmission Risk Management Plan for my PhD Research Fieldwork

Research Title: “Transformational school leadership and academic performance of secondary schools in Uganda”

Task/ activity	Action to be taken to reduce/ remove the risk of COVID-19 transmission	Person responsible
Travel from Kampala to Schools	A. Deep cleaning and sanitization <ul style="list-style-type: none"> • This will involve deep cleaning and disinfecting of my private car before leaving for the field. • I will ensure that all my clothes are cleaned/washed and ironed. • I will also clean and/or disinfect the pens, papers, notebooks, phone, laptop, recorder and any other materials that I will use in data collection. • I will frequently clean and disinfect frequently touched surfaces likes doorknobs/handles, table and chair surfaces etc during research activities. • I will consistently wash my hands with soap and water whenever I can access a hand washing facility/point and participants will be encouraged to do the same. • I will also carry with me a hand sanitiser that I will consistently use in case there is no accessible facility/point for washing hands 	Researcher Participant
Identification and recruitment of participants		
Data collection		
Movement within schools	B. Wearing face masks and physical distancing <ul style="list-style-type: none"> • Wearing of face masks will be ensured. • I will ensure that we (participants, and myself) consistently wear face masks during all the research procedures and activities such as consenting, interviews to prevent person-to-person transmission of COVID-19. • A physical distance of at least two meters will be maintained during research procedures and activities. • I will avoid handshakes and hugging at all times during greetings. • I have secured accommodation at a relative’s home in villages where I have relatives for the days I will be in the field. This will reduce the risk of interacting with many and different people in a hotel when seeking accommodation. 	Researcher Participant
Identification and recruitment of participants		
Data collection		
Researcher’s accommodation during fieldwork		
Task/ activity	Action to be taken to reduce/ remove the risk of transmissionof COVID-19	Person responsible

Field Travel	C. Self-quarantining and self-monitoring	Researcher
	<ul style="list-style-type: none"> • Before leaving for the field, I will quarantine myself at home for two weeks. • During the two weeks, I will monitor my body temperature to observe for fever (above 37.2⁰C) and any other COVID-19 symptoms like cough, flue, sore throat etc. • I will also do daily self-monitoring for symptoms (chills, cough, flu, shortness of breath, general body weakness, sore throat and diarrhoea) of COVID-19 and document my COVID-19 status during the fieldwork. 	

RESEARCHER'S NAME:**Sengendo David**

SIGNATURE:.....DATE:.....

SUPERVISOR: **Dr. Eduan Wilson**

CO-SUPERVISOR:**Dr. Ben Musinguzi**

Appendix 4: REC Approval Letter



UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

04/08/2020

To: David Sengendo

Uganda Christian University 0701515856

Type: Initial Review

Re: UCUREC-2020-21: Transformational School Leadership and Academic Performance of Secondary schools in Uganda, 3, 2020-07-27

I am delighted to notify you that the Uganda Christian University Research Ethics Committee (UCU REC), following an expedited review conducted on 07/05/2020, has granted approval for the study mentioned above.

The approved research is valid from 04/08/2020 to 04/08/2021. As the Principal Investigator of this research, it is your responsibility to fulfill the following requirements as part of the approval:

1. Adhere to the approved research protocol: Ensure that all research activities are conducted in accordance with the approved protocol. Any modifications or deviations from the protocol must receive prior approval from the UCU REC.
2. Obtain informed consent: Obtain informed consent from all participants involved in the study. Provide them with clear and detailed information about the purpose, procedures, potential risks, benefits, and their rights as participants. Use the provided consent form for documentation.
3. Protect participant confidentiality: Safeguard the confidentiality of all participant information collected during the study. Use secure storage and

ensure that data is anonymized and aggregated during analysis to maintain privacy.

4. Voluntary participation: Ensure that participation in the study remains voluntary. Participants should have the right to withdraw from the study at any point without facing any consequences or loss of benefits.
5. Data management and storage: Implement appropriate data management practices to ensure the security and integrity of the collected data. Store all data in a safe and secure location, ensuring it is accessible only to authorized personnel.
6. Regular progress reports: Provide progress reports to the UCU REC as per their specified requirements. These reports should include details of the research progress, any challenges encountered, and any amendments made to the study protocol.

Adherence to ethical guidelines: Conduct the research in compliance with ethical guidelines and principles, including the protection of human subjects, integrity in data collection and analysis, and appropriate dissemination of research findings.

The following is the list of all documents approved in this application by Uganda Christian University REC:

No.	Document Title	Language	Version Number	Version Date
1	Data collection tools	English	3	2020-07-27
2	Protocol	English	3	2020-07-27
3	Informed Consent forms	English	2	2020-03-19



Yours Sincerely

Peter Waiswa

For: Uganda Christian University REC

Appendix 5: Uganda National Council for Science and Technology Approval Letter



Uganda National Council for Science and Technology

(Established by Act of Parliament of the Republic of Uganda)

Our Ref: SS563ES

30 June 2023

David Sengendo
Uganda Christian University
Mukono

Re: Research Approval: Transformational School Leadership and Academic Performance of Secondary schools in Uganda

I am pleased to inform you that on **30/06/2023**, the Uganda National Council for Science and Technology (UNCST) approved the above referenced research project. The Approval of the research project is for the period of **30/06/2023** to **30/06/2024**.

Your research registration number with the UNCST is **SS563ES**. Please, cite this number in all your future correspondences with UNCST in respect of the above research project. As the Principal Investigator of the research project, you are responsible for fulfilling the following requirements of approval:

1. Keeping all co-investigators informed of the status of the research.
2. Submitting all changes, amendments, and addenda to the research protocol or the consent form (where applicable) to the designated Research Ethics Committee (REC) or Lead Agency for re-review and approval **prior** to the activation of the changes. UNCST must be notified of the approved changes within five working days.
3. For clinical trials, all serious adverse events must be reported promptly to the designated local REC for review with copies to the National Drug Authority and a notification to the UNCST.
4. Unanticipated problems involving risks to research participants or other must be reported promptly to the UNCST. New information that becomes available which could change the risk/benefit ratio must be submitted promptly for UNCST notification after review by the REC.
5. Only approved study procedures are to be implemented. The UNCST may conduct impromptu audits of all study records.
6. An annual progress report and approval letter of continuation from the REC must be submitted electronically to UNCST. Failure to do so may result in termination of the research project.

Please note that this approval includes all study related tools submitted as part of the application as shown below:

No.	Document Title	Language	Version Number	Version Date
1	Admission Letter	English	1	05 May 2017
2	Data Collection Tools	English	2	04 August 2020
3	Informed Consent Form	English	3	08 February 2021
4	Risk Management Plan	English	2	08 February 2021
5	Project Proposal	English	2	
6	Approval Letter	English		
7	Administrative Clearance	English		
7	Renewal of REC Approval	English	1	19 June 2023
8	Informed Consent Form	English	2	16 June 2023

Yours sincerely,



Dr. Christopher Ddamulira

For: Executive Secretary

UGANDA NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

LOCATION/CORRESPONDENCE

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EMAIL: info@uncst.go.ug
WEBSITE: <http://www.uncst.go.ug>

Appendix 6: MoESPermission

Telegram: "EDUCATION"
General Line: 234451/8
Fax: 234920
In any correspondence on
This subject please quote No.



Ministry of Education & Sports
Embassy House
P.O. Box 7063
Kampala, Uganda
E-Mail: permasec@education.go.ug
Website: www.education.co.ug

12th November 2020

Sengendo David
Uganda Christian University,
Mukono

PERMISSION TO CONDUCT RESEARCH

Reference is made to your letter dated 2nd November 2020;

I am pleased to inform you that permission is hereby granted in respect of the research request about 'Transformational school leadership and Academic performance of secondary schools in Uganda.'

As you are aware, schools are operating under observance of the COVID-19 SOPs and operating guidelines. Since schools from central region of Uganda will make the sample of your study, liaise with the Desk Officer – Central Region from secondary department to support you reach out to schools.

I wish you all the best in your research.

A handwritten signature in blue ink, appearing to read "Ismael Mulindwa".

Ismael Mulindwa
FOR PERMANENT SECRETARY

Appendix 7: Thesis Plagiarism Report

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Appendix 9: List of schools in Uganda Central region by district

No.	School	District
1	3 Rs Secondary School	Buikwe
13	Alema High School	Buikwe
16	Allied Teachers ' Secondary School Nyenga	Buikwe
25	Back To Eden Secondary School	Buikwe
78	Buikwe Senior Secondary School	Buikwe
79	Buikwe Sen Sec Sch	Buikwe
104	Busagazi Progressive Secondary School	Buikwe
122	Buwooya Trust Academy	Buikwe
136	Cardinal Nsubuga Secondary School	Buikwe
194	Equator College Lugazi	Buikwe
198	Excel High Sch Mbiiko	Buikwe
222	Getwise Secondary School	Buikwe
252	Hands Of Grace Secondary School	Buikwe
263	Hill Top College	Buikwe
275	Hope Christian High School	Buikwe
277	Hope For Joy High Sch (grate Hope Secondary School	Buikwe
279	Hope Land High School	Buikwe
282	Hopeland High School	Buikwe
294	Jireh Comp Secondary School	Buikwe
347	Kansas Christian Secondary School	Buikwe
365	Kasoga Secondary School	Buikwe
461	Kitenda Baptist High School	Buikwe
467	Kiteza Secondary School	Buikwe
477	Kizzigo Sec School	Buikwe
519	Lord's Angle Secondary School	Buikwe
520	Lords Meade Voc College	Buikwe
524	Lugazi Mixed School Nalya	Buikwe

525	Lugazi Progressive College	Buikwe
557	Mabira Standard Academy	Buikwe
572	Malindi Islamic Secondary School	Buikwe
575	Mandela Secondary School	Buikwe
580	Maria Thereza College Schl	Buikwe
614	Mehta Sec School	Buikwe
684	Najja Education Centre	Buikwe
686	NajjaMarys High School Kyaggwe	Buikwe
688	Najjembe Homeland Secondary School	Buikwe
709	Naluwembe Community School	Buikwe
718	Naminya High School	Buikwe
728	Namwizi Umea Secondary School	Buikwe
756	NgogweBaskeville Secondary School	Buikwe
760	Nile Hill School	Buikwe
761	Njeru Secondary School	Buikwe
764	Noah's Ark Secondary School	Buikwe
774	Nyenga Senior Secondary School Kigudu	Buikwe
775	Nyenga Progressive Secondary School	Buikwe
776	Okasha High School	Buikwe
791	Pioneer Sec School	Buikwe
806	Queensway College Lugazi	Buikwe
811	Rayan High School	Buikwe
813	Rehaboth Integrated High School	Buikwe
819	Risah Standard High School	Buikwe
830	Sacred Heart Najja Secondary School	Buikwe
859	Shiloh High School	Buikwe
863	Skills Sec. Sch.	Buikwe
865	Source Of The Nile School	Buikwe
876	Ssunga Senior Secondary School Kiduusu	Buikwe

879	St Andrew' Secondary School Econdary School	Buikwe
897	St Eliza Secondary School	Buikwe
1045	St. Peters Nkokonjeru	Buikwe
1057	St.cornelius Secondary School Kalagala	Buikwe
1067	St.noahMawagali Senior Secondary School	Buikwe
1074	Standard High Sch Bulumagi	Buikwe
1081	Stella Maris College Nsuube	Buikwe
1095	The Cranes College Nangunga	Buikwe
1096	The Hill College School -Bugozo	Buikwe
1102	Trinity Secondary School Nakibizzi	Buikwe
1116	Victoria Secondary School Bukunja	Buikwe
1119	Victors High School	Buikwe
1123	Visionland Secondary School Nkokonjeru	Buikwe
284	Hoys Sec Sch	Bukomansimbi
402	Kibinge High School	Bukomansimbi
508	Light Secondary School Kitoma	Bukomansimbi
612	Mbulire Secondary School	Bukomansimbi
627	Misanvu Secondary School(dup)	Bukomansimbi
904	St George Secondary School Makukulu	Bukomansimbi
929	St Joseph's Secondary School Butenga	Bukomansimbi
963	St Peter's College School Kisojo	Bukomansimbi
1022	St. Lawrence Standard High School Bulenge	Bukomansimbi
1051	St. Victor S Kitaasa Secondary School	Bukomansimbi
1107	Uganda Martyrs Buyoga Senior Secondary School	Bukomansimbi
70	Budde Secondary School	Butambala
73	Budinse Memorial School	Butambala
96	Bulo Mixed Secondary School	Butambala
97	Bulo Parents Senior Secondary School	Butambala
114	ButawukaMageziNtake	Butambala

129	Bweya Secondary School	Butambala
134	Card E. Wamala Vocational Secondary School	Butambala
236	Gombe Secondary School	Butambala
237	Gombe Hill Secondary School	Butambala
295	Jireh High School	Butambala
312	Kaggulwe Secondary School	Butambala
389	Kayenje Secondary School	Butambala
396	Kibibi Secondary School(dup)	Butambala
397	Kibibi Central College	Butambala
398	Kibibi Model Sec Sch	Butambala
399	Kibibi Muslim Secondary School	Butambala
400	Kibibi Parents' Secondary School	Butambala
401	Kibibi Standard Secondary School	Butambala
455	Kitagobwa Secondary School	Butambala
530	Lukalu S. Secondary School	Butambala
537	Luutu Memorial College	Butambala
768	Nsozibbirye Secondary School	Butambala
769	Ntanda College School	Butambala
808	Rasul Akram Islamic Institute	Butambala
842	Sayidina Abubakar Secondary School	Butambala
118	Buvuma College	Buvuma
513	Lingira Living Hope Senior Secondary School	Buvuma
514	Living Grace One Voc& Sec School	Buvuma
946	St Mary's Day And Boarding Secondary School Buvuma	Buvuma
964	St Peters Secondary School Buvuma	Buvuma
82	Bukalali High School	Gomba
84	Bukandula Secondary School	Gomba
85	Bukandula College Secondary School	Gomba
149	Citizen High School Maddu	Gomba

183	Emmanuel Secondary School	Gomba
199	Excel High School Gomba	Gomba
235	Gomba Global College	Gomba
265	Hillside College (Hill Top High Sch)	Gomba
309	Kabulasoke Secondary School	Gomba
352	Kasaka Secondary School	Gomba
453	Kisozi Seed Secondary School	Gomba
486	Kyaayi Secondary School	Gomba
644	Mpenja Senior Secondary School	Gomba
927	St Joseph Voc.s S Buyinjabutoole	Gomba
1023	St. Leonard Secondary School	Gomba
41	Bishop Dunstan Nsubuga Senior Secondary School	Kalangala
86	Bukasa Secondary School	Kalangala
872	Sserwanga Lwanga mem. Senior Secondary School	Kalangala
37	Bexhill High School	Kalungu
59	Bright High School	Kalungu
61	Bright Land High School Namagoma	Kalungu
83	Bukalasa Seminary	Kalungu
91	Bukulula Secondary School	Kalungu
160	Comprehensive High School Baja	Kalungu
161	Comprehensive High School Kiragga	Kalungu
170	Crested Hs Masaka	Kalungu
207	Fatih Islamic Secondary School	Kalungu
248	Greenhill Secondary School Kyamulibwa	Kalungu
271	Holy Family Kyamulibwa	Kalungu
308	Kabukunge Moslem. Secondary School	Kalungu
310	Kabungo Secondary School	Kalungu
423	King David High School	Kalungu
489	Kyagambiddwa	Kalungu

495	Kyato Senior Secondary School	Kalungu
536	Lutengo Secondary School	Kalungu
577	Mapeera Secondary School Kalungu	Kalungu
667	Mustard Seed Sec. School	Kalungu
887	St Benedict Secondary School Mukoko	Kalungu
894	St Charles Lwanga Gtck	Kalungu
950	St Mary's Parent's Secondary School Kigo	Kalungu
973	St Thereza Girls Secondary School Bwanda	Kalungu
976	St. Aloysius Secondary School Bwanda	Kalungu
984	St. Balikuddembe Secondary School Lwabenge	Kalungu
989	St. Charles Lwanga Senior Secondary School Kasasa	Kalungu
1013	St. Joseph Senior Secondary School Villa Maria	Kalungu
1026	St. Mark's College Namagoma	Kalungu
1078	Star Major High School	Kalungu
1117	Victoria College Secondary School	Kalungu
1125	Wagwa High School	Kalungu
1143	YesuAkwagala High School	Kalungu
1144	YesuAkwagala High School	Kalungu
2	Abdulwaheed High Sch	Kampala
3	Abubakar Swidiq Secondary School	Kampala
5	Aga Khan High School	Kampala
11	Ahmadiya Muslim High School	Kampala
17	Amka Classic School	Kampala
19	Apas Secondary School Nsambya	Kampala
30	Baptist High School	Kampala
32	Bbiina Islamic Secondary School	Kampala
38	Bilal Islamic Sec Sch	Kampala
40	Bishop Cipriano Kihangire Secondary School	Kampala
60	Bright High School Busega	Kampala

65	Bright Way Hill School	Kampala
68	Broad Way High School	Kampala
77	Bugolobi International High School	Kampala
90	Bukoto High School	Kampala
106	Busega Secondary School	Kampala
107	Busega Secondary School	Kampala
126	Buziga Islamic T I	Kampala
133	Campus High School-kasubi	Kampala
139	Center Field Senior Secondary School	Kampala
147	Church Of God High School	Kampala
148	Chwa li Memorial College	Kampala
151	City Campus High School	Kampala
152	City Hill College	Kampala
154	City Side College	Kampala
155	City View High School	Kampala
162	Continental Whiteland College	Kampala
165	Crane High School Kintintale	Kampala
166	Crane Hill Secondary School Makerere	Kampala
169	Crested Secondary School	Kampala
178	Eagles' Nest Secondary School	Kampala
179	Eastland High School	Kampala
184	Emmanuel College Kazo	Kampala
196	Excel Secondary School Kasubi	Kampala
202	Faiha High School	Kampala
203	Faiha High School	Kampala
212	Frima High School	Kampala
214	Gadhafi Integrated Academy	Kampala
223	Ggaba Parents High School	Kampala
227	Global College	Kampala

253	Happy Hours Senior Secondary School	Kampala
257	Heritage College School	Kampala
261	Highland Secondary School Kisaasi	Kampala
291	Jakays Secondary School Kabowa	Kampala
307	Kabowa High School	Kampala
314	Kairos High School	Kampala
325	Kakungulu Memorial Secondary School	Kampala
329	Kalinabiri Secondary School	Kampala
337	Kampala Secondary School	Kampala
338	Kampala Apostolic Sec School	Kampala
339	Kampala Citizen College School	Kampala
340	Kampala High School	Kampala
342	Kampala Students Centre	Kampala
345	Kansanga Secondary School	Kampala
346	Kansanga Seed Secondary School	Kampala
368	Kasubi Parents Secondary School	Kampala
376	Katwe Noor Sec School	Kampala
377	Kawaala High School	Kampala
378	Kawala College School	Kampala
381	Kawempe Global College	Kampala
384	Kawempe Standard School	Kampala
407	Kibuli Senior Secondary School	Kampala
421	Kinaawa High School	Kampala
425	King Of Kings College	Kampala
427	King Solomon's College Kyambogo	Kampala
432	Kingstone High School	Kampala
448	Kisaasi Muslim Secondary Sch	Kampala
454	Kisugu High School	Kampala
457	Kitante Hill Secondary School	Kampala

459	Kitebi Secondary School	Kampala
460	Kitebi Light Secondary School	Kampala
481	Knowledge Center High School	Kampala
482	Kololo Senior Secondary School	Kampala
483	Kololo High School	Kampala
485	Kulumba High	Kampala
493	Kyambogo College School	Kampala
504	Lakeside College Luzira	Kampala
509	Light Africa Sec Sch	Kampala
515	Lohana High School	Kampala
518	London High School Kabwa	Kampala
522	Lubiri High School	Kampala
526	Lugoba High School Nansana	Kampala
548	Luzira Secondary School	Kampala
563	Makerere Day & Evening Adult	Kampala
564	Makerere Highway College	Kampala
565	Makerere Modern Secondary School	Kampala
566	Makidye Community College	Kampala
567	Makindye Parents Secondary School	Kampala
568	Makindye Sec Sch	Kampala
569	Makindye Trinity Secondary	Kampala
571	Malcom X Secondary School	Kampala
574	Mamtaz Secondary School Kawempe	Kampala
578	Maranatha High School	Kampala
594	Masanafu Secondary School	Kampala
610	Mbogo College School	Kampala
611	Mbogo High School	Kampala
613	Mbuya College School	Kampala
616	Mengo Secondary School	Kampala

619	Midfield Secondary School	Kampala
625	Mirembe College School	Kampala
666	Mulago Secondary School	Kampala
672	Muyenga High School	Kampala
679	Nabisunsa Girls School	Kampala
683	Naguru High School	Kampala
685	Najja High School	Kampala
687	NajjanakumbiY.c.school	Kampala
693	Nakasero Senior School	Kampala
701	Nakinyuguzi High School	Kampala
725	Namungona High School	Kampala
726	Namungoona Parents Secondary School	Kampala
734	Nateete Mixed College	Kampala
735	Nateete Muslim High School	Kampala
747	New Castle High School	Kampala
751	New KabaleBusoga High School	Kampala
754	New Styles Secondary School	Kampala
777	Old Kampala Senior Secondary School	Kampala
778	Omega College School	Kampala
782	Our Lady Of Fatima Secondary School Nakulabye	Kampala
784	Our Lady Seat Of Wisdom Secondary School	Kampala
786	Pal And Lisa Sec School	Kampala
788	Pearl High School	Kampala
792	Praise / Integrated High Sch	Kampala
795	Premier High School	Kampala
796	Prida Academy Kampala	Kampala
800	Prince Secondary School Diana High School	Kampala
802	Progressive Secondary School Kitintale	Kampala
820	Rise & Shine High Sch	Kampala

822	Rock Hill Secondary School Luzira	Kampala
825	Royal College Makindye	Kampala
828	Rubaga Girls Secondary School	Kampala
883	St Augustine Secondary School	Kampala
892	St Catherine's College	Kampala
895	St Edward High School Lubaga	Kampala
900	St Florence Secondary School Namungona	Kampala
901	St Francis Secondary School Kawempe	Kampala
905	St George Hs Kabusu	Kampala
917	St JananLuwum Secondary School	Kampala
947	St Mary's High School	Kampala
968	St Robert Integrated High School	Kampala
994	St. Denis Secondary School Ggaba	Kampala
998	St. Henry's College -Gangu	Kampala
1035	St. Mbuga Vocational Secondary School	Kampala
1056	St.charles Lwanga Hs	Kampala
1060	St.joseph's Girls Senior Secondary School Nsambya	Kampala
1061	St.joseph's Sec School	Kampala
1063	St.luke Secondary School Mengo	Kampala
1077	Star Secondary School Busega	Kampala
1082	Stena Hill School	Kampala
1084	Strike High School Kawala	Kampala
1109	Uganda Martyrs High Schoolch	Kampala
1113	Uplands High School	Kampala
1114	Upper Prison Inmates' Secondary School	Kampala
1120	Vienna High School	Kampala
1134	Winston Standard Secondary School	Kampala
1138	Wordsworth Secondary School	Kampala
14	Alliance Secondary School Bukuya	Kasanda

50	Brain Hill	Kasanda
52	Brainhill High School	Kasanda
92	Bukuya Senior Secondary School	Kasanda
209	Forest Peas High School Kikandwa	Kasanda
262	Highway Secondary School Kiganda	Kasanda
324	Kakungube Secondary School	Kasanda
335	Kalwana Secondary School	Kasanda
367	Kassanda Senior Secondary School	Kasanda
409	Kiganda High School	Kasanda
491	Kyakatebe Grace Secondary School	Kasanda
570	Makonzi Boarding Secondary School	Kasanda
675	Myanzi Senior Secondary School	Kasanda
844	Seesa High School	Kasanda
972	St Theresa Sec School	Kasanda
988	St. Charles Lwanga Iwangiri Secondary School	Kasanda
1033	St. Matiamulumba's Senior Secondary School	Kasanda
1039	St. Mugaga Senior Secondary School Kiganda	Kasanda
1040	St. Oikuomenios Secondary School	Kasanda
7	Agape Ch School	Kayunga
31	Bbaale Secondary School	Kayunga
39	Bishop Brown Voc Sen Sch	Kayunga
53	Bridge Light College Sec Sch	Kayunga
76	Bugerere High School	Kayunga
101	Busaale Secondary School	Kayunga
102	Busaana Senior Secondary School	Kayunga
103	Busaana Central Secondary School	Kayunga
216	Galilaya Seed Secondary School	Kayunga
247	Green Valley High School	Kayunga
250	Greenvine College	Kayunga

274	Hope Christian High School	Kayunga
276	Hope Christian High School	Kayunga
281	Hopeful Future Secondary School	Kayunga
343	Kangulumira Islamic Academy	Kayunga
344	Kanjuki Secondary School	Kayunga
391	Kayunga Light College	Kayunga
431	Kingstone College School	Kayunga
449	Kisega High School	Kayunga
458	Kitatya Secondary School	Kayunga
468	Kitimbwa Bright Future Senior Secondary School	Kayunga
469	Kitimbwa High School	Kayunga
505	Lawala Vocational Secondary School	Kayunga
581	Marks' Oasis Secondary School	Kayunga
671	Muyallen High School	Kayunga
674	My Carmel Senior Secondary School	Kayunga
706	Nakyessa Senior Secondary School	Kayunga
710	Namagabi Secondary School	Kayunga
711	Namagabi High School	Kayunga
738	Nazigo Town Secondary School	Kayunga
740	Ndeeba Sen Secondary School	Kayunga
763	Nnalinya Irene Nature Senior Secondary School	Kayunga
785	Out Span Secondary School	Kayunga
849	Sekisinde Vocational High School	Kayunga
875	Ssuka Islamic Educ Centre	Kayunga
889	St Boniface Secondary School	Kayunga
922	St John's Apollo Senior Secondary School	Kayunga
1007	St. John's Secondary School Busaale	Kayunga
1047	St. PontianoNgondwe Senior Secondary School Kangulumira	Kayunga
1066	St.matia Mulumba Secondary School	Kayunga

1110	Uganda Martyrs Senior Secondary School	Kayunga
29	Bamusuta Secondary School Econdary School.	Kiboga
64	Bright Stars Sec Sch	Kiboga
88	Bukomero Secondary School Econdary School.	Kiboga
89	Bukomero College Al Islamia	Kiboga
112	Busuulwa Memorial Secondary School	Kiboga
260	High Standard Sec School Kateera	Kiboga
349	Kapeke Seed Secondary School	Kiboga
371	Kateera Trust Secondary School	Kiboga
403	Kiboga Light College	Kiboga
405	Kiboga Progressive Secondary School	Kiboga
550	Lwamata Central Secondary School	Kiboga
551	Lwamata Seed Secondary School	Kiboga
841	Saviour High School	Kiboga
939	St Lawrence Secondary School Muwanga	Kiboga
952	St Marys Secondary School Kiboga	Kiboga
957	St Paul's College	Kiboga
1087	Summit Secondary School Lwamata	Kiboga
1108	Uganda Martyrs High School Kiboga	Kiboga
33	Beatrice Secondary School - Kyankwanzi	Kyankwanzi
56	Bright Future Secondary School Watuba	Kyankwanzi
115	Butemba College School	Kyankwanzi
125	Buyimbazi Secondary School	Kyankwanzi
217	Gava Secondary School	Kyankwanzi
233	God's Marcy High School	Kyankwanzi
372	Katendagi International Christian Secondary School	Kyankwanzi
404	Kiboga Parents High School	Kyankwanzi
428	King's Secondary School	Kyankwanzi
474	Kiyombya Academy Secondary School	Kyankwanzi

623	Millenium High School	Kyankwanzi
624	Millenium High School	Kyankwanzi
653	Mt Zion High School	Kyankwanzi
729	Nankandula Senior Secondary School	Kyankwanzi
771	Ntwetwe Citizen Secondary School	Kyankwanzi
874	Ssingo Secondary School S	Kyankwanzi
920	St John The Baptist Ndibata	Kyankwanzi
1011	St. Joseph Secondary School Econdary School. Vvumba	Kyankwanzi
1016	St. Joseph S Kigando Secondary School	Kyankwanzi
1042	St. Paul C.o.u Secondary School Kascolo	Kyankwanzi
1085	Strive High School Misango	Kyankwanzi
1140	Yashaga College	Kyankwanzi
1141	YashagaaColleg	Kyankwanzi
145	Christ The King Secondary School Kalisizo	Kyotera
158	Community College Kalisizo	Kyotera
175	Divine Mercy Hs Kyotera	Kyotera
221	Gayaza Sec & Vocational Sch	Kyotera
230	Glorious Mixed Secondary School	Kyotera
272	Holy Family Nazareth Senior Secondary School	Kyotera
273	Homeland College Kyotera	Kyotera
288	Insula Christian High School	Kyotera
303	KabaleSanje Secondary School	Kyotera
311	Kabuwoko Senior Secondary School	Kyotera
321	Kakondo High School	Kyotera
330	Kalisizo Progressive Secondary School	Kyotera
331	Kalisizo Seed Secondary School	Kyotera
408	Kifampa Comprehensive Secondary School	Kyotera
417	Kikondo Secondary School	Kyotera
465	Kiteredde Secondary School	Kyotera

470	Kiweewa Foundation Dynamic Secondary School	Kyotera
490	Kyakago Secondary School	Kyotera
499	Kyotera Central Secondary School	Kyotera
500	Kyotera Parents	Kyotera
501	Kyotera Parents Secondary School	Kyotera
502	Kyotera Town School	Kyotera
597	MataleCou Senior Secondary School Rakai	Kyotera
758	Nile Citizens Secondary School Kalissizo	Kyotera
880	St Andrews Matale Secondary School	Kyotera
913	St James Secondary School Kyotera	Kyotera
919	St John Senior Secondary School Kabuwoko	Kyotera
958	St Peregrin Senior Secondary School Nakatoogo	Kyotera
969	St Sebastian Secondary School Bethlehem	Kyotera
985	St. Bernard's Secondary School Many	Kyotera
1002	St. Herman Secondary School Lwankoni	Kyotera
1003	St. James Secondary School	Kyotera
1004	St. John Secondary School Econdary School. Kabuwoko	Kyotera
1005	St. John Mary MuzeeyiBiganda Senior Secondary School	Kyotera
1017	St. Joseph Tech Sec	Kyotera
1030	St. Mary's Secondary School Secondary School Anje	Kyotera
1031	St. Mary's Mboye High School	Kyotera
1038	St. Monica High School Kabuoroko	Kyotera
1048	St. Raphael-kabira	Kyotera
1146	Zaake Secondary School -kariba	Kyotera
21	Atlanta High School	Luwero
34	Berbra Hill Senior Secondary School	Luwero
48	Bombo Senior Secondary School	Luwero
49	Bombo Army Secondary School	Luwero
66	Brilliant College Secondary School	Luwero

75	Bugema Adventist Sec School	Luwero
93	Bulamba Advanced Secondary School	Luwero
105	Buscisa Grammar Secondary School	Luwero
113	Butanza College	Luwero
127	Buzzibwera Senior Secondary School	Luwero
172	Destiny Christian High Sch	Luwero
180	Ebony College	Luwero
226	Giants College Luweero	Luwero
242	Goshen Vocational Sec Sch	Luwero
246	Green Valley High School	Luwero
270	Holy Cro Secondary School Secondary School	Luwero
292	Janan Secondary School Bombo	Luwero
323	Kakoole High School	Luwero
328	Kalasa College	Luwero
355	Kasana Secondary School	Luwero
358	Kasana Town Academy	Luwero
374	KatikamuSda Secondary School	Luwero
390	Kayindu S. S	Luwero
419	Kikyusa High School	Luwero
429	King's College Bamunanika	Luwero
480	Kkubo Secondary School	Luwero
484	Kong's Secondary School Bombo	Luwero
533	Luteete Senior Secondary School	Luwero
539	Luweero Senior Secondary School	Luwero
540	Luweero Seed Secondary School	Luwero
541	Luwero Brilliant High School	Luwero
542	Luwero Central Sec Sch	Luwero
543	Luwero High School	Luwero
544	Luwero Light Of Life Secondary School	Luwero

545	Luwero Noor Islamic	Luwero
546	Luwube Muslim Secondary School	Luwero
558	Mack High School	Luwero
606	Mazzi Vocational Senior Secondary School	Luwero
620	Midland High School Luwero	Luwero
645	Mpigi Secondary School	Luwero
699	Nakatonya Islamic Sec School	Luwero
707	Nalinya-lwantale Girls Secondary School	Luwero
708	Naluvule College	Luwero
715	Nambi Secondary And Vocational Skills	Luwero
741	Ndejje Senior Secondary School	Luwero
742	Ndejje Day Voc Sec School	Luwero
743	Ndejje High School	Luwero
753	New Life Secondary School	Luwero
755	Ngogololo View Secondary School	Luwero
815	Rhino Foundation Schools	Luwero
821	Ristaka High School	Luwero
847	Sekamuli C O U Secondary School	Luwero
852	Semu M. Muwanguzi Secondary School	Luwero
855	Shaky Senior Sec Sch	Luwero
856	Shammah High School	Luwero
857	ShanamaBombo High School	Luwero
860	Shine High Sch- Kangavve	Luwero
921	St John's Secondary School Kalere	Luwero
945	St Mary's College Ndejje	Luwero
948	St Mary's Namaliga	Luwero
979	St. Andrew Kaggwa's Senior Secondary School Kasaala	Luwero
992	St. Cyprian Chavanod College	Luwero
993	St. Daniel Comboni College Kasala	Luwero

1006	St. John S Nandere Secondary School	Luwero
1019	St. Kaloli Lwanga Mulajje	Luwero
1021	St. Kizito KatikamuKisule Secondary School	Luwero
1029	St. Mary S College	Luwero
1052	St.agnesVoc.ss	Luwero
1076	Standard High School Ndejje	Luwero
1088	Sure Land Academy	Luwero
1092	Target Community College	Luwero
1118	Victoria Model Secondary School	Luwero
1126	Wakatayi Secondary School	Luwero
1135	Wobulenzi College	Luwero
1136	Wobulenzi Progressive Senior Secondary School	Luwero
1137	Wobulenzi Town Academy	Luwero
23	B.k. Memorial Sec Sch	Lwengo
108	Busibo Secondary School	Lwengo
197	Excel College School	Lwengo
238	Good Samaritan High School	Lwengo
278	Hope Integrated Secondary School	Lwengo
313	Kaikolongo Seed Secondary School	Lwengo
434	Kinoni Integrated Secondary School	Lwengo
441	KirimyaVoc Secondary School Ndeeba	Lwengo
573	Malongo Baptist High School	Lwengo
605	Mayira High School	Lwengo
609	Mbirizi High School	Lwengo
640	Modern High School	Lwengo
641	Modern Sec School Mbirizi	Lwengo
698	Nakateete Secondary School	Lwengo
705	Nakyenye Senior Secondary School	Lwengo
739	Ndagwe Secondary School	Lwengo

803	Progressive High School	Lwengo
858	Shepard Collage School	Lwengo
870	Sseke Secondary School	Lwengo
882	St Anthony Secondary School Kyazanga	Lwengo
888	St Bernard's College Kiswera	Lwengo
896	St Edward Kingo Secondary School	Lwengo
902	St Francis Namabaale Vocational Secondary School	Lwengo
912	St James Secondary School Jjaga	Lwengo
916	St James Secondary And Vocational	Lwengo
934	St Jude Secondary School Masaka	Lwengo
991	St. Clement Secondary School Nkoni	Lwengo
995	St. Denis Makondo Secondary School	Lwengo
1001	St. Henry's School Kyengera	Lwengo
1015	St. Joseph Mary's Secondary School Mbiriizi	Lwengo
1065	St.mary's Senior Secondary School - Manja	Lwengo
1098	Timothy Girls High School	Lwengo
285	Ian College Lyantonde	Lyantonde
289	International Missionary Society Salaam Secondary School	Lyantonde
351	Kasagama Secondary School	Lyantonde
435	Kinuuka Secondary School	Lyantonde
487	Kyabuuza Muslim Secondary School	Lyantonde
555	Lyantonde Senior Secondary School	Lyantonde
823	Rockside High School	Lyantonde
829	Rwamabara Secondary School	Lyantonde
997	St. Gonzaga's Secondary School - Kijukizo	Lyantonde
1010	St. John's Kaliiro Comprehensive Secondary School	Lyantonde
20	Archbishop Kiwanuka Secondary School Kitovu	Masaka
46	Blessed Sacrament Secondary School - Kimaanya	Masaka
128	Bwala Secondary School	Masaka

138	Centenary High School Nyendo	Masaka
225	Ggulama Secondary School Nakatete	Masaka
244	Green Hill Sec School	Masaka
249	Greenhill Academy	Masaka
293	Jane Frances Secondary School	Masaka
298	John Hill Secondary School Ggulama	Masaka
319	Kako Senior Secondary School	Masaka
393	KeveniteVoc Senior Secondary School Katikamu	Masaka
413	Kikaalaala Bright Secondary School	Masaka
418	Kikungwe Secondary School	Masaka
439	Kirimya High School	Masaka
440	KirimyaVoc Secondary School	Masaka
464	Kitengesa Comprehensive	Masaka
503	Lakes High School	Masaka
507	Lia Christian Secondary School	Masaka
512	Lincoln College Masaka	Masaka
586	Masaka Secondary School	Masaka
587	Masaka Academy	Masaka
588	Masaka Citizen Secondary School	Masaka
589	Masaka Elgon Secondary School	Masaka
590	Masaka Exodus Vocational Senior Secondary School	Masaka
591	Masaka Islamic Senior Secondary School	Masaka
592	Masaka Parents Secondary School	Masaka
593	Masaka Town College	Masaka
602	Mawanda Girls Secondary School	Masaka
637	Mivule Secondary School	Masaka
736	Nativity Of Our Lady Secondary School	Masaka
737	Nazarene Voc High School Kamuzinda	Masaka
746	Nelson Mandela Secondary School Masaka	Masaka

765	Notre Dame H/ S	Masaka
772	Numasa Secondary School	Masaka
773	Nyendo Mixed Secondary School	Masaka
799	Prince Karma Memorial High School	Masaka
890	St Bruno Senior Secondary School Bbuuliro	Masaka
899	St Elizabeth Voc Sec	Masaka
908	St Gerald's Voc Sec School	Masaka
956	St Mugagga Vocational Secondary School Kkindu	Masaka
981	St. Anthony Secondary School kayunga	Masaka
986	St. Bruno Secondary School Serunkuma	Masaka
999	St. Henry's College Kitovu	Masaka
1027	St. Martin Vocational Secondary School Narozari	Masaka
1034	St. Maurice Lwaggulwe Senior Secondary School	Masaka
1037	St. Micheal Secondary School Butende	Masaka
1080	Stella Maris Secondary School	Masaka
1133	White Angels Secondary School Mikomago	Masaka
63	Bright Sec School	Mityana
81	Bujubi Senior Secondary School	Mityana
110	Busujju Secondary School	Mityana
164	Country View Secondary School -matte	Mityana
266	Hillside College Mityana	Mityana
316	Kakindu Parents Vocational Secondary School	Mityana
327	Kalangaalo Secondary School	Mityana
424	King Faisal Bbuye Islamic Secondary School	Mityana
445	Kiryokya Parents Secondary School	Mityana
446	Kiryokya Progressive Secondary School	Mityana
472	Kiyindi Islamic Institute	Mityana
506	Legacy Secondary School - Kiwawu	Mityana
579	Maranatha Sda Secondary School Mityana	Mityana

631	Mityana Secondary School	Mityana
632	Mityana College Kikumbi	Mityana
633	Mityana Model High School	Mityana
634	Mityana Modern Secondary School	Mityana
635	Mityana Standard S. S. Kagavu	Mityana
636	Mityana Trinity College	Mityana
677	Naama Secondary School	Mityana
703	Nakwaya Senior Secondary School	Mityana
727	Namutamba Secondary School	Mityana
790	Pioneer High School	Mityana
797	Pride Secondary School Mityana	Mityana
812	Real College Busunju	Mityana
848	Sekanyonyi Senior Secondary School	Mityana
873	Ssingo Secondary School	Mityana
877	St Francis As Busunju	Mityana
911	St Ireneaus Comm College	Mityana
936	St Kizito High School	Mityana
961	St Peter Secondary School Busuubizi	Mityana
977	St. AmbroziKyengeza	Mityana
996	St. Elizabeth Girls School	Mityana
1000	St. Henry's S. S. Misigi	Mityana
1008	St. John's Secondary School Buyambi	Mityana
1012	St. Joseph Secondary School Kakindu	Mityana
1014	St. Joseph Buganda Tuzukuke	Mityana
1041	St. Padre Pio Secondary School Busunju	Mityana
1050	St. Thereza S. S. Zigoti	Mityana
1068	St.peters Secondary School -kkande	Mityana
1090	Talents Secondary School	Mityana
1129	Wamala High School	Mityana

1148	Zigoti Secondary School S	Mityana
51	Brain Trust College	Mpigi
80	Bujjuko High School	Mpigi
94	Bulamu Seed Secondary School	Mpigi
100	Bunjako Island Vocational High School	Mpigi
117	Butoolo Sec School	Mpigi
119	Buwama High Sch	Mpigi
120	Buwama High School	Mpigi
124	Buyiga Seed Secondary School	Mpigi
135	Card. Nsubuga Senior Secondary School Kitakyusa	Mpigi
168	Crescent High School	Mpigi
173	Destiny Eagles Sec School	Mpigi
174	Destiny Sec School	Mpigi
177	Dynamic Secondary School Jessa	Mpigi
208	Fisher Branch Kalagala	Mpigi
211	Friends Academy Katende	Mpigi
224	Ggolo Mixed Senior Secondary School	Mpigi
280	Hope Senior School	Mpigi
296	Jjeza Central College	Mpigi
379	KawamiVoc Senior Secondary School	Mpigi
388	Kayabwe High School	Mpigi
406	Kibuka Memorial Senior Secondary School	Mpigi
416	Kikomeko Secondary School Kituntu	Mpigi
430	Kings College Bujuuko	Mpigi
494	Kyasanku Hill College	Mpigi
521	Lowell Girls School	Mpigi
531	Lumuza High School	Mpigi
538	Luwala Vocational Secondary School	Mpigi
556	M.s Green Valley Secondary School	Mpigi

629	Mitala Maria Hill School	Mpigi
630	Mitala Maria Progressive Secondary School	Mpigi
646	Mpigi Central	Mpigi
647	Mpigi High School	Mpigi
648	Mpigi Light College	Mpigi
649	Mpigi Mixed Secondary School	Mpigi
650	Mpigi Modern Secondary School	Mpigi
670	Muwenda Mixed Secondary School	Mpigi
798	Pride College Sch Mpigi	Mpigi
804	Queen Of Peace High School	Mpigi
810	Rawuzha High School	Mpigi
835	Sam's Park High School	Mpigi
885	St Benedict S. S	Mpigi
891	St Catherine Secondary School Bujuuko	Mpigi
903	St Francis Sec School Kankobe	Mpigi
909	St Henry Secondary School Kyagalanyi	Mpigi
923	St John's College	Mpigi
926	St Joseph Of Nazareth High School	Mpigi
930	St Joseph's Secondary School Kkonge	Mpigi
932	St Joseph's High School Nakirebe	Mpigi
933	St Jude Secondary School Katende	Mpigi
940	St Lawrence College Paris	Mpigi
941	St Lawrence Crown City	Mpigi
943	St Martin Secondary School Janya	Mpigi
955	St Mugagga Secondary School Jjalamba	Mpigi
971	St Theresa Secondary School Katende	Mpigi
983	St. Balikuddembe Secondary School	Mpigi
987	St. Bruno Secondary School Erunkuuma	Mpigi
1009	St. John's Secondary School Bujjo	Mpigi

1024	St. Maria Goretti Katende	Mpigi
1025	St. Mark Secondary School Kamengo	Mpigi
1028	St. Mary Senior Secondary School Nkozi	Mpigi
1046	St. Phillip Senior Secondary School Nabusanke	Mpigi
1064	St.mary's Secondary School Nsumba	Mpigi
1079	Star Senior School Jjeza	Mpigi
1097	The Mijja College Bulamu	Mpigi
1111	Uganda Matyrs Senior Secondary School	Mpigi
1124	Waggumbulizi Secondary School	Mpigi
26	Bagezza Seed Secondary School	Mubende
54	Bright Secondary School Kaweeri	Mubende
116	Butoloogo Seed Secondary School	Mubende
144	Christ The King Secondary School	Mubende
157	Collins Secondary School	Mubende
159	Comprehensive High School	Mubende
229	Global Senior Secondary School	Mubende
264	Hillside Secondary School	Mubende
267	Hilltop Secondary School Kibyamirizi	Mubende
283	Hosana High School	Mubende
305	Kabbo Seed Secondary School	Mubende
326	Kalamba Hill Secondary School	Mubende
350	Kasaana Modern Secondary School	Mubende
353	KasambyaParents Secondary School	Mubende
354	Kasambya Quran Secondary School	Mubende
364	Kasenya Secondary School	Mubende
410	Kigando Secondary School	Mubende
463	Kitenga Senior Secondary School	Mubende
475	Kiyuni Secondary School	Mubende
532	Lusiba Progressive Secondary School	Mubende

657	Mubende Army Secondary School	Mubende
658	Mubende High School	Mubende
659	Mubende Light Secondary School	Mubende
678	Nabingoola Public Secondary School	Mubende
831	Sacred Heart Seminary	Mubende
832	Sacred Heart Seminary Mubende	Mubende
861	Silversteps Sec School	Mubende
886	St Benedict Secondary School	Mubende
915	St James Katente	Mubende
974	St Zoe Secondary School	Mubende
978	St. Andrew Kaggwa Madudu Senior Secondary School	Mubende
1049	St. Suzan High School	Mubende
1112	Universal College Mubende	Mubende
6	Agalyawamu High School Kasawo	Mukono
8	Agape Christian Secondary School Mukono	Mukono
24	B.I.kMuwonge Secondary School Ntunda	Mukono
42	Bishop's Secondary School	Mukono
62	Bright Sec Sch Seeta	Mukono
87	Bukerere College School	Mukono
142	Central College Kabubira	Mukono
143	Central View High School	Mukono
176	Dyanamic Secondary School	Mukono
204	Fairland High School	Mukono
205	Fairmont High School	Mukono
206	Faith High School Sonde	Mukono
228	Global Muslim High School	Mukono
243	Green Acres College	Mukono
256	Helm Se	Mukono
269	Hilton High School	Mukono

306	Kabimbiri High School	Mukono
336	Kamda Community Academy	Mukono
356	Kasana Secondary School &Voc.school	Mukono
360	Kasawo Senior Secondary School	Mukono
361	Kasawo Islamic School	Mukono
386	Kawuku Secondary School	Mukono
451	Kisowera Secondary School School	Mukono
479	Kkome Seed Secondary School	Mukono
510	Light College Mukono	Mukono
535	Lutendo United Secondary School	Mukono
562	Makerere Advanced Secondary School	Mukono
582	Marta Orphanage Secondary School	Mukono
608	Mbalala Secondary School	Mukono
651	Mpoma Boys Secondary	Mukono
652	Mpoma School	Mukono
654	Mt. St. Mary's Namagunga	Mukono
656	Mubanda Secondary School	Mukono
662	Mukono Secondary School	Mukono
664	Mukono High School	Mukono
665	Mukono Hill Side College School	Mukono
682	Naddunga Secondary School	Mukono
690	Nakanyonyi Secondary School	Mukono
700	Nakijuma High School	Mukono
712	Namakwa Secondary School	Mukono
713	Namanve High School	Mukono
714	Namasumbi Moslem School	Mukono
717	Namilyango College	Mukono
720	Namirembe Standard Academy	Mukono
721	Namiryango High Sch	Mukono

722	Namiryango Sec School	Mukono
723	Namuganga Senior Secondary School	Mukono
744	Ndese Sen Sec Sch	Mukono
750	New Horizon Secondary & Vocation School	Mukono
752	New King David Sec Sch	Mukono
759	Nile High School	Mukono
780	Our Lady Of Africa Secondary School Namilyango	Mukono
781	Our Lady Of Africa Secondary School Mukono	Mukono
801	Progressive Secondary School Kabembe	Mukono
826	Royal College Namugongo	Mukono
843	Seat Of Wisdom Secondary School Kasawo	Mukono
845	Seeta College	Mukono
846	Seeta High Green Campus	Mukono
862	Simex Vocational Sec.school	Mukono
867	Springfield College	Mukono
881	St Anne Grace Secondary School	Mukono
884	St Balikuddembe Secondary School Kisoga	Mukono
893	St Charles College School	Mukono
910	St Henry High School Mukono	Mukono
931	St Joseph's College Namagunga	Mukono
949	St Mary's Orthodox Secondary School	Mukono
965	St Peters Secondary School Mixed	Mukono
1020	St. Kizito Secondary School - Nakibano	Mukono
1036	St. Michael High School Mukono	Mukono
1054	St.augustine Secondary School Nakifuma	Mukono
1069	St.stephen's Secondary School Mukono	Mukono
1091	Talents College Mukono	Mukono
1121	Vision High School	Mukono
1131	Wellstar Bright Senior Secondary School	Mukono

1142	Yefe High School	Mukono
44	Blessed High School Lubwama	Nakaseke
45	Blessed Hope Voc Secondary School	Nakaseke
146	Christ The Rock S. S.	Nakaseke
195	Erina Memorial Secondary School	Nakaseke
210	Fort Jesus High School	Nakaseke
332	Kaloke Christian High School	Nakaseke
348	Kapeeka Secondary School	Nakaseke
366	Kassaga Sec School (nakaseke 2000 Secondary School)	Nakaseke
370	KataleKammese Modern Secondary School	Nakaseke
412	Kijaguzo Secondary School	Nakaseke
436	Kinyogoga Seed Secondary School	Nakaseke
471	Kiwoko Secondary School	Nakaseke
607	Mazzoldi College	Nakaseke
691	Nakaseke International College	Nakaseke
692	Nakaseke Sec Sch	Nakaseke
748	New Hope Academy	Nakaseke
757	Ngoma Secondary School	Nakaseke
838	Sana High School	Nakaseke
853	Semuto Secondary School	Nakaseke
854	Semuto High School	Nakaseke
1075	Standard High School Kapeeka	Nakaseke
1099	Timuna Secondary School	Nakaseke
1128	Wakyato Seed Sec Sch	Nakaseke
36	Bethel Royal High School	Nakasongola
140	Central Secondary School Kakooge	Nakasongola
181	Ekitangaala Transformation High School	Nakasongola
322	Kakooge Senior Secondary School	Nakasongola
333	Kalongo Seed Sec.sch.	Nakasongola

444	Kirojo College Nakasongola	Nakasongola
447	Kisaalizi Secondary School	Nakasongola
450	Kisenyi Lake View Secondary School	Nakasongola
473	Kiyingi Memorial Sec Sch	Nakasongola
498	Kyoga Secondary School - Zengebe	Nakasongola
549	Lwabiyata Sec School	Nakasongola
552	Lwampanga Mixed Secondary School	Nakasongola
621	Midland Sec Sch Karonge	Nakasongola
622	MigyeraUweso Secondary School	Nakasongola
680	Nabiswera Progressive Secondary School	Nakasongola
694	Nakasongola Secondary School	Nakasongola
695	Nakasongola Army Secondary School	Nakasongola
696	Nakasongola Modern Secondary School	Nakasongola
697	Nakataka Parents Secondary School	Nakasongola
702	Nakitoma Secondary School	Nakasongola
962	St Peter's Secondary School Katuugo	Nakasongola
982	St. Anthony S. S Kakooge	Nakasongola
1018	St. Joseph's Voc High School	Nakasongola
47	Blessed Sacrament S. S. Kayabwe	Rakai
123	Buyamba Secondary School	Rakai
232	Glory Of Christ Sec School	Rakai
258	Heroes Voc Secondary School Buyamba	Rakai
315	Kakabagyo	Rakai
320	Kakoma Senior Secondary School	Rakai
394	Kibaale Senior Secondary School	Rakai
395	Kibaale Community Secondary School	Rakai
420	Kimuli Senior Secondary School	Rakai
476	Kiziba High School	Rakai
836	Samson Kalibala Kamya Secondary School	Rakai

837	Samson KalibbalaKamya Mem. Secondary School	Rakai
871	Sserinya Senior Secondary School	Rakai
878	St Aloysius Voc Secondary School Lwamagwa	Rakai
975	St. Adrian Kasozi Secondary School	Rakai
9	Agape Community Secondary School	Sembabule
69	Buda Islamic Secondary School	Sembabule
334	Kalububba High School	Sembabule
357	Kasana Sec School Ntete	Sembabule
375	KatweIntergrated Senior Secondary School	Sembabule
380	Kawanda Parents Secondary School	Sembabule
496	Kyeera Effective Secondary School	Sembabule
528	Lugusuulu High School	Sembabule
553	Lwebitakuli Bright Secondary School	Sembabule
554	Lwemiyaga Secondary School	Sembabule
559	Mainland High School	Sembabule
598	Mateete College School	Sembabule
599	Mateete Comp Seed Secondary School	Sembabule
603	Mawogola High School Bukukula	Sembabule
668	Muteesa li Royal College	Sembabule
730	Nankondo Bright Secondary School	Sembabule
770	Ntuusi Secondary School	Sembabule
851	Sembabule Cou Secondary School	Sembabule
924	St Johns College Lwemiyaga	Sembabule
938	St Kizito Voc Secondary School Mateete	Sembabule
980	St. Andrew's Mitete Secondary School	Sembabule
990	St. Charles Lwanga Lwebitakuli Secondary School	Sembabule
1043	St. Paul Citizen's High Sch Kalukungu	Sembabule
1101	Trenton White Memorial Secondary School	Sembabule
1105	Uganda Martyrs Secondary School Embabule	Sembabule

1106	Uganda Martyrs Secondary School Kikoma	Sembabule
4	Africana High School	Wakiso
10	Aggrey Memorial Secondary School	Wakiso
12	Airforce Secondary School	Wakiso
15	Alliance High School Nansana	Wakiso
18	Answer Muslim High School	Wakiso
22	Awegys Christian Comprehensive Secondary School	Wakiso
27	Bahati High School	Wakiso
28	Balibaseka Sec School	Wakiso
35	Bethany High School	Wakiso
43	Blasio Konde Mem Secondary School	Wakiso
55	Bright College Secondary School Nansana	Wakiso
57	Bright Future Vic Secondary School	Wakiso
58	Bright Future Academy	Wakiso
67	Brilliant High School	Wakiso
71	Buddo Secondary School	Wakiso
72	Buddo Christian Secondary School	Wakiso
74	Budo College	Wakiso
95	Bulenga Parents Secondary School	Wakiso
98	Buloba Secondary School	Wakiso
99	Buloba High School	Wakiso
109	Bussi Island Senior Secondary School	Wakiso
111	Busukuma College School	Wakiso
121	Buwambo Seed Secondary School	Wakiso
130	Bweyogerere High School	Wakiso
131	Bweyogerere Parents Secondary School	Wakiso
132	Bweyogerere Sec School	Wakiso
137	Caring Heart Secondary School	Wakiso
141	Central College School	Wakiso

150	Citizen High School-buloba	Wakiso
153	City Land College Matugga	Wakiso
156	Clive College Kireka	Wakiso
163	Cornerstone High School Nangabo	Wakiso
167	Creamland College	Wakiso
171	Day Spring High School	Wakiso
182	Emirates College School	Wakiso
185	Entebbe Senior Secondary School	Wakiso
186	Entebbe Adult Education Centre	Wakiso
187	Entebbe C Secondary School	Wakiso
188	Entebbe Comprehensive School	Wakiso
189	Entebbe Creamland School	Wakiso
190	Entebbe Girls Secondary School	Wakiso
191	Entebbe Kings Secondary School	Wakiso
192	Entebbe Lake View Secondary School	Wakiso
193	Entebbe Parents Secondary School	Wakiso
200	Excel High School Maganjo	Wakiso
201	Excel Millennium High School	Wakiso
213	Fulbright Sec School	Wakiso
215	Galaxy Sec School	Wakiso
218	Gayaza Cambridge College	Wakiso
219	Gayaza High School	Wakiso
220	Gayaza Islamic Sec School	Wakiso
231	Glory For Education Chs	Wakiso
234	God's Way High School	Wakiso
239	Good Samaritan High School	Wakiso
240	Good Shepherd High School	Wakiso
241	Good Will College School Mutundwe	Wakiso
245	Green Light High School Zana	Wakiso

251	Hana Mixed School	Wakiso
254	Happy Times Secondary School -masajja	Wakiso
255	Hawa Secondary School	Wakiso
259	High Field High School	Wakiso
268	Hilltop Academy Secondary School	Wakiso
286	Ibun Masood High School	Wakiso
287	Immaculate Heart Of Mary Secondary School	Wakiso
290	Irma Pfeiffer Bweya High	Wakiso
297	Jjungo Senior Secondary School	Wakiso
299	John Paul 2 Memorial College	Wakiso
300	Jovens High School Entebbe	Wakiso
301	Joy High School	Wakiso
302	K Garden Groove College	Wakiso
304	Kabanyolo High School	Wakiso
317	Kakiri Secondary School	Wakiso
318	Kakiri Secondary School	Wakiso
341	Kampala Islamic Secondary School	Wakiso
359	Kasanje High School	Wakiso
362	Kasenge Green Hill Secondary School	Wakiso
363	Kasengejje Senior Secondary School	Wakiso
369	Kasule High School	Wakiso
373	KatikamuSda secondary School gayaza Campus	Wakiso
382	Kawempe Royal College	Wakiso
383	Kawempe Secondary	Wakiso
385	Kawere Memorial High School	Wakiso
387	Kawuku Secondary School	Wakiso
392	Kazo Secondary School	Wakiso
411	Kigwoogwa Mixed High School	Wakiso
414	KikajjoSda High School	Wakiso

415	Kikaya College School	Wakiso
422	Kinawa High School	Wakiso
426	King S College Budo	Wakiso
433	Kingsway High School	Wakiso
437	Kira Secondary School	Wakiso
438	Kireka High School	Wakiso
442	Kirinya Church Of Uganda Secondary School	Wakiso
443	Kirinya High School	Wakiso
452	Kisozi High School	Wakiso
456	Kitala Sec School	Wakiso
462	Kitende Senior Secondary School	Wakiso
466	Kitetika High School	Wakiso
478	Kkan High School Bunamwaya	Wakiso
488	Kyadondo Secondary School	Wakiso
492	Kyaliwajala Secondary School	Wakiso
497	Kyengera Central College	Wakiso
511	Light Sec AndVoc Sch Bulenga	Wakiso
516	London College Of St. Lawrence	Wakiso
517	London College School(high)	Wakiso
523	Lubugumu Jamia High Schoolchool	Wakiso
527	Lugoba Muslim Voc Secondary School	Wakiso
529	Luigi Giussani High School	Wakiso
534	Lutembe Boarding School	Wakiso
547	Luyanzi College	Wakiso
560	Majorine College Mulawa	Wakiso
561	Makerere Secondary School	Wakiso
576	Mandela College School	Wakiso
583	Martin Luther King College	Wakiso
584	Maryland High School	Wakiso

585	Masajja Secondary School	Wakiso
595	Mashariki High School	Wakiso
596	Masooli Secondary School	Wakiso
600	Matugga College School	Wakiso
601	Matugga Sec School	Wakiso
604	May Christian College Nkumba	Wakiso
615	Mende-kalema Senior Secondary School	Wakiso
617	Merryland High School Katabi	Wakiso
618	Merryland High School Kigungu	Wakiso
626	Mirembe Islamic Senior Secondary School	Wakiso
628	Mita College Kawempe	Wakiso
638	Mk Crown Academy	Wakiso
639	Mmanze Senior Secondary School	Wakiso
642	Motherland Academy	Wakiso
643	Mount Of Olives College Kakiri	Wakiso
655	Mt.vernon School -maya	Wakiso
660	Mugongo Secondary School S	Wakiso
661	Mugwanya Summit College	Wakiso
663	Mukono Comprehensive Secondary School Bweyogerere	Wakiso
669	Muwanguzi High School	Wakiso
673	MwerwerweSec.sch	Wakiso
676	Naalya Secondary School Bweyogerere	Wakiso
681	Nabitato Secondary School	Wakiso
689	Najjera High School	Wakiso
704	Nakwero C O U Secondary School	Wakiso
716	Namboole High School	Wakiso
719	Namirembe Hillside	Wakiso
724	Namulonge Secondary School	Wakiso
731	Nansana Secondary School	Wakiso

732	Nansana St Joseph's Secondary School	Wakiso
733	Nanziga Parent's Secondary School	Wakiso
745	Ndiwulira Memorial College	Wakiso
749	New Hope High School	Wakiso
762	Nkoowe High School	Wakiso
766	Nsangi High School	Wakiso
767	Nsangi Sec Sc	Wakiso
779	Our Lady Consolata Kireka	Wakiso
783	Our Lady Of Good Counsel	Wakiso
787	Peace High School	Wakiso
789	Pere Grandmaison Memorial	Wakiso
793	Precious College Sch Kampala	Wakiso
794	Premier High School	Wakiso
805	Queens Sec School	Wakiso
807	Rafiki Secondary School	Wakiso
809	Ratiman Muslim High School	Wakiso
814	Revival Grammar School	Wakiso
816	Richmond College	Wakiso
817	Ridha Islamic High School	Wakiso
818	Rines Senior Secondary School	Wakiso
824	Royal College Analyst Gayaza	Wakiso
827	Royal Embassy High School	Wakiso
833	Salvation College Kajjansi	Wakiso
834	Sam Iga memorial College	Wakiso
839	Savannah Sec Sch	Wakiso
840	Savio College School	Wakiso
850	Selona Secondary School	Wakiso
864	Sos Hermann Gmeiner Secondary School	Wakiso
866	Spire High School Gayaza	Wakiso

868	Ssanga Sec School	Wakiso
869	Sseguku Hill College	Wakiso
898	St Elizabeth Senior Secondary School Nkoowe	Wakiso
906	St Gerald Millennium High School	Wakiso
907	St Gerald's College Wakisi	Wakiso
914	St James High School	Wakiso
918	St John High School -kazo	Wakiso
925	St Jonah High School	Wakiso
928	St Joseph's Secondary School Namugongo	Wakiso
935	St Julian High School	Wakiso
937	St Kizito High School Namugongo	Wakiso
942	St Lucia Hill School	Wakiso
944	St Mary's College Namugongo	Wakiso
951	St Mary's Secondary Sch Mutungo	Wakiso
953	St Mboga's College Naddaji	Wakiso
954	St Michael Int School	Wakiso
959	St Peter Secondary School Kajansi	Wakiso
960	St Peter College School	Wakiso
966	St Peters Bukalango Secondary School	Wakiso
967	St Pius Senior Secondary School Kiziba	Wakiso
970	St Theresa Secondary School	Wakiso
1032	St. Mary's Vocational Secondary School Kavumba	Wakiso
1044	St. Paul's Secondary School Lweza	Wakiso
1053	St.aloysius Secondary School Nabbingo	Wakiso
1055	St.catherine Sec School	Wakiso
1058	St.johns Secondary School	Wakiso
1059	St.johns Wakiso Secondary School	Wakiso
1062	St.lawrence Citizen High School	Wakiso
1070	St.thomas Aquinas Secondary School	Wakiso

1071	Stafford High School	Wakiso
1072	Standard Secondary School Bweyogerere	Wakiso
1073	Standard College Nsangi	Wakiso
1083	Stfrancis High School Namagoma	Wakiso
1086	Sumayya Girls H School	Wakiso
1089	Sure Public Secondary	Wakiso
1093	Temple High School	Wakiso
1094	The Academy St. Lawrence - Buddo	Wakiso
1100	Top Times High School Kengera	Wakiso
1103	Trinity College Nabbingo	Wakiso
1104	Uganda Martyrs' S. S Namugongo	Wakiso
1115	Victor Hill Secondary School	Wakiso
1122	Vision School Entebbe Buvvi	Wakiso
1127	Wakiso Senior Secondary School	Wakiso
1130	WampewoNtakke Senior Secondary School	Wakiso
1132	West Herts College	Wakiso
1139	World Ahead Matuga	Wakiso
1145	YounanBulamu Secondary School Gayaza	Wakiso
1147	Zana Mixed Secondary School	Wakiso

7.3.3 Dissertation Correction Compliance form (Post Viva Form)



**UGANDA CHRISTIAN
UNIVERSITY**

A Centre of Excellence in the Heart of Africa

**SCHOOL OF RESEARCH & POSTGRADUATE STUDIES
DISSERTATION CORRECTION COMPLIANCE FORM (POST VIVA FORM)**

Date: 10th September, 2023

Name of Candidate: Sengendo David

Reg.No: RM/17/P02/007

Title of Dissertation: Transformational Leadership and Academic Performance of Secondary Schools

S/ N	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	There are instances where the candidate seems to deviate and focus on the academic performance of the students rather than the schools.	Addressed by focusing on academic performance in schools as per the study topic	From Page XV (Abstract)- throughout the thesis
2	The current abstract is relatively okay. However, a better abstract would be one paragraph, one page! This one has several paragraphs. Why? The abstract also lacks the conclusion drawn from the study findings before making the recommendations! Therefore, the writing of the abstract should be tightened.	Adjusted on one page and paragraph, conclusion added	Page 1, preliminary page XV
3	First, the current Objective No.1 stated, "To investigate the extent to which transformational leadership attributes of head teachers influence the academic performance of secondary schools in Uganda", is not any different from the general objective stated as "The main objective of this research is to investigate the extent to which transformational leadership attributes of headteachers influence the academic	Main objective adjusted "to examine how a leadership style adopted by school headteachers influences academic performance of secondary schools in Uganda. Objectives edited to reflect UCE and UACE academic performance Conceptual frame edited to reflect the dependent variable in this study as "academic performance in UCE	Refer to page 12 - Page 12

	<p>performance of secondary schools in Uganda". This way of stating the specific research objective and general objective is not correct. If the candidate wants to conceptualize the study like that, then it is better to have only two objectives: Objectives No. 2 and 3! Second, the research objectives No. 2 and No. 3 stated as "(2) To examine the influence of transformational leadership attributes on the academic performance of public secondary schools in Uganda" and (3) "To examine the influence of transformational leadership attributes on the academic performance of private secondary schools in Uganda" are not in tandem with the conceptual framework presented in Figure 1.</p> <p>In the conceptual framework, the dependent variable in this study is "academic performance in UCE and UACE".</p>	and UACE"	Page 22
4	<p>The candidate's literature review is generally narrative. The candidate hardly attempted to critique the works of the scholars he reviewed. This review of the literature must be improved upon. The candidate should be more critical and analytical in the review of his literature</p>	Literature review revisited.	-Page 24
5	<p>The candidate has made some good effort to present his/her study results. However, these results are being presented on research objectives that are not well conceptualized. While these results could be useful, they must be realigned to address well-derived research</p>	Research objectives aligned with results	Page12 Page 59 -99

	objectives. Second, the candidate should also strengthen the interpretations of his study		
6.	Chapter Six: Conclusion and Recommendations - The conclusion drawn in this study is generally good. However, the statement of the recommendations needs to be further refined.	Recommendations refined	Refer to Page 113
7.	References and Appendices - The reference list needs some improvement. Some of the sources cited are incomplete, especially journals. Some of them lack volumes, editions and even page numbers.	References completed with missing information	Page 116-123

S/ N	COMMENTS BY INTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Table captions should appear above the associated table. Figure captions should appear below the associated figure.	Figure captions appear below the figure number (APA 7 th edition)	Page 22 Page 61-95
2	Consciously make references to Tables, Figures, Appendix etc where appropriate. There is no reference to some tables, appendix etc within in-test narratives; some examples Table 6 on page 57, no reference to Appendix 7 (refer to submitted examiner thesis edited soft copy)	Reference made for table 6 Plagiarism test reference it is a required appendix	Page 7 etc corrected
3	Work on presenting 'correctly matched information' For instance, some narratives such as for Appendix 1 do not match (see examples in Section 3.6, Page 39 and Section 3.7 Page 41)	Correctly matched appendix i replaced with appendix II	Page 41
4	The only part identified where candidate discusses findings in relation to other studies in literature that contradicts or are not in consistence with his findings is Section 5.2.3.1, Page 106. Similar narratives as presented at this specific section	Findings discussed and related to other studies	Refer to Pages 100-111

	(Section 5.2.3.1) can be adopted where relevant at other sections of this chapter to strengthen discussion of the findings.		
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S/ N	COMMENTS BY VIVA VOCE PANEL	ACTION TAKEN	INDICATOR
1	The theory that was invented in 1985 has been used by different people since then, you need to cite/quote them in your work. Need to read other theories relating to the study.	Other theories cited in the theoretical background, conceptual frame work, theoretical framework in Literature review e.t.c	Refer to Page 22, 24-28, 3-6
3	Writing style: you need to be clear on the writing style that you used. If it was APA you need to know the version.	Adopted the APA 7th Edition	Throughout the thesis
4	The general objective cannot come into specific objective, It needs to stand alone If the general objective come up in the specific objectives then the study remain with only two objectives	Main objective adjusted “to examine how a leadership style adopted by school headteachers influence academic performance of secondary schools in Uganda.	Refer to Page 12
5	The first objective influence leadership in UACE & UCE, need to rework the conceptual framework.	Objectives edited to reflect UCE and UACE academic performance	Refer to page 22
6	On the controlled variables, moderating variables and dependent variables, each arrow has a meaning need to understand them well All the variables are moderating according to the pointing of the arrows.	Conceptual framework revised accordingly	Refer to page 22
7	Need to be clear whether you like it to be Uganda or Central Uganda. Consistency is needed in the methodology	The study is in Uganda, schools in central region are representative of Secondary schools in Uganda	
8	The sampling is convenience not random.	Convenience sampling used to select 156 private and 156 public secondary schools	Refer to page 40
9	Objective 1. You do not have to	This has accordingly been addressed	Refer to

	present variables which were not f leadership attributes like school entry points, school fees etc		page 62
10	You have to defend the significance of the P value.	All P values defended	Pages 59-99
11	What was the real gap in the study?	Research gaps identified Chapter two	Page 2.4 page 34-35
12	Need to think through your work and reorganizes /realign it with objectives and do not repeat the general objective.	Objectives reviewed	Page 12
14	H ₀ 1 should not begin, it should be H ₁ which is non-direction. Need to revertIf the objectives are on influence then they should be and If they are on relationship they should be	All Hypotheses reviewed accordingly	Page 12 -13
15	How did you get 156 private and 156 government?	Convenient sampling	Page 40
16	Validity of research instruments need to cite study	Studies are cited in the main text	Page 41 - 42
17	Need to remove some statements from your work “due to financial constraints there was limited geographical scope” remove this from your work	Statement Deleted and limitations reviewed	Page 115
18	Need to show the limitations in the findings	Limitations are shown in chapter six of this thesis	Page 115

Candidate's Name: Sengendo David

Signature

Supervisor's Name: Dr. Wilson EduanSignature

NB: Post Viva compliance form is designed to capture all the corrections recommended by internal examiner (supervisor), external examiner and viva panel.