

**TEACHERS' PSYCHOLOGICAL WELL-BEING AND LEARNERS'
ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN
KIAMBU COUNTY, KENYA**

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY
DEGREE IN EDUCATION OF
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DECLARATION AND APPROVAL

DECLARATION AND APPROVAL

Declaration

This thesis/project is my original work and has never been presented for any academic award in any institution.

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Approval

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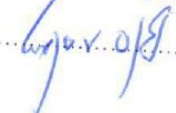
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DEDICATION

I dedicate this thesis to my family members, my children and parents. I wish you the best for the amazing moral presence during this work. God bless you mightily.



ACKNOWLEDGEMENT

First and foremost, I am grateful to God Almighty for giving me the ability to participate in this program. I would like to thank and acknowledge my supervisors, Drs. Anne Muiru and Benson Njoroge, for their appropriate direction, academic counsel, and support throughout my academic career. God bless you.



ABSTRACT

National students' performance at KCSE over the years has been dismal in Kiambu County. Despite the fact that most national schools are located in the county, and consistently achieve excellent KCSE results, the 2022 KCSE analysis reveals that more than 50% of the 261 secondary schools in the County posted a mean standard score of less than 3.0. The purpose of this study was to evaluate the influence of teachers' psychological well-being on the academic achievement of students in public secondary schools located in Kiambu County, Kenya. Recognizing self-esteem as a crucial factor, the research aimed to explore various aspects of teachers' well-being, including self-efficacy, quality of relationship, personal growth, autonomy, and sense of purpose. Guided by Carol Riff's theory of psychological well-being and Production function theory. The study used a mixed methodology approach, combining qualitative and quantitative methods. The study employed a concurrent triangulation research design with a target population of 116,333 individuals, including 227 principals, 2606 teachers, and 113,500 students across all 227 public secondary schools. The sample size consisted of 11,784 respondents, including 23 school principals, 261 teachers, and 11,500 students. Data collection utilized interview schedules for principals, questionnaires for teachers, and observation guides for students, supplemented by document analysis. Piloting of instruments occurred in three schools not included in the main study, ensuring validity and reliability. Face and content validity were confirmed by experts from Mount Kenya University, while reliability was assessed using the test-retest method. Descriptive statistics such as frequencies, percentages, means, and standard deviations were employed, with results presented using tables and figures. Inferential statistics included correlation and multiple regression analyses. Qualitative data underwent thematic analysis and was presented narratively. The study revealed that 71.2% of the variation in learners' academic achievement could be attributed to teachers' level of self-efficacy, indicating a significant influence (p -value = 0.635). This finding underscores the importance of teachers' self-efficacy in shaping students' academic outcomes in public secondary schools. The study revealed several significant findings regarding the relationship between teachers' psychological factors and students' academic achievement in public secondary schools in Kiambu County, Kenya. Firstly, it demonstrated that changes in teachers' self-efficacy positively affect students' academic performance. Moreover, a strong association was found between teachers' quality of relationships with others and students' academic achievement, with about 70.3% of the variation in achievement attributed to this factor. Furthermore, the study highlighted a positive correlation between teachers' personal growth and students' academic achievement, with 73.8% of the variation in achievement linked to this aspect. Additionally, teachers' level of autonomy was found to significantly impact students' academic outcomes, with about 72.2% of the variation attributed to this factor. Moreover, teachers' sense of purpose in life also positively influenced students' academic achievement. Overall, the study recommends strengthening guidance and counseling units tailored for teachers to promote their psychological well-being, consequently enhancing students' learning outcomes. This emphasizes the importance of supporting teachers' mental health and overall well-being to optimize educational outcomes in public secondary schools.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA	:	Analysis of Variance
KCSE	:	Kenya Certificate of Secondary Education
MOEST	:	Ministry of Education, Science and Technology
NACOSTI	:	National Commission for Science Technology and Innovation
NCES	:	National Centre for Education Statistics
SPSS	:	Statistical Packages for Social Sciences
TSC	:	Teachers Service Commission
UNICEF	:	United Nations Children’s Fund
USA	:	United States of America
VSO	:	Voluntary Service Officers
WHO	:	World Health Organization
SPWB	;	Scales of Psychological Well-being.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Today, academic achievement is often viewed as an individual's behavior limited to the early stages of life. Despite this fact, the academic outcome of individuals shows that it outplays most stages of life eventuality. At a student level, academic achievements predict short-term behaviors, including dropping out of school. In most cases, they also determine occupational trajectories all the way into adulthood (Crosnoe, 2002b). Academic challenges among students can give rise to disparities and undermine the overall mission of schools (Karlsson, McPherson & Pampallis, 2020). From a wider perspective, widespread academic failure has shown negative effects on fertility and mortality rates, marriage behaviors and employment levels through its connection to human capital development (Mirowsky & Ross, 2003b). Thus, while academic achievement may initially appear as a factor limited to individuals of school-going age, its effects extend across various social phenomena.

A society without effective teachers bears non-thinkers. Teachers teach as well as shape the younger generations' minds and also make them ready to be citizens who give a contribution to their own communities and the world in general. Nelson (2007) expounded that what is brought to classroom by a teacher governs quality of educational experiences of their learners. Schools are contracting institutions that are functional and as a result packages knowledge and skills to a group of those learning homogenously. There are different communities having a big range of capital that is physical like constructions, stationery as well as other resources. Recent research, as evidenced by studies conducted by Blum and Libbey in 2004 and Plagens in 2011, highlights the significant impact of social capital on the quality of the learning environment and, more

specifically, on student achievement. Social capital, defined in this context as the expectations and interactions that foster encouragement, respect, trust, value, and unity among individuals, plays a crucial role in shaping the conditions conducive to effective learning and academic success for students.

Many research globally discovered that those teaching are more exposed to mental disorders as well as stress that is related to work in comparison to other people that have other jobs (Eaton *et al.*, 1990; Stansfeld *et al.*, 2011; Johnson *et al.*, 2005; Wieclaw *et al.*, 2005). The majority of reported research focuses on the fit or misfit between the resources of the individual and the demands of the environment put on the teacher (Dalgard *et al.*, 2007; Fejgin *et al.*, 2015).

Health figures from the executive for safety, studied from 2003 with consistent display of professionals in teaching have shown a prevalence of self-reported stress that is high, distress as well as anxiety brought about or made bad by work. Prevalence in Great Britain - averaged over 2009–2012 – that is most recent was 2.3% in comparison with 1.2% for all jobs (Health and Safety Executive, 2014). In comparison to this, there is always a silent direct concern of this situation for the learners' achievement.

According to Diener (2010), there is a scarcity of studies on psychological and subjective well-being factors in the teaching environment. This is despite the acknowledgment that psychological and subjective well-being elements in other studies have been reported to have an impact on psychological well-being (Abbott *et al.*, 2006). For instance, Abbott reported a positive relationship between psychological well-being and mental health. Additionally, according to Ryff (2009a, 2009b), psychological well-being has been shown to alleviate symptoms of burnout among mental health professionals during psychotherapy, as demonstrated by Rabin *et al.* (2011).

In South Africa, the replenishing rate of teachers is lower than their attrition rate (Musundire & Mumanyi, 2020). The morale of South African teachers is reported to be low, as shown by De Beer (2004). Steyn, Wolhuter, and De Waal (2004) discovered that, on average, 1.7% of teachers in predominantly white schools constitute 15.5% (increasing up to 25.5% in some cases) of those teaching in historically black schools, which may not be present on any given day (Hamlyn, 2009).

All studies found in this context do not report on Ryff's psychological or Diener's (2010) subjective well-being factors, which could be protective in teachers' psychological well-being in the Eastern Cape Province of South Africa. Few studies that do report on protective psychological well-being factors align with the interests of the present study.

The multidimensional constructs identified by Ryff (2009a, 2009b) are related to psychological well-being, while subjective constructs chosen in the current study include life satisfaction, positive and negative affect, as implied by Diener (2010).

The most pervasive factor affecting psychological well-being among teachers is job demands (Haberman, 2015). Kyriacou (2011) supports this, asserting that teachers' psychological well-being in the workplace is primarily influenced by elements related to the school environment. Global academic studies by Motseke (2008) and Olivier and Venter (2013) link psychological well-being in occupational terms to different settings. Motseke (2008) identified that, among those teaching in township schools in the Free State, social, emotional, and psychological factors, along with environmental factors, significantly contribute to teachers' emotional well-being. In the George area, Western Cape, South Africa, Olivier and Venter (2013) discovered that 20% of teachers faced psychological well-being challenges related to learner discipline, motivation, time constraints, and large class sizes.

Additionally, it appears from Motseke (2008) and Olivier & Venter (2013) that the manifestation of patterns of psychological well-being may differ among teachers in different areas of South Africa (Beers, 2012). According to Jackson et al. (2006), there is evidence that levels of psychological well-being reported by teachers are highly related to their work circumstances.

Other studies support the links between the well-being of teachers and student outcomes. For instance, a significant study involving 182 secondary schools and 246 primary schools in the UK, with 24,100 staff (Briner & Dewberry, 2007), identified key factors such as feeling cared for, feeling valued, experiencing job overload, and deriving stimulation and enjoyment from their work. The research underscores the importance of various factors at the classroom level, alongside the presence of qualified instructors, suitable teaching resources, sufficient physical infrastructure, and a well-defined learning curriculum. Among these factors are the individual characteristics of teachers, the demographic composition of students in the classroom, the alignment of the curriculum with school priorities, and the effectiveness of leadership within the educational institution. The study suggests that within the dynamic social context of the classroom, these elements can either promote or hinder educational outcomes. As Dewberry noted in 2007, the interplay of forces within the social tension system can significantly influence the achievement of desired outcomes.

In recent years, there has been a notable surge in research focusing on understanding the factors influencing teacher well-being. However, much of this research tends to adopt a theoretical approach that primarily seeks to identify the factors contributing to teachers' well-being. While correlational analyses are commonly utilized in these studies, there appears to be a comparative dearth in the exploration of how well-being might impact other outcomes. As such, there is a need for more comprehensive studies to uncover the

various ways in which teachers' well-being influences not only their individual experiences but also student outcomes and broader educational contexts.

Studies by Katebi et al. (2022) and Carolan et al. (2017) highlight the importance of well-being beyond employee retention and personal psychological advantages. But even with these results, there is still a lot we don't know about the precise impacts of teacher well-being. To fully understand the intricate relationship between classroom dynamics, student achievement, and teacher well-being, more research is necessary. Researchers who delve deeper into this field can offer insightful information that helps shape educational practices and policies meant to create a welcoming and comfortable learning environment for instructors and students.

While early researchers, such as McCallum and Price in 2010, acknowledged that teacher well-being might influence teaching behavior and workplace relationships, a thorough examination of the full range of potential effects has not been systematically undertaken. Despite initial recognition of its importance, the extent to which well-being impacts various aspects of teaching and the broader educational context remains largely unexplored. Therefore, there is a clear need for more comprehensive studies that systematically investigate the multifaceted effects of teacher well-being. Such research could provide valuable insights into how well-being influences teaching practices, classroom dynamics, and overall educational outcomes, ultimately contributing to the development of more effective strategies for supporting teacher well-being and enhancing the quality of education.

The Kenyan system of learning is heavily reliant on examination results, with education policy often assessed based on students' performance in national examinations (Eshiwani, 2013). The focus on factors influencing students' examination achievement has predominantly centered on subject matter, neglecting other crucial aspects.

Evidence from various studies consistently supports the widely held view that positive relationships exist between the well-being of educators, their teaching effectiveness, and students' learning outcomes (Day et al., 2006). Barker and Martin (2009) argue that individuals trained to teach and who are happy can provide effective education. It is ethically untenable to accept a situation where teachers, responsible for training others, are not happy themselves. Therefore, the research argues that the pursuit of happiness should be a fundamental goal for those involved in teacher training.

Moskowitz and Dewaele (2021) discuss how a teacher's happiness can impact the classroom climate and, consequently, students. Additionally, numerous studies have established a connection between a teacher's psychological well-being and students' academic achievement. It is evident that psychologically dissatisfied teachers are likely to perform poorly compared to their motivated counterparts. Hanushek's (2009) review of one hundred and forty research studies found that only 30% of the studies on teachers' psychological well-being were correlated with learners' outcomes. As a result, this study particularly investigates how teachers' psychological health affects students' academic performance in Kiambu County's public secondary schools.

1.2 Statement of the Problem

National students' performance at KCSE over the years has been dismal. For instance, in the year 2022, the overall national mean standard score (MSS) of KCSE was 4.458 (D+) (MOE, 2023). In the recently released KCSE results 47 thousand students scored E , while a paltry 1,400 scored grade A plain countrywide,(MOE 2024). The situation is no better in Kiambu County. The 2022 KCSE analysis shows that over 50% of the 261 secondary schools in Kiambu County had a mean standard score of less than 3.0, even

though the majority of national schools are situated in the County and routinely receive excellent KCSE results (Kiambu County Education Office, 2021).

Many efforts and strategies, including the provision of adequate instructional resources, employing well-trained teachers, and capacity building for teachers, among others, have been implemented (MOE, 2017). However, low students' performance at KCSE still persists. The relationship between teachers' psychological health and students' academic success has not been investigated, despite Kenya's government's strong commitment to offering all citizens, regardless of level, high-quality education. The primary goal of the current study is to evaluate teachers' psychological well-being and its influence on students' academic achievement in public secondary schools in Kiambu County, Kenya. This topic has been neglected in the reviewed literature.

1.3 Purpose of the Study

The purpose of this study was to evaluate the impact of teachers' psychological well-being on the academic achievement of students in public secondary schools located in Kiambu County, Kenya.

1.4 Research Objectives

The following objectives guided the study;

- i. To assess how teachers' level of self-efficacy affects the academic achievement of students in public secondary schools in Kiambu County, Kenya.
- ii. To examine how teachers' quality of relationships with others impacts the academic achievement of students in public secondary schools in Kiambu County, Kenya.
- iii. To investigate the correlation between teachers' personal growth and the academic achievement of students in public secondary schools in Kiambu County, Kenya.

- iv. To evaluate the impact of teachers' autonomy on the academic achievement of students in public secondary schools in Kiambu County, Kenya.
- v. To explore how teachers' sense of purpose in life influences the academic achievement of students in public secondary schools in Kiambu County, Kenya.

1.5 Research Questions

The research questions for the study were as follows;

- i. In what manner does the level of self-efficacy among teachers impact the academic achievement of students attending public secondary schools in Kiambu County, Kenya?
- ii. How does the quality of relationships between teachers and others influence the academic achievement of students in public secondary schools located in Kiambu County, Kenya?
- iii. What is the influence of teachers' personal growth on the academic achievement of students attending public secondary schools in Kiambu County, Kenya?
- iv. To what degree does teachers' autonomy affect the academic achievement of students in public secondary schools situated in Kiambu County, Kenya?
- v. How does the sense of purpose in life among teachers affect the academic achievement of students enrolled in public secondary schools within Kiambu County, Kenya?

1.6 Justification of the Study

The Kenyan government has made human capital investments development to be specific in education as main strong hold in overall strategies of economic recovery a priority. Therefore, the Kenyan government has placed strict interest in giving high quality

education to every citizen. Poor examination results in spelling opportunities loss in participating in society. Therefore, this study looked into how instructors' psychological health affected children' academic performance in Kiambu County, Kenya.

1.7 Significance of the Study

The findings from this study hold potential significance for the development and improvement of educational policies, as well as the enhancement of existing ones. The results are expected to offer valuable insights that can benefit schools within Kiambu County, as well as various stakeholders involved in school management, including the Ministry of Education (MOE) and the Teacher's Service Commission (TSC). Specifically, the study focuses on issues related to staff management skills that could lead to improved outcomes for students in public secondary schools. By examining the psychological well-being of teachers and its impact on student academic achievement, the study aims to shed light on the relationship between these factors and their effects. The findings of the study are also crucial for providing additional insights to teachers on how to enhance their psychological well-being and the significance of utilizing guidance and counseling services to address these issues. This, in turn, is expected to positively impact on the academic achievement of students in public high schools. Additionally, the study highlights the importance of school managers in promoting teachers' autonomy in achieving their objectives and fostering positive student outcomes. By recognizing the pivotal role of school managers in supporting teachers and facilitating their autonomy, schools can create an environment conducive to improving student academic performance.

1.8 Scope of the Study

The purpose of the study was to investigate how the psychological health of teachers affected the academic performance of pupils in public secondary schools in Kiambu

County, Kenya. The study concentrated on five main ideas, drawing on Ryff's Theory and production theory: teachers' sense of purpose, autonomy, personal development, relationship quality, and degree of self-efficacy. The study, which was carried out from February to August 2022, used a hybrid research strategy, combining quantitative and qualitative techniques to give a thorough grasp of the subject.

1.9 Limitations of the Study

Limitations are elements affecting researchers negatively but for which he has no control over them. These factors pose shortcomings and conditions on the methodology and conclusion. The researcher may face the following restrictions.

- 1) Some administrators were not willing to disclose information about their teachers' well-being for fear of vindication. Therefore, the researcher assured them of anonymity and confidentiality.
- 2) Some teachers were not willingly sharing their psychological problems for fear of victimization. Therefore, the researcher assured them by coding the information. The research took place in high schools that are public in Kiambu County also factors of intensity may be different from one school to another hence conclusion was made with caution.
- 3) There were differences in diversity among those teaching because of experience, gender as well as professional qualifications. Teachers with more qualifications and of male gender could handle challenges well compared to counterparts, thus generalization of the findings in every school were considered based on these possible differences. This was handled by ensuring that all teacher demographics are considered and specifically by disregarding experience, age and gender.
- 4) Error due to inaccuracy of instruments and of data scoring was minimized by increasing the reliability to a coefficient of 0.74 to improve consistency level.

1.10 Delimitations

The researcher's choice that expounds the study boundaries set is referred to as Delimitations.

The delimitations of the study were;

- 1) For three months, this research study was conducted at public secondary schools in Kiambu County, Kenya.
- 2) The study's only focus was on how instructors' psychological health affected students' academic performance in public secondary schools in Kiambu County, Kenya. Trainers' self-efficacy, instructors' personal development, their quality of relationships with colleagues, their sense of autonomy, and their sense of life's purpose are among the factors that were taken into account.
- 3) Due to the study's scope, only instructors and students from Kiambu County, Kenya's public secondary schools participated.

1.11 Assumption of the Study

Assumptions of the study was considered as the respondents would be conversant and competent enough to respond to research questions. Also, the respondents would cooperate in giving the required information during the collection of data processes to enable the study to be successful. Secondly, the study assumed that there are varied psychological wellbeing of the teachers in public secondary schools in Kiambu county.

1.12 Operational Definition of Terms

- Autonomy** : Freedom that is self-directing and to be specific moral independence
- Personal growth** : The state of mind that has awareness of identity with a sense that we can influence our own aspirations and dreams and of others.
- Learners' Achievement** : Learners' successful performance shows how good or bad one has attained the goals of an educational programme. In this study, Achievement is shown via KCSE results after a period of four years referred to as summative assessment.
- Psychological well-being** : The capacity to adapt complicated situations to one's own wants and ideals in a way that pertains to the classroom and other members
- Quality of Relationship** : It is what measures relationship strength of a teacher and a student. For instance, the relationship between the teacher and the students can be observed through the classroom interaction
- Self-efficacy** :The state of being accepted or acceptable precisely self-worth. For instance, an individual way of appreciating what he/she does in the line of profession.
- Sense of Purpose** : The motivation that drives you toward a satisfying future or contentment. It also helps professionals, i.e., teachers, to get the most from the things they do and achieve.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This literature review sought to explain the impact of teachers' autonomy, sense of purpose, personal development, quality of relationships, and degree of self-efficacy on students' academic performance in public secondary schools. The chapter's goal is to present and evaluate a range of research and theories that address concerns related to academic success and teachers' psychological well-being. As a result, the research gaps that guided the current study were drawn.

2.1 Empirical Literature

The chapter gives different research studies carried out in the country and out of the country on the study related areas. Organization of such presentations is based mostly on the specific objectives of the current study.

2.1.1 Concept of Psychological Well-being

Teachers play a crucial role in the teaching process, where their psychological well-being and occupational self-efficacy significantly impact the efficiency of their teaching methods, ultimately influencing learners' outcomes. Ryff (1989a, 1989b) defines psychological well-being as a multidimensional construct with diverse social, psychological, and physiological characteristics that may relate to and influence one another. The dimensions include self-efficacy, autonomy, personal growth, a sense of purpose in life, and teachers' relations with others. 'Growth in the profession' is related to openness to new experiences and possessing continuous abilities for personal

expansion and development, while 'autonomy' denotes a sense of self-determination, freedom, and independence from norms.

Deci & Ryan (2008) state that well-being is the perception of a contented state of being happy. It is also defined as a state that can be sustained and permits individuals, groups, or nations to emerge and develop (Deci & Ryan, 2008). Cloninger (2008) offers another perspective, asserting that well-being involves not only positive emotions but also mature personal characteristics, such as cooperation, self-direction, life satisfaction, and self-transcendence. Furthermore, it is supposed to encompass character virtues and strengths, such as hope, courage, and compassion. Cloninger adds that well-being characteristics reduce if they are not internalized, experienced spontaneously, and self-awareness is crucial to authentic well-being.

Winefield et al. (2012) assert that psychological well-being is construed as a positive affective state, such as being happy, and optimal effective functioning in personal and social life. Psychological well-being is seen as an outcome of a lifetime development of perspectives of the mind that determine various challenges faced in the life cycle. The psychological health of an individual has a relationship with positive functioning in every aspect of life, and for individuals to be psychologically happy, they should set goals and at least have meaning in life.

A deeper analysis of psychological well-being includes an individual's relationship with life goals, the quality of relationships with others, how the individual feels about themselves, and their attitude towards life, all of which contribute to personal development and the ability to make decisions (Christopher, 2016). Falkman, Cheney, Collette, Boccellare, and Cooke (2016) discovered that discovering positive meaning yields notable therapeutic benefits, including recovery from depression and enhancements in health and overall well-being. Meanwhile, Laine (2009) investigated

the impact of stress on the well-being of vocational teachers in Georgia's southeastern state. The findings revealed that stress exerts a detrimental influence on both teaching performance and the physical and emotional well-being of both students and teachers.

In the 21st century, teachers frequently encounter stressful circumstances that can impact their well-being in the workplace. The education sector grapples with numerous conflicts and unresolved issues, contributing to ongoing challenges. Job satisfaction and workload are prominent topics of concern among both industrial workers and educators. Presently, many teachers express dissatisfaction and discontent with their jobs (Elizur & Shyc, 2011). As per Kamarudin (2007), dissatisfaction arises when an individual's needs are not met. An unhealthy work environment not only diminishes employee motivation but also impacts satisfaction, social relationships, performance, and health. Therefore, several factors must be considered, including the provision of a conducive work environment that addresses teachers' well-being needs at school, as well as the role of school leaders in effectively managing the work environment and promoting teachers' well-being.

The psychological well-being theory posits that an individual's psychological health is related to positive functioning in every aspect of life. Moreover, according to this theory, individuals need to set goals and find meaning in life, fostering positive relationships with others. A more extensive analysis of psychological well-being suggests that an individual's relationship with life goals, the quality of relationships with others, self-perception, personal development, and decision-making ability all play vital roles (Christopher, 2016).

2.1.2 Concept of Learner Achievement

The concept of achievement in education is closely tied to the idea of effective schools, which prioritize excellence and effectiveness in curriculum delivery (Johnson, 2016). Viewing a school as an organization with specific objectives necessitates evaluating learners based on their attainment of academic goals, such as literacy and numeracy, alongside other general educational objectives. Accordingly, the study utilizes rank orders to showcase the performance levels of learners, employing a hypothetical scale chosen for rating achievement. The effective school movement has outlined five criteria to elucidate the concept of effective schooling. These criteria include consistent high achievement across a broad curriculum for at least two consecutive years, cohorts of learners consistently demonstrating high achievement, the development being characteristic of the entire school rather than specific grades, and achievement accounting for the socio-economic background of the student population (Hopkins, 2011).

The criteria for an effective school proposed by the above-mentioned study outline indicators of achievement, which are further categorized in the current subsequent study. Internal achievement indicators include metrics such as the average length of study, examination success rates, student illustrations, teaching effectiveness, and student learning outcomes. Operational indicators encompass factors like class size, staff-student ratio, student workload, space utilization, and resource allocation for assets and equipment (Weinsten, 2012). External achievement indicators encompass the acceptability of graduates and staff productivity metrics such as publications and qualifications.

The teacher appraisal component plays a pivotal role in enhancing teacher achievement, as it encourages educators to seek out better practices that could lead to improved professional competence for promotion and overall academic enhancement for both the school and its students.

Enhancing learning outcomes is closely connected to teacher appraisal, which serves as a professional accountability method that fosters new understandings about the learning process (Vaillant, 2015). Values related to learning, such as acceptance, support, and recognition of these aforementioned qualities, necessitate appropriate in-service support for all teachers. School achievement could be enhanced through the adoption of a didactic approach, where teachers focus on facilitating learning rather than solely instructing, allowing students to take greater ownership of their learning process (Carr & Burnham, 2007).

In light of this, it is crucial to assess teachers' training needs, outline essential and potential skills, and allocate resources to enhance students' time management skills. Schools must focus on improving students' personal time management, identifying time constraints, addressing issues such as inadequate time for routine assessments and an overloaded curriculum, and resolving problems arising from insufficient training, poorly managed Continuous Assessment Tests (C.A.Ts), student absenteeism, and insufficient time for lesson/study preparation by school administrators. This approach necessitates strategic planning, the identification of strategies to enhance underperforming schools in challenging circumstances, an understanding of the school's context, and the implementation of appropriate interventions to support improvement processes (Chapman, 2013).

Schools facing such challenges would benefit from resource-based interventions, which could include educational grants, subsidies from the Subsidized Day Secondary School Fund, and funding from the Constituency Development Fund. The concept of academic achievement is akin to the broader notion of achievement, referring to the specific attainment of goals, such as successful program/curriculum or course completion, as ascertained by summative evaluation results. The KCSE is a summative evaluation reflecting the achievement or attainment level of learners, showing how well or poorly they have met program objectives after four years of high school. Researchers like Wright (2011), Barasa (2013), and Nyagah (2007), citing Eshiwani (1983), have identified variables influencing learners' achievement in various subjects in school.

Additional variables that influence academic achievement, as cited by the same researchers, include characteristics of the learners, such as their previous school experiences (Barasa, 2013), attitudes towards specific subjects, and sometimes gender (Nyagah, 2007). Alongside teachers' attributes, such as qualifications, attitude, and professional commitment, the experience of teachers also significantly impacts learners' achievement. In this context, learners' characteristics are considered to internally influence a school's effectiveness in preparing students for the Kenya Certificate of Secondary Education (KCSE) examination.

The quality of procedures like class size, textbook-to-student ratio, school administration, library services, laboratory facilities, teacher-student ratio, and frequent in-service training for teachers are some of the additional factors that influence achievement and are related to the level of education and resources available. The two main evaluation types used in educational institutions around the world are formative (occurring during teaching and learning) and summative (Wright, 2011).

2.1.3 Teachers well-being.

In their thorough analysis of forty years of research on teacher self-efficacy (TSE), Zee and Komen (2016) focused on how TSE affects classroom procedures, students' academic adjustment, and teachers' psychological health. Using a criteria-based review approach, they chose 165 relevant articles for in-depth examination as part of their research methodology. By using this method, they were able to offer a comprehensive analysis of the body of research on teacher self-efficacy and its various effects in learning environments.

The findings from Zee and Komen's (2016) study demonstrate a positive correlation between TSE and multiple variables within the academic environment. It's fascinating how the quality of interactions between teachers and students can influence academic adjustment and even the effectiveness of classroom instruction. Building strong teacher-student relationships is crucial for creating a positive learning environment where students can thrive.

According to the research data collected on teacher self-efficacy levels and student outcomes in different learning settings, it is apparent that highly efficacious teachers contribute significantly to creating effective teaching-learning processes resulting in better academic results among their pupils. Moreover, it was found that TSE had a clear correlation with educators' emotional health in respects like personal accomplishment, happiness at their job, and dedication. This further underscore the critical role of teacher wellness in the broader educational ecosystem.

Conversely, Zee and Komen (2016) identified negative associations between TSE and factors contributing to teacher burnout. This finding underscores the importance of

nurturing TSE as a preventative measure against professional exhaustion, which could detrimentally impact teachers' mental health and students' academic achievements.

Interestingly, the study highlighted the indirect effects between TSE and academic adjustment and psychological well-being. Specifically, TSE appeared to influence academic adjustment by shaping instructional support and similarly impacted psychological well-being via its effect on classroom organization.

In the final analysis, Zee and Komen (2016) present compelling evidence linking TSE to classroom quality, student achievement, and teachers' mental well-being. However, they note that gaps still exist in the measurement and analysis of TSE in the current body of educational literature, suggesting that further research is warranted to comprehend the intricacies of these relationships fully. The study affirms the integral role of teacher wellness for professionals and their students' holistic development and academic success.

Granziera et al. (2023) examined the connection between 486 teachers and school-average teacher well-being. The findings indicate a strong link between teacher well-being and student academic success. In schools where teachers expressed more emotional exhaustion, average student achievement levels were generally lower. Because it directly affects student outcomes, this highlights how important it is to support educators' emotional well-being.

Although no statistically significant association was observed between school-level teacher behavioral engagement and student achievement, the substantial effect size suggests a potential correlation that warrants further investigation. Granziera et al. emphasize the need for more comprehensive studies, particularly focusing on school-level variables, to delve deeper into this potential connection.

Understanding the interplay between teacher well-being, classroom dynamics, and student outcomes is essential for developing effective strategies to support both educators and learners in educational settings.

In another study, Marsh (2017) conducted a study that primarily focused on exploring teacher well-being and its impact on student learning. The existing literature predominantly examines teacher well-being in terms of its deficits, as stress and burnout among teachers are widely reported across the teaching workforce. Despite research indicating a minor impact of teacher well-being on student learning/achievement, the underlying mechanisms reveal indirect links via elements such as TSRs, teacher engagement, and quality. Despite attempts by scholars to bridge the gap between literature on teaching methodologies, significant issues remain systemic; these include problems related to the method itself, including those surrounding causality and generalizability, while contested terms like student engagement also pose a threat.

TSRs are the most plausible mediator between teacher well-being and student learning. Educational practitioners (EPs) are crucial in supporting teacher well-being, facilitating positive effects on student learning, assisting in developing positive TSRs, fostering favorable school climates, promoting supervision, and implementing stress management programs. However, future research must concentrate on how teacher well-being can positively influence student learning. By understanding effective strategies comprehensively, interventions can be developed to support stressed teachers and cultivate positive learning environments.

Adler (2016) conducted a series of studies to explore the possibility and advantages of implementing well-being education on a large scale, particularly within school environments. Involving a group of over eight thousand students from eighteen different secondary schools across Bhutan was part of the design for the initial research project.

Eleven schools were placed in the treatment group and seven in the control group in this randomized division. Ten non-academic well-being skills were the focus of an intervention given to the treatment schools. These abilities are probably intended to support different facets of students' mental, emotional, and social health, which can support their general well-being and success outside of the classroom.

The schools in the control group, on the other hand, did not receive this intervention and carried on with their regular operations. With this configuration, researchers can evaluate how well the intervention improved the wellbeing of the students by comparing the results between the treatment and control groups.

Such experimental designs are common in research aimed at evaluating the impact of interventions or programs on specific outcomes. By randomly assigning schools to different groups, bias can be minimized and ensure that any differences observed between the groups can be attributed to the intervention rather than other factors.

The studies by Carroll et al. (2021), Hascher & Waber (2021), and Benevene et al. (2020) collectively emphasize the critical role of educator well-being in shaping various aspects of educational experience. Improved well-being among educators not only benefits their own health and effectiveness but also has positive ripple effects on students' well-being, academic self-perceptions, and the overall academic environment.

Furthermore, the psychological well-being of educators is closely linked to their instructional strategies, highlighting the importance of supporting teachers' mental health for optimizing classroom practices. Additionally, educators' well-being is intricately tied to their relationships with students, colleagues, and families, as well as students' academic outcomes.

These findings underscore the significance of understanding and addressing the well-being of educators in educational research and practice. By prioritizing educator well-being, schools can foster a positive learning environment that supports both the personal and academic growth of students.

2.1.4 Teachers' level of self-efficacy on learners' achievement

According to Bonds (2017), self-efficacy is synonymous with happiness, love, and being comfortable with oneself, manifesting as unconditional self-love or self-esteem. It reflects an intrinsic sense of value, both conscious and subconscious, and encompasses trust in one's abilities to perform and achieve important objectives. In essence, self-esteem involves appreciating, validating, accepting, and supporting oneself, including aspects one may wish to change. Positive self-esteem correlates with academic achievements.

Onuka and Emunemu (2010) assert that learning institutions, by imparting skills and attitudes across generations, play a vital role in nurturing and sustaining communities in Nigeria. They emphasize the importance of responsiveness and autonomy in educational institutions.

According to Pintrich and Schunk (2013), motivation is a process that is centered on persistently pursuing goals. According to Gardner's (2015) theory, when students believe their teachers care about them, they become more motivated to learn. Democratic interaction styles, behavioral expectations that recognize individual differences, a nurturing attitude toward students' work, and insightful feedback are all characteristics of caring teachers. Effective teachers encourage understanding, address misunderstandings using visual aids, provide opportunities for student participation and substantive feedback, rather than merely assigning scores on homework. Additionally,

research indicates that teachers significantly influence students' enthusiasm for learning and can impact students' emotional responses to educational objectives (Stipek et al., 2008).

Zee, Koomen, and Jong (2019) delved into how Teacher-Student Relationships (TSE) influence students' academic performance. Using a multilevel approach, they explored the impact of different TSE measurements on this relationship. Their study involved 360 students from fourth to sixth grade and 49 teachers from 19 primary schools in the Netherlands. Through standardized tests and TSE scales, they found that individual TSE positively correlated with reading and math achievement, while group-level TSE had a negative association with these outcomes. Additionally, collective teacher self-efficacy is only related to the average math performance of the class. These results emphasize the complex dynamics between TSE and academic success, suggesting a need for more precise TSE measures to understand its effects on academic outcomes and teacher confidence.

Ma's (2022) study sought to understand how teachers' self-efficacy, creativity, and the academic performance of EFL students interact. The study filled a gap in the literature by examining the effects of teacher-related characteristics, specifically creativity and self-efficacy, on students' academic performance in an EFL setting. Ma emphasized the strong benefits of teachers' creativity and self-efficacy on EFL students' academic achievement by conducting a thorough review of previous research. The study promoted the growth of EFL teachers' self-assurance and inventiveness as a way to enhance language learning results for students.

Shahzan and Naureen (2017) conducted a study investigating how teacher self-efficacy influences students' academic achievement in secondary schools located in Chiltan Town, Quetta city. They surveyed 60 secondary school teachers and 100 students, using

questionnaires to measure both teachers' self-efficacy and students' academic performance. Their findings revealed a positive relationship between teacher self-efficacy and students' academic success, emphasizing the importance of enhancing teachers' self-efficacy to benefit student outcomes. The study recommended integrating strategies for developing self-efficacy into teacher training programs and suggested exploring self-efficacy in various cultural and geographical contexts.

Oguz and Saka (2019) investigated the connection between students' academic performance, teachers' Technological Pedagogical Content Knowledge (TPACK) levels, and students' self-efficacy. 1597 students and 78 teachers participated in the study, which was carried out in three secondary schools in Konya and Ankara. The results showed that teachers' TPACK levels and students' self-efficacy in the academic, social, and emotional domains all had an impact on students' academic achievement. Interestingly, the main factor influencing overall academic success was found to be academic self-efficacy. Additionally, the study found no discernible variations in teachers' TPACK levels according to their gender or work experience, underscoring the critical role that TPACK plays in improving student outcomes.

In order to evaluate the impact of teachers' self-efficacy on their job satisfaction and students' academic achievement in Italian junior high schools, Caprara et al. (2006) carried out a study. The study included information on students' final grades as well as a sizable sample of more than 2000 teachers. The results showed that teachers' self-efficacy beliefs had a significant effect on students' academic performance as well as their job satisfaction. This implies that raising teachers' self-efficacy may result in better learning outcomes.

Muhammad and Muhammad (2017) looked into the connection between secondary school students' academic success in Punjab, Pakistan, and the self-efficacy of math

teachers. Their study looked at how students' academic performance was affected by teachers' self-confidence in their capacity to teach mathematics. The purpose of the findings was to clarify the role that teacher self-efficacy plays in influencing students' academic performance in Punjabi secondary education. 480 students and 96 math teachers participated in the study, which gathered academic results from pertinent documents. This favorable correlation emphasizes how crucial it is for teachers to have faith in their capacity to instruct and engage students, as this will ultimately affect their academic achievement.

To ascertain the connection between math teachers' self-efficacy levels and their students' academic achievement, the researchers used Pearson correlation analysis. The self-efficacy levels of male and female math teachers were also compared using a t-test assuming equal variances, and the mean scores of the two groups did not differ significantly. The study also looked at possible differences in math proficiency between male and female students, but it came to the conclusion that there was no discernible gender difference in students' academic performance.

The study's findings highlighted a strong correlation between the self-efficacy levels of mathematics teachers and the academic performance of their students. Consequently, the authors proposed the implementation of in-service training programs and promotion-linked training initiatives aimed at bolstering teachers' efficacy beliefs. These recommendations seek to enhance teachers' confidence in their abilities, potentially leading to improved teaching practices and ultimately benefiting students' academic achievement.

In their study examining the interaction of motivation, self-efficacy, and student performance in Physics, Schunk and DiBenedetto (2021) synthesized theoretical

perspectives from Skinner's Theory of Operant Conditioning and Bandura's Social Cognitive Theory. Their primary objective was to deepen understanding of the relationships among these constructions. Utilizing a correlational-survey research design, data were gathered from 375 senior secondary three Physics learners. By analyzing the collected data, the researchers aimed to elucidate how motivation and self-efficacy influence student performance in Physics. The study sought to provide valuable insights into factors impacting student achievement in Physics education.

As a result of their findings, the study suggests the crucial role of educators in creating a supportive academic environment that fosters learners' motivation and self-efficacy. By nurturing these aspects, educators can potentially enhance students' performance in Physics and other academic subjects. This underscores the importance of implementing strategies and interventions aimed at promoting motivation and self-efficacy among learners to optimize their educational outcomes.

By shedding light on the importance of motivation and self-efficacy in the context of learning physics, the study by Schunk and DiBenedetto (2021) significantly adds to the body of existing literature. They shed light on the ways in which these psychosocial elements affect academic achievement, especially in the area of physics, through their research. The study emphasizes the significance of motivation, self-efficacy, and learner performance in influencing educational outcomes by showing their positive correlation. The study thoroughly examined the connection between academic success in Physics, motivation, and self-efficacy using two theoretical frameworks.

The study has some limitations, including data being collected from a single location and the sample being limited to senior secondary three Physics learners. Future studies could extend the research to other locations and include a larger, more diverse sample of learners. Additionally, future studies could examine the impact of specific interventions

on learner motivation and self-efficacy and their subsequent effects on academic achievement in Physics.

In order to determine whether a teacher's self-efficacy in biology instruction could influence their students' development of self-efficacy, Ahmed, Lawal, and Ahmed (2021) carried out a study in Ogbomoso, Nigeria. Numerous earlier studies have demonstrated the recognized importance of self-efficacy in the educational process, which served as the impetus for their investigation. The study most likely used a quantitative methodology, collecting information on teacher and student self-efficacy levels through surveys or questionnaires. It's possible that the researchers used statistical analyses to look at the connection between student self-efficacy development and teacher self-efficacy. The results of this study may shed important light on how teacher self-efficacy influences how students view their own abilities in the context of biology instruction in Ogbomoso, Nigeria.

The researchers adopted a descriptive research approach with a survey type. Using proportionate and stratified sampling techniques, they selected 98 secondary schools for their study. The study involved 207 Biology teachers and 392 students in their first and second years of senior secondary school, selected based on gender using proportionate, purposive, and simple random sampling techniques.

With a significance level of 0.05, Ahmed, Lawal, and Ahmed (2021) used regression analysis, mean scores, and chi-square to examine the data they had gathered. Their research revealed a number of important revelations. First, they found that students' and teachers' self-efficacy in biology was positively correlated. Second, the study found that biology teachers had a moderately high level of self-efficacy, which suggests that they have a favorable opinion of their own teaching skills. Finally, their study showed that students' self-efficacy varied by gender, with female students in biology having higher

levels of self-efficacy than male students. These results advance our knowledge of the relationships among gender disparities, teacher and student self-efficacy, and biology education in Ogbomoso, Nigeria.

To sum up, Ahmed, Lawal, and Ahmed (2021) demonstrated that a teacher's sense of self-efficacy does, in fact, affect how self-efficacious their students become. In light of these results, the researchers suggested that biology instructors, irrespective of the gender of their students, assume accountability and focus more on helping them develop self-efficacy.

The Ahmed, Lawal, and Ahmed (2021) study is extremely pertinent to our investigation. It not only highlights how crucial teacher self-efficacy is in influencing students' self-efficacy, but it also offers important new perspectives on its function in biology education. These results provide important background information as we investigate how teacher self-efficacy affects students' academic performance in our own research.

Juan, Hannan, and Namome (2018) conducted a study examining the correlation between students' self-efficacy in science and their academic achievement in the subject. Their research utilized data from 12,514 ninth-grade pupils in South Africa who participated in the Trends in International Mathematics and Science Study (TIMSS) in 2015. By analyzing this data, the study aimed to elucidate the relationship between students' self-beliefs and their performance in science education at the ninth-grade level. The research conducted by Juan, Hannan, and Namome (2018) focused on exploring the correlation between students' self-efficacy and their achievement in science, as well as the contextual factors associated with students' self-efficacy. To address these inquiries, the researchers employed multiple linear regression analyses. The study's results demonstrated a positive correlation between self-efficacy and science achievement, highlighting the significance of non-cognitive factors in determining school-level success in science instruction. These

findings advance our knowledge of the complex relationship between student achievement in science and self-belief's influence on academic performance.

Furthermore, the study underscored the importance of teachers' efficacy in fostering both students' self-efficacy and their achievement in science. Given the pivotal role of teachers in shaping students' attitudes toward science and their self-belief, the findings highlight the critical influence educators have on student outcomes. The implications of the study are significant for educational programs and teachers, emphasizing the necessity of integrating non-cognitive aspects into interventions aimed at enhancing students' self-efficacy in science. Moreover, the results stress the value of enhancing teachers' efficacy in improving students' academic performance in science, suggesting that policies aimed at promoting teacher efficacy can contribute to enhancing science education in schools. Teachers can promote self-efficacy of students, beliefs, motivation, and achievement in science by providing a favorable academic environment and effective teaching practices.

The study emphasizes recognizing attitudes as a critical component in interpreting achievement results. Attitudes towards science reflect individuals' emotional evaluation of the subject and impact behavior and the learning process. Additionally, the study suggests that attitudes toward science indicate the prevailing culture in schools and the broader social context in which learning occurs. Therefore, understanding attitudes is crucial in interpreting achievement results, developing interventions incorporating non-cognitive dimensions, and promoting students' and teachers' efficacy.

Ross (2012) conducted an investigation into the association between teachers' efficacy and the academic performance of students assigned to them. Using a sample of 18 history teachers drawn from Grade 7 and 8, along with 36 classes, the study found that increased interaction between teachers and students led to improved learning outcomes. This

improvement was attributed to the boost in students' confidence resulting from the interactions, which subsequently enhanced their academic performance.

In a separate study, Tournaki and Podell (2015) examined the impact of various teacher characteristics on students' academic outcomes using a sample of 384 general education teachers. The study involved 32 case studies where teachers were required to respond to surveys. Additionally, teachers indicated their students' gender, social behavior, reading achievement, and classroom attentiveness. Utilizing a 16-item rating scale, the study found that high levels of teacher efficacy were associated with negative predictions for students' academic performance. Furthermore, less teacher-student contact was linked to higher predictions of misbehavior among students. The results also indicated that teachers were able to predict high academic outcomes for unfriendly students, regardless of their level of aggressiveness.

2.1.5 Teacher's Quality of relationship with the others

A significant body of literature underscores the importance of strong teacher-student relationships as fundamental elements for fostering healthy academic development in educational environments (Hamre & Pianta, 2001; Eccles & Wigfield, 2002). This literature draws attention to the ongoing concern regarding teacher well-being and its profound influence on students' learning outcomes, an area of research that has garnered attention for decades but has not been extensively explored within the current geographical region.

Credible evidence indicates that the manner and extent of teachers' interactions with students affect their learning (Dickinson & Brady, 2006; Brophy-Herb et al., 2007; Oscar, 2009). Psychologists, educators, sociologists, and social constructivists have all contributed to the growing interest in interventions, in their efforts to enhance the quality

of teacher-student interactions, Hamre et al. (2012) emphasized the necessity for teachers to actively engage with learners to facilitate effective learning processes. They underscored the importance of teachers' active involvement in interactions with students as a means to create conducive learning environments where learning can flourish. This highlights the critical role that teacher-student interactions play in promoting meaningful learning experiences for students.

As per Smith and Ragan (1993), a learning environment encompasses not only teachers but also the curriculum, instructional equipment, and the institutional learner community. Additionally, Shields (2011) suggested that the school environment extends to the broader climate or school context, which can either support or hinder classroom instruction and learning. These perspectives highlight the multifaceted nature of the learning environment, emphasizing the various factors that contribute to the overall educational experience and shape students' learning outcomes.

Fatima, Akhtar, and Begum (2020) conducted a study aimed at investigating how positive and healthy relationships between principals and teachers can impact learning outcomes, character development, and citizenship. The study sought to explore how positive interactions between principals and teachers influence the learning environment in schools, teacher performance within the context of teacher-teacher relationships, and the overall impact of cultivating solid connections between teachers on students' performance and character development. The study included 209 participants, consisting of 190 teachers and the remaining individuals were principals.

The study's findings corroborated the information outlined in the literature review and bolstered previous research in the field, suggesting that teacher support is a crucial factor in shaping both academic outcomes and interpersonal relationships. This alignment with existing literature underscores the importance of teacher support in fostering positive

educational experiences and underscores its impact on both academic achievement and the quality of student-teacher relationships.

The study revealed that creating and maintaining positive relationships between principals and teachers enhances the learning environment, improves academic performance, and fosters character development. The study recommended that administrators in challenging school environments enhance their programs by fostering positive relationships between principals and teachers. Furthermore, it suggested that school leaders enhance communication by carefully examining their relationships and leadership styles. Specific recommendations were provided for administrators, institutions, teachers, and researchers interested in this area of research.

Furthermore, the study examined the effect of the quality of teachers' relationships with others on learners' academic achievement. It is found that creating and maintaining positive relationships between teachers can positively impact learners' academic achievement. The study recommended that schools provide opportunities for teachers to engage in activities that promote positive relationships, such as team-building exercises, and that instructors should be motivated to participate in such activities. The study also suggested that schools develop a culture of collaboration, where teachers work together to develop lesson plans and share best practices to improve the quality of relationships among teachers.

Through their study conducted in Lahore, Pakistan, Afzal, Rafiq, and Kanwal (2023) emphasized the significance of strong student-teacher relationships for achieving academic success, as academic success is largely dependent on the nature of the relationship between teachers and students. As such, this association deserves careful attention.

The key focus of their study was answering two important questions, with the primary topic being how students viewed their relationships with teachers. By examining teacher-student relationships, the second question aimed to assess their effect on academic achievement. Taking a scientific perspective on knowledge production and utilizing quantitative research methods, the researchers tackled these questions.

To gather the necessary data, Afzal, Rafiq, and Kanwal (2023) relied on a survey method. They used a structured questionnaire as their primary tool for data collection. Their study encompassed all public and private universities in Lahore, from which they selectively sampled eight universities, evenly split between public and private institutions, using a convenient sampling technique.

Upon collecting, the data underwent analysis using SPSS-V-27 software. The researchers utilized descriptive and inferential statistical methods to interpret the results and draw conclusions. Their findings revealed a significant correlation between educators and learners, ultimately contributing to enhanced academic achievements. This highlights the crucial role of teacher-student interactions in shaping student outcomes and underscores the importance of fostering supportive relationships within educational settings. Moreover, the study concluded that the majority of pupils held a positive perception of the bond they shared with educators. This positive outlook significantly contributed to improving both their academic scores and overall achievement. These findings underscore the importance of nurturing supportive teacher-student relationships as a means to positively influence student academic outcomes and overall success.

According to Afzal et al.'s (2023) findings, fostering strong and healthy relationships between students and teachers can significantly enhance academic accomplishments. This study reinforces our research goals centered on understanding how various aspects,

including teachers' self-belief and interpersonal relationships, contribute to learners' academic achievement. Their findings help to emphasize the importance of considering interpersonal dynamics within educational settings when addressing student outcomes.

The primary purpose of conducting a recent study on fourth graders' and eighth graders' teacher-student relationship comparison along with analyzing their academic achievements was to determine their subjective well-being, as per Zhou et al. (2023), who conducted this research in Central China. In addition to this objective, there is a desire to analyze how subjective well-being mediates the connection between teacher-student relationships and academic achievement among students in these two grades.

The substantial number of participants consisted of nearly twenty thousand fourth-grade students as well as over eleven thousand eighth-grade students, and the examination of differences and similarities was carried out through a comparative study methodology as part of our research design. We conducted an effective examination of several factors due to the significant scale of this study.

The results of their work were incredibly interesting in every category - the teacher-student connection as well as both emotional and educational results - fourth-grade pupils had a better level of success compared to their eighth-grade peers. By establishing a healthy student and teacher relationship, which enhances the state of being of the former, can lead to better grades. According to the study conducted with both fourth and eighth-grade students, it's worth noting that subjective well-being plays an important role within the framework of teacher-student relations when determining academic achievement since for those students under the age of twelve accounted with forty-two-point eight percent compared to twenty-two-point seven percent among older students.

Zhou et al.'s (2023) findings on the interplay between subjective well-being and teacher-student relationships provide insight into academic success. To ensure improved academic performance, we must focus on cultivating positive teacher-student relationships and fostering students' subjective well-being, highlighting the importance of these factors in learners' academic achievement is a significant contribution from this data to our study. This study indicates that future research should be conducted to explore this subject further and overcome any potential shortcomings.

Baafi (2020) analyzed the situation of public senior high schools in Ghana, and the purpose of this study was to grasp the influence of teacher-student connections on participation in class activities and learning outcomes. While many discussions center around how much an effect teaching quality has on students' success, we found little research that directly explored the relationship between teachers and students.

The study involved 220 students and 160 teachers. They were asked about their perceptions of their relationships with each other. The objective was to establish how these relationships could impact learning outcomes. The research used surveys to collect the data, providing both teachers and students with a chance to share their thoughts and experiences.

As per the findings of this research, teachers who encountered less trouble with pupils noted more favorable educational developments, and those who established professional bonds with their students and made them rely on their guidance experienced enhanced behavioral and instructional participation from their students.

In terms of our own research goals and objectives, Baafi's (2020) findings are highly valuable, and enhancing the relationship between teachers and students positively impacts the learning environment by improving academic performance. For this reason,

it justifies the argument that encouraging these associations can be beneficial in uplifting learner outcomes, and working toward creating a friendly relationship between teachers and pupils is highly recommended by this study for achieving better classroom environments coupled with higher academic achievements. This finding aligns with our research focus, thus offering valuable insights into our study.

Fowler, Banks, Anhalt, Der, and Kalis (2017) conducted a study to investigate the relationship between academic achievement and teacher assessments of students' social functioning, as well as the quality of the teacher-student relationship. Their main goal was to shed light on the variables influencing the caliber of the student-teacher relationship and how it affects academic ratings. Two underperforming, highly impoverished schools in a sizable urban district in the Midwest served as the study's sites. The study sought to clarify the relationships between teacher perceptions of student social functioning, the teacher-student relationship, and academic achievement, even though it only included 230 students and 20 teachers.

According to the study, the quality of the relationship between instructors and students, assessed using the brief version of the Student-Teacher Relationship Survey, was notably influenced by students' externalizing and prosocial behaviors during their early years from kindergarten through third grade. Additionally, the researchers observed that teacher perceptions of these behaviors were partially influenced by the race of the teacher. This highlights the complex interplay between student behavior, teacher perceptions, and the dynamics of the teacher-student relationship, emphasizing the need for a nuanced understanding of these factors in educational settings. Specifically, African American teachers rated African American students higher on externalizing behaviors than non-African-American teachers. This finding suggests that teacher race may affect how teachers perceive and respond to student behavior.

Moreover, the study's findings indicated that the quality of the relationship between learners and teachers had a substantial clinical impact on teachers' academic evaluations of students. This underscores the importance of the teacher-student relationship in shaping how educators perceive and assess students' academic performance. Such insights underscore the need for educators to cultivate positive and supportive relationships with their students to foster optimal academic outcomes.

Stated differently, the teacher's evaluation of the student's academic performance was influenced by the quality of the relationship between the teacher and the student. According to the study's authors, this result emphasizes how crucial good teacher-student relationships are for fostering academic success.

Furthermore, the study's findings suggest that there may be a link between externalizing behavior problems and negative assessments of the teacher-student relationship, which are then connected to poorer academic evaluations. In order to improve academic outcomes for students in high-poverty, low-performing schools, this finding emphasizes the significance of addressing externalizing behavior issues and fostering positive teacher-student relationships.

In conclusion, the study provides first-hand information into the complex interplay between student behavior, teacher-student relationships, and academic performance. While the study's sample size was relatively small, the findings suggest that teacher race and student behavior may play essential roles in shaping the quality of the student-teacher relationship and, in turn, academic outcomes. Extensive studies are required to validate the findings and explore the factors contributing to positive teacher-student relationships in high-poverty, low-performing schools.

Murray-Harvey (2010) conducted a study to evaluate the quality of a student's school experience using various indicators, including academic performance, psychological health, and social/emotional adjustment. The study collected data from students and teachers across 21 South Australian schools, encompassing 58 classes and 888 students from Year 5 to Year 9. Students completed a questionnaire to report on their academic performance, psychological health, sense of belonging to the school, and perceived stress or support from family, peers, and teachers. Teachers were asked to provide evaluations of randomly chosen students in their classes.

Correlation analysis was utilized in the study to identify possible associations between various factors in relation to academic success. Such variables include quality of relationships, psychological health of both teachers and students, and social adjustments. Path analysis was further utilized to investigate these associations, confirming the strong correlation between the social and emotional status of learners and academic school experience. Additionally, the analysis revealed that the quality of teacher-student relationships significantly impacted academic, social, and emotional outcomes. Compared to the influence of family and peers, teacher-student relationships were found to have the most substantial effect on student well-being and achievement outcomes.

Generally, the study findings suggest that academic performance alone may not fully reflect a student's experience of school, and other indicators, such as psychological health and social/emotional adjustment, should also be considered. The quality of relationships between teachers and students is crucial in promoting positive outcomes for students, and educators should prioritize building and maintaining solid relationships with their students to support their overall well-being and academic achievement.

According to Asunmo (1999), schools are expected to provide a conducive environment for studies, especially in terms of trust and respect. Building confidence among the

learners when the teachers are outraged may be difficult to achieve. For instance, Nigerian studies (Glueck, 2002), William, 2005) and Emunemu (2010) recommended that teachers should teach learners to be sensitive to each other's needs and give appreciation notwithstanding the differences in social background. Concerning the same, Akinpelu (2003), Hoyle (2003), and Ibrahim (2006) suggested that students' voices in affairs of the school are a fact that is established.

At all education system levels, a student must be brought up to participate in school affairs. Decisions of a group, as per Beardwell and Holden (2010), are mostly trustworthy than decisions that are made individually because the judgment is broad-based. Nevertheless, the relationship type which exists between those teaching and those being taught are supposed to be warm and friendly for effective transfer of learning and as a result of learner enhanced performance in academics (Rumnarayan & Rao, 2004). Likewise, there is a connection between the learners' academic outcomes and their social well-being (Farounbi, 2002).

Nevertheless, in a study that was conducted to investigate the teacher-learner relations impact on academic outcomes, Ogunniyi (2006) reported significant differences in relationships between male and female teacher-learners. A noticeable disparity was found between the young-old and trainee-trainer relationship. According to Ryan and Deci (2010), there exist significant differences between gender and social interactions among students. For Watkins (2001), personality traits were significant between the male and female trainers on students. Watkins further reports a noticeable disparity was also found regarding private and public secondary school student-teacher relationships.

In Sub-Saharan Africa, which comprises mostly developing nations where Kenya is included, there seem to be many scholarly works on education and the relationship between trainers and those being trained and their success academically.

In Fan's (2012) study, the primary objective was to examine how the quality of teacher-student interpersonal relationships relates to students' academic performance in social studies. This investigation utilized an ex post facto design, which analyzed existing data to explore this correlation. The research sample comprised 1,954 Junior Secondary School students, who were randomly selected from 50 government secondary schools located in Calabar, Nigeria. By employing this methodology, the study aimed to provide valuable insights into the dynamics between teacher-student relationships and academic achievement in the context of social studies education at the secondary school level.

The study's results indicated a correlation between social studies academic achievements and teacher-student interpersonal relationships. By prioritizing the cultivation of strong teacher-student relationships, educators can create an environment conducive to academic success and promote the holistic development of their students. Students can evaluate their emic standing in the classroom as the wand. They can do this by assessing the tasks given, grouping strategies used in the classroom, teacher feedback and information on ability, responsibilities given by teachers, and the quality of teacher-student relationships.

The key inference derived from the study is that cultivating positive interpersonal connections serves as a fundamental tool for attaining high productivity and success across various domains of human activity, with particular relevance in education. This highlights the pivotal role of positive relationships, especially between teachers and students, in fostering conducive learning environments and promoting academic achievement. By prioritizing the establishment of positive interpersonal connections, individuals can enhance their capacity for success and fulfillment in educational settings and beyond. Therefore, teachers should prioritize building cordial relationships with their students. Establishing positive human relationships is a critical factor in achieving high

productivity, and in the context of education, teachers should aim to foster friendly and supportive relationships with their students to enhance academic achievement.

The study underscores the importance of cultivating positive relationships between teachers and students, highlighting their profound impact on academic achievement. By prioritizing the establishment of supportive and respectful connections within the classroom, educators can create an environment conducive to learning and promote student success.

In order to investigate the elements affecting the teacher-student relationship and their effect on student learning in secondary schools in Namibia's Khomas Education region, Isaacs and Lwendo (2022) conducted a study. The study used a qualitative research approach within a theoretical attachment framework and an explanatory case study design to gather data from 20 grade 12 students and 10 subject teachers who were selected through purposive sampling according to predetermined criteria. To gather data for the study, the researchers utilized a variety of methods, such as in-depth interviews, focus group discussions, and classroom observations. Subsequently, they conducted a thematic content analysis to systematically examine and interpret the patterns and themes emerging from the collected data. This comprehensive approach allowed for a rich exploration of the complexities surrounding teacher-student relationships and their impact on academic achievement. The researchers used a range of techniques, including focus groups, in-depth interviews, and classroom observations, to collect data for the study. The patterns and themes that emerged from the gathered data were then methodically examined and interpreted through a thematic content analysis. The intricacies of teacher-student relationships and their effects on academic achievement were richly explored thanks to this all-encompassing approach.

According to the study's findings, it was clear that both teachers and students believed that a supportive learning environment was necessary for the growth of a positive relationship. Two important elements that can help create such an environment are motivation and effective communication skills. This emphasizes how crucial it is to promote motivation and open communication in the classroom in order to develop strong teacher-student bonds, which can improve academic results and the learning process as a whole.

Nevertheless, some students reported negative relationships with teachers, which were attributed to personal attitudes in the classroom. The study also identified that the quality of teacher-learner relationships was influenced by teachers' conduct and level of education, while challenges such as the absence of adequate resources and poorly behaved students were significant challenges.

Moreover, the study revealed that teachers significantly influence student learning, and their interactions with learners in the school environment could have a fluctuating impact. The scholars advised that educators should foster and establish a favorable and accommodating educational climate for successful pedagogy and learning, which would improve student academic performance in the school learning environment.

2.1.6 Teacher Personal growth and learners' achievement

The study suggests that an environment supportive of self-identity, one that cares and stimulates cognitive adaptability and behavior-related outcomes, is more beneficial compared to an environment solely focused on results (Roeser, Midgley, & Urdan, 1996). In light of this, it is inferred that schools and educators need to foster greater inspiration (Roeser, 1996). Developing teachers' talents, including motivating them by addressing their weaknesses, providing guidance on classroom materials, and utilizing student input

to enhance academic performance, may effectively contribute to the growth of teachers' personalities (Fryer & Elliot, 2008).

In classes emphasizing improved personal awareness and identity, students tend to focus more on learning, apply new ideas, adopt diverse approaches to tasks, and prefer challenging assignments, exhibiting more encouraging behaviors. Conversely, classes focused on performance and other strategies tend to elicit destructive behaviors (Kaplan, & Midgley, 2002; Gheen, & Edelin, 1998; Midgley, Ramnarain, 2013; Ryan, Pintrich, & Skaalvik & Skaalvik, 2013; Midgley, 2001).

The goal of Shih's (2008) unique study of Taiwanese junior school pupils was to ascertain the connection between social well-being and participation in educational activities. The findings showed that students were less likely to report experiencing anxiety when they actively engaged in learning activities. Increased enjoyment and decreased boredom were also linked to higher learning engagement. These results highlight the beneficial effects of students' active participation in their education on their social wellbeing and the significance of developing stimulating and interesting learning environments in classrooms.

Previous research conducted in Norway and the United States showed that students' ratings of teacher talent were associated with fewer self-handicapping behaviors, a positive self-concept, seeking assistance, and avoiding cheating behaviors in tests (Ryan, Gheen & Midgley, 1998; Patrick et al., 2003; Skaalvik & Skaalvik, 2013). More recently, significantly positive teacher aspirations were reported in relation to students' outcomes (Moreira, Dias, Vaz & Vaz, 2013).

Despite most students indicating an association between employability, academic success, and goal orientation (Gherasim, Butnaru & Mairean, 2013), research found no significant association between academic achievement and goal orientation in Romanian

classrooms (Gherasim et al., 2013). Gherasim et al. (2013) found that studies focusing on teachers' potential in talent improvement served as significant predictors of student support and mathematics achievement. However, research on support and goal aspirations, particularly in middle school settings, has not consistently produced results regarding the influence of teachers on support and mastery goal orientation on student outcomes. These findings highlight the need for further exploration into the role of teachers in fostering student support and promoting mastery goal orientation, particularly in middle school contexts, to better understand their impact on student achievement and overall development.

Therefore, further research considering teachers' personal growth levels in relation to students' outcomes is warranted.

In 2021, Saeed and Akbar conducted a study aimed at understanding the connection between a teacher's professional skills, as one of the aspects of a teacher's personal growth, and a student's success in English at the undergraduate level. They sought to investigate what students think about the skills their English teachers need and how these skills might affect their performance in the subject.

The study took place in government colleges affiliated with the University of the Punjab. The researchers randomly selected one-fifth of these colleges for their study. They utilized a correlational research design to understand if and how two things might be related.

Using a specially designed form intended for pupils to provide feedback about their educators' professionalism, they conducted data gathering and analyzed the collected data using a statistical program called SPSS. Initially, they reviewed various demographic factors, including age and gender.

To investigate the association between teacher competency in English language instruction and student success in this area, they employed the statistical approach known as Pearson's product-moment, and a fragile but promising bond was detected between the pair. In simpler terms, better professional skills in teachers might lead to slightly better performance in students. Interestingly, this relationship was the same regardless of the gender of the students.

One interesting finding was that teachers often assess students individually through oral questioning to check if students understand the content. Based on these findings, the researchers suggested a change in the assessment system to enhance students' performance in English. They believe that modifying the way teachers assess students could lead to better results. This study helps us understand that teachers' professional skills and the way they assess students can have an impact on students' success in English.

In 2020, Zhaohui conducted a study that looked at how training for teachers, also known as professional development (PD), affects students' grades. This study took place at Jiangsu University, and almost 300 teachers shared their thoughts and experiences through a survey.

To examine the gathered data, the study used particular statistical and mathematical techniques. To analyze the data and make inferences, structural equation modeling and confirmatory factor analysis were employed as analytical tools. According to the findings, Jiangsu University instructors were aware of and interested in a range of professional development (PD) initiatives, such as workshops, professional article reading, educational conferences, and seminars. This suggests a proactive approach among teachers towards continuous learning and professional growth, underscoring the importance of ongoing PD opportunities in enhancing teaching practices and promoting educator effectiveness, conducting research both individually and with others, visiting

other universities to observe, and learning about managing conflicts, handling the classroom, and engaging students.

The teachers shared that the PD programs they attended in the past three years helped them improve their research skills and teaching methods. They also believed that these programs significantly improved students' grades.

However, it wasn't all positive. The teachers also mentioned some challenges that stopped them from attending more PD programs. For instance, they didn't receive enough support from their employers, and sometimes the PD programs clashed with their work schedules.

Based on these findings, Zhaohui offered some suggestions to overcome these challenges. The study shows that while PD can have positive effects on teachers' skills and students' grades, more support is needed to ensure teachers can fully participate in these programs.

In 2018, Akwankwasa led a study investigating the impact of teachers on student academic performance, specifically within Rwengoma Sub county, Kabarole District. The main purpose was to uncover the extent to which a teacher's impact shapes student outcomes in this particular region.

The study was framed by three primary inquiries. Firstly, it sought to delve into the overarching impact of a teacher's personal growth on student academic performance. Secondly, it aimed to discern the potential influence of teacher qualifications on student performance. Lastly, the study aimed to illuminate the importance of a teacher's experience in shaping student academic outcomes. These questions collectively provided a comprehensive framework for exploring the multifaceted dynamics between teachers and student achievement within the context of Rwengoma Sub county, Kabarole District. To answer these questions, Akwankwasa delved into various research articles and other

relevant literature. This literature review formed the backbone of the study, allowing the researcher to gain a broad understanding of the topic before embarking on the research.

The study then employed a certain methodology, though this specific methodology is not outlined in the abstract, it was presumably carefully selected to best answer the research questions. This was followed by a thorough analysis and discussion of the findings.

This finding underscores the importance of considering socio-economic factors when analyzing student achievement outcomes. By recognizing the impact of socio-economic variables, educators and policymakers can better address disparities in academic performance and implement targeted interventions to support students from diverse socio-economic backgrounds. However, the specifics of socio-economic factors affecting students' academic performance may not be detailed enough in this abstract for Kabarole District, but their significance is clear. Akwankwasa's study underscores how important it is to consider both teacher qualifications and socio-economic conditions when analyzing student academic achievement. A meta-analysis was carried out by Didion, Toste, and Filderman (2020) to look into how teacher professional development (PD) affected the reading outcomes of kindergarten through eighth graders. The study's main goal was to present a thorough evaluation of the effect of professional development for teachers on students' reading proficiency, which hasn't been thoroughly examined before. Examining whether study, program, or participant characteristics may affect how well these interventions affect student achievement was another objective of this study. After a thorough search of both published and unpublished research from 1975 to 2017, 28 studies that satisfied the requirements were found. According to the ensuing meta-analysis, student reading achievement is somewhat positively impacted by teacher professional development (PD). Significantly, this effect was discovered to be statistically significant, suggesting that teacher professional development has a

significant impact on raising students' reading proficiency. These results are in line with earlier studies that have repeatedly shown how beneficial high-quality, hands-on teacher professional development is for enhancing student learning outcomes.

The analysis of the studies primarily centered on elementary school students without any learning disabilities. While four studies looked at reading outcomes for students with reading disabilities or those at risk of reading difficulties, only three studies included middle school students. This emphasizes how important it is to conduct more research on how teacher professional development affects a range of student populations. More thorough insights into how well teacher professional development programs meet the various needs of students in various educational contexts can be obtained by broadening the research's focus to include a wider range of student demographics and learning profiles.

Despite the limitations, the meta-analysis provides important effects for practice and future research. The findings suggest that teacher PD can positively impact student reading achievement. Even though teacher professional development (PD) has been shown to improve reading achievement, more research is still required to pinpoint the precise traits of successful PD and comprehend the processes that influence student outcomes. To fully comprehend the effect of teacher professional development on student learning outcomes across a range of educational contexts, it is also essential to carry out research that involves middle school students and diverse student populations. Teachers and legislators can improve professional development programs to better serve the needs of all students and increase overall educational efficacy by filling in these research gaps.

The study does indeed suggest that teacher professional development (PD) can yield positive effects on students' learning outcomes. By participating in PD opportunities that focus on personal growth, teachers may enhance their capacity to meet the diverse needs of their students and implement more effective instructional practices. This underscores the importance of investing in ongoing professional development for educators to continuously improve their teaching skills and ultimately contribute to better student outcomes.

This association and its possible ramifications for teacher professional development programs need to be investigated further. A study by Jacob and Lefgren (2004) examined the relationship between student achievement and in-service teacher training within the framework of school reform programs. Even though prior research has shown a connection between teacher attributes and student learning, states and school districts frequently use in-service training programs to enhance teaching methods and student results.

The authors used a quasi-experimental research design to examine the effects of in-service training on elementary school students' reading and math performance, focusing on the most recent school reforms in the state of Chicago. In particular, they estimated the impact of teacher preparation on student achievement using a regression discontinuity method. By comparing the performance of students whose teachers received training with those whose teachers did not, within a specific cutoff point or threshold, they were able to evaluate the impact of in-service training on academic outcomes.

Their analysis revealed that even marginal elevations within in-service training had no significant influence on the academics particularly on reading or math achievement among elementary school students. This finding suggests that modest investments in staff

development may not be sufficient to improve academic outcomes for children in high-poverty schools.

The study's findings are significant because they contribute to the ongoing discourse about practical approaches to teacher professional development and school reform efforts. The authors suggest that although in-service training is often touted as a critical component of school improvement initiatives, its impact on student achievement may be limited.

It is crucial to highlight that this study solely focused on investigating the impact of teacher training on student achievement and did not encompass other dimensions of teacher growth, such as personal or professional development. While the study provided valuable insights into the specific effects of in-service training on student outcomes, it did not delve into the broader spectrum of factors that contribute to teacher effectiveness and overall educational quality. Future research endeavors may benefit from considering a more comprehensive approach that encompasses various aspects of teacher growth and their potential impact on student learning and development.

Therefore, it is crucial to continue exploring the factors contributing to teacher effectiveness and student success.

Parkhouse et al. (2019) conducted a systematic review of 40 different studies that evaluated professional development (PD) programs focused on multicultural education. The objective was to investigate how these programs contribute to teachers' self-efficacy and success in teaching students from culturally diverse backgrounds. Parkhouse et al. (2019) concluded that practical in-service teacher training focusing on creating inclusive and equitable classrooms could result in higher academic success rates, motivation, self-confidence, and self-efficacy for students from marginalized communities. However,

there is inadequacy in teachers' preparation to work in culturally diverse classrooms, emphasizing the importance of high-quality professional development.

This shows that further study is necessary to obtain a more thorough and cohesive knowledge of how various professional development programs affect student outcomes and teacher effectiveness. It is therefore difficult to make firm judgments on the elements influencing the efficacy of teacher professional development. Prior research has identified essential questions and factors that professional development (PD) providers and researchers must consider when working in the field of multicultural education. One of these areas involves how PD providers manage potential tensions or obstacles that may arise from resistance toward discussions of diversity and equity.

Furthermore, it is essential to strike a balance between equipping teachers with specific knowledge about students' cultures and avoiding the perpetuation of stereotypes or over-generalizations. This delicate balance highlights the importance of culturally responsive teaching practices that acknowledge and respect students' diverse backgrounds while avoiding essentialism or bias. Exploring these areas presents promising avenues for future research in the field of education, as it can contribute to the development of more effective and culturally responsive pedagogical approaches that promote inclusivity and equity in education.

The authors suggest that researchers and PD developers should closely examine their theories regarding teacher learning and multicultural education. This includes exploring the effectiveness of various forms and features of PD programs, such as case studies or simulations, online versus in-person delivery, and program length and frequency. The authors also suggest the need for research on effectively measuring the impact of multicultural education-focused PD programs on teacher self-efficacy and student outcomes.

Howes (1999) discussed the importance of teaching in improving self-awareness and identity by arguing that personal growth goals that comes early is the same as realization of one's dreams and aspirations. This conclusion partly supports Pianta and Steinberg (1992) work who made a selection of 101 two-year-olds, their parents, as well as those who train them to assess aspirations of children's quality from their mothers six months following the assessment of the quality of relationship to those training them. This research showed that children had the tendency of forming potential for noticing their own dreams via trainers whose identity was similar to their mothers. The writing gave a disclaimer, nevertheless, that behavior of children to mothers and those teaching them may be different due to set potentiality context at home as well as in school.

Similarly, Murdock and Miller (2003) investigated the potential of talents development among eighth-grade students in relation to the encouragement as well as self-perception of a trainer that is caring. Putting into consideration parents' and peer influences, the writers concluded that perceived teacher caring added an important part of the difference in achievement academically as well as encouragement. In the same direction as Murdock and Miller's research, Wentzel (1997) investigated the range to which perceptions of adolescents' trainers who are caring and positive, foresaw efforts to accomplish social and academic outcomes at school. She ended that caring that is perceived from those teachings is noticeable in relation to academic efforts of a student and related positively to students' aim of pro-social and social responsibility goals.

Birch and Ladd (1997) studied the potential of trainers for talents development among learners in learning institutions. They found three aspects that are qualitative of the trainer-learner relationship that influence children's adjustment in learning institutions. They included dependency, closeness, as well as conflict. Degree of warmth and communication that is open between trainers and learners referred to as closeness.

Writers gave a suggestion that being with a trainer who is warm and affectionate in the class may create room for emotions that are positive as well as an attitude toward the learning institution indicative of an excess reliance on those teaching as a support source referred to as dependency. The study aimed to explore more on teacher's personal growth and its effect on learners' academic outcome.

Cilliers et al. (2022) conducted a study to assess the effectiveness of on-site versus virtual coaching for public primary school teachers in South Africa. The research aimed to determine whether virtual coaching could provide cost-effective professional development opportunities on a large scale while emulating the benefits of in-person interaction. The results indicated that, over a three-year period, on-site coaching had a notably stronger positive influence on students' English oral language and reading proficiency when compared to virtual coaching. With on-site coaching, the improvement in proficiency in reading and English language was measured to be 0.13 and 0.31 SD, respectively. However, the impact of virtual coaching was measured to be smaller, with a 0.12 SD improvement in English oral language proficiency and no improvement in English language. The study also observed an unintentional negative effect on home language literacy associated with virtual coaching. Additionally, the researchers highlighted that coaching had a more pronounced impact on the top-performing students, suggesting that they consistently derived the greatest benefit from the coaching interventions.

The study's results underscore the significance of in-person interaction for successful teacher coaching and its subsequent influence on students' academic performance. The findings suggest that on-site coaching proves more efficacious than virtual coaching in enhancing English oral language and reading proficiency within South Africa's public

primary schools. However, virtual coaching may still benefit schools with limited resources and access to professional development opportunities.

Generally, this study emphasizes the need to carefully consider the type and mode of coaching for teachers to promote their personal growth, which can positively influence learners' academic achievement. The findings call for more research on the effectiveness of virtual coaching as a viable option for teacher professional development, especially in low-resource settings.

Ajani (2018) carried out a study to investigate the impact of in-service PD activities on the academic performance of secondary school students in Lagos, Nigeria. The study examined the influence of in-service training programs for teachers on students' academic achievement. The study's findings showed that well-designed and relevant professional development activities positively impacted on the instructional task delivery of teachers. As a result, students showed improvement in their academic performance in both internal and external examinations. The research findings also suggested that in-service professional development is a crucial factor in achieving quality education. The reason for this is that on-site coaching allows teachers to acquire current and practical knowledge and skills that can improve academic excellence in teaching and learning.

The study suggests that well-designed in-service training programs are effective in improving teachers' teaching skills, which can positively impact students' academic performance. Based on the findings of the study, the paper recommends the adoption of purposeful, relevant, and learner-centered teaching skills, along with regular professional development structures for all teachers. These measures can enhance the overall quality of education and promote excellent academic performance in students.

Additionally, the study developed a model called Learner-Centered In-Service Professional Development (LIPD) to enhance the effectiveness of PD activities for teachers. The LIPD model was designed to ensure that in-service PD is practical and beneficial to school teaching and learning. The model focuses on developing teacher competence in content knowledge, pedagogy, learner diversity, educational technology, and assessment. It also emphasizes the need for ongoing teacher support through mentoring, coaching, and networking.

This study highlights the crucial role that in-service professional development plays in improving students' academic performance in Nigerian secondary schools. The results have implications for policymakers, school administrators, and teachers in Nigeria. It emphasizes the need for relevant and effective in-service professional development programs and the importance of ongoing support for teachers' professional growth.

In a study by Pearson (2015), it is shown that at the secondary school level, more autonomy was displayed among the teaching staff compared to non-teaching ones. Findings of the research study showed that autonomy is a variable that is highly confined within job satisfaction. The commitment of a training person is important among learning institutions that focus on effectiveness. Any teaching staff must feel encouraged to be a contributor to the success of students and their achievement that occurs every day. They also call for the ability to develop oneself as well as advancing in studies. For instance, Lyman Porter contributed to Maslow's Hierarchy of Needs by introducing an additional level known as "autonomy." This means the desire of an individual to perform duties on their own as they continue to take part in decisions is a creation that affects others together with the individual.

Pearson (2015) examined diagnostically the relationship between autonomy and attitudinal set as well as variables concerning work. The writer wanted to find out and

estimate the strength of the relationship between attitudinal and variables related to work and autonomy. The study used the linear combination that is the best variable that gives prediction of autonomy of a teacher. The research question was: What attitudes and factors in the work environment directly relate to the autonomy of teaching positions directly? The variables that are independent are attitudinal and demographic while variables related to work are assessed as per to change.

Kreis and Brockopp (2011) carried out an investigation on the relationship between the degree of perceived autonomy for trainers in the situations of work and job satisfaction sense. The researchers also assessed disparities between parochial and public learning institutions trainers on perceived autonomy and satisfaction with the job. The study was guided by a hypothesis that trainers who were parochial saw themselves as more autonomous than trainers in public learning institutions. The study findings revealed that indeed the parochial trainers were more likely to be satisfied with their job compared to their counterparts in public learning institutions.

In 2016, Yazici set out to examine the connection between how independent teachers are, or their "autonomy behaviors," and how they foster self-governance in their students, or their "learner autonomy support behaviors". Muğla province with its neighboring regions served as a location for this study conducted during the academic year of 2015 through 2016 with local elementary and high school educators forming part of our target population. Disproportional cluster sampling was employed as a method for selecting participants for the study which involved 428 teachers. To gather data, Yazici used two scales: the Teacher Autonomy Scale and the Learner Autonomy Support Behaviors Scale. After collecting the data, Yazici analyzed it using various statistical tools. These included descriptive statistics, t-tests, ANOVA, correlation, and multiple regression analysis. The results were fascinating.

The study found that teachers generally show a good level of autonomy in their work. They are most independent in how they communicate, while they are least autonomous in their professional development. But what about how they encourage autonomy in their students? Interestingly, the teachers believed that they often fostered self-governance in their students. Yazici found a moderate, positive link between how autonomous teachers are and how much they support learner autonomy. The aspects of teacher autonomy were able to predict 12% of the variance in learner autonomy support behaviors. The key predictors were found to be communication autonomy and teaching process autonomy. Students are more likely to develop self-governance if the teachers use independent communication and teaching practices. In conclusion, Yazici's study highlights the importance of teacher autonomy, not just for the educators themselves, but also for their ability to nurture self-governance in their students.

In Ma's 2021 research, the spotlight is on the unique motivational tools that learners possess. These inner resources can greatly boost their involvement, excitement, resilience, and ultimately, their success in educational activities. The study emphasizes that learner engagement is a crucial element that contributes to the overall triumph of students in higher education.

However, building resilience in students isn't a task they can do alone. It requires a significant effort from teachers. That's where teacher support for autonomy comes in. Ma argues that it's vital for producing the right outcomes. Moreover, teacher autonomy support is seen as a powerful predictor of students' unique resources, their motivational styles, and their academic success.

But despite its significance, few studies have examined teacher autonomy support and its substantial impact on student resilience and engagement. That's what makes Ma's review special. It tries to fill this gap by focusing on this motivational style in higher education.

The study doesn't just stop at this exploration. It goes a step further by offering several implications. These are aimed at shedding light on the issue for different stakeholders in education. These include teachers, students, those who train teachers, and those who administer education.

Therefore, Ma's study underscores the importance of teacher support for autonomy. It also spotlights how this support can nurture students' resilience and engagement, key factors that contribute to their success in higher education.

In Okada's 2021 study, an extensive meta-analysis was carried out with a particular aim. The goal was to uncover how much influence perceived teachers' autonomy support has on the academic success and motivation of students in higher education. Okada used a systematic review; 153 correlations were collected. These correlations were between perceived autonomy support and variables related to achievement. These variables included academic performance, motivation, basic psychological needs, satisfaction, and engagement.

But that's not all. Okada took it a step further by integrating these correlations. The aim was to estimate population correlation coefficients. This was done using procedures specific to meta-analysis. The results of the study provided some insightful revelations. The effect sizes, which represent the estimated population correlation coefficients, showed variations across different variables.

The study suggests that the use of autonomy-supportive methods have a significant contribution, particularly in enhancing the educational success of students in higher education. This underscores the importance of teachers fostering an environment that supports autonomy, which can help motivate students and satisfy their basic psychological needs, ultimately leading to better academic outcomes.

Kengatharan (2020) examined the relationship between teacher autonomy and job satisfaction. Using three theories—the theory of student involvement, self-determination theory, and the job demands-resource model—the study sampled 703 teachers working in state schools through a self-administered questionnaire.

Before conducting the analysis using a partial least squares-based structural equation modeling approach, the researchers conducted a confirmatory factor analysis using AMOS. The findings of the analysis indicated a positive correlation between teacher autonomy and student behavior, as well as job satisfaction. According to the study, student behavior can impact teacher job satisfaction, and this relationship is partially mediated by student engagement. The findings also suggest that teacher autonomy can play a moderating role in this relationship, as higher levels of autonomy can strengthen the positive impact of student behavior on teacher job satisfaction. These results highlight the importance of considering student behavior and teacher autonomy in promoting job satisfaction among educators.

The findings offer important insights into the link between teacher autonomy, student conduct, student engagement, and teacher job satisfaction, making the study's practical implications for the education sector noteworthy. These results might be used to the development of techniques that would improve student conduct and engagement, boost teacher autonomy, and improve teacher job satisfaction, all of which would eventually improve student learning outcomes. These findings can guide policymakers and educational institutions in developing strategies to improve teacher satisfaction, which can ultimately lead to better educational outcomes for students. By understanding these relationships, educational institutions can take steps to promote teacher autonomy, encourage positive student behavior, and increase student engagement, which can ultimately lead to higher levels of teacher job satisfaction.

However, the study is limited in some cases, including the utilization of self-reported data and the fact that the study was limited to state schools. To improve upon the limitations of the study, future research could consider using a larger and more diverse sample, as well as incorporating additional variables that may impact the relationship between teacher autonomy and teacher satisfaction.

Bonneville-Roussy, Hruska, and Trower (2020) investigated the relationship between music performance teachers' autonomy support and the well-being of their students using self-determination theory (SDT) and the PERMA model of well-being. The study aimed to investigate the provision of autonomy support by music performance teachers to their students in higher music education and how it affects their well-being. The research team aimed to answer these three primary questions and provide insight into the impact of autonomy support on music students in higher education.

The authors collected data from 35 music performance teachers and 190 students from higher music education institutions in the UK. They employed mean comparisons and correlational and qualitative analyses to interpret the data.

The findings revealed that music performance teachers and students agreed that teachers support their students' autonomy. The study found that teachers who demonstrated a passion for music and exhibited autonomy-supportive behaviors positively influenced their students' well-being. In contrast, teachers who displayed controlling behaviors had a negative impact on their students' well-being. These results highlight the importance of teachers' attitudes and behaviors towards music education in promoting students' well-being. The qualitative results revealed that students prioritize their well-being, while music teachers seemed unprepared to address such concerns effectively.

This study provides valuable insights into the importance of autonomy support in music education. By encouraging autonomy, music performance teachers can help foster their students' well-being, resulting in better learning outcomes. However, the findings also indicate the need for music teachers to pay more attention to their students' concerns and develop effective strategies to address them.

In 2020, Cheon, Reeve, and Vansteenkiste carried out two empirical research studies to assess the impact of an intervention created to assist physical education (PE) teachers in providing autonomy support and structure in an autonomy-supportive manner. In the initial study, a group of physical education teachers at the secondary level were randomly selected to participate in an intervention, while others were not included. The results indicated that those who received the intervention experienced improvements in all five expected benefits, such as teaching efficacy and job satisfaction, over a period. In the second study, the researchers examined the intervention's impact on participating in teachers' students. The study's results showed that students who had teachers who received the intervention showed long-term improvements in all four predicted benefits, which included classroom engagement and skill development.

The results of both studies suggest that providing structure in an autonomy-supportive way can lead to positive outcomes for teachers and students. The intervention provided PE teachers with the tools to support student autonomy while maintaining a structured learning environment. This approach appears to have led to increased teacher job satisfaction and teaching efficacy and improved student engagement and skill development.

These studies have significant practical implications for the education and training of physical education (PE) teachers. It is crucial for educators and trainers to emphasize teaching teachers how to promote student autonomy while also providing structure in a

way that supports autonomy. Such an approach can lead to positive outcomes for teachers and students, ultimately improving the overall quality of education.

However, it is worth noting that the intervention used in these studies was designed explicitly for PE teachers, and it is unclear whether similar interventions would be effective for teachers in other subject areas. Future research could explore the applicability of this approach to other educational contexts.

Weiqi (2007) provided an analysis of the elements constituting job satisfaction and its effects on teacher attrition and work enthusiasm. The researcher delineated the basic components of job satisfaction as a crucial theoretical and measurement basis. The theoretical perspective came from researchers including Vroom, Friedlander, and Locke (1976), who employed factor analysis to interpret the structure of job satisfaction. The study sought answers to questions such as: (a) What is the basic structure of secondary learning institution teacher job satisfaction? (b) What leads to job satisfaction among secondary learning institution teachers? (c) What components of the job are crucial for secondary learning institution teachers? (d) What factors could accelerate work enthusiasm among secondary learning institution teachers? and (e) What links are there between secondary learning institution teachers' job satisfaction and retention? This demonstrates the specific indicators that can be used in measuring the concerns raised in teachers' autonomy against students' achievement.

Rivkin, Hanushek, and Kain (2006) revealed that differences in teacher quality were the foremost determinant of variances in both student study habits and Mathematics achievement. Conversely, Jordan, Mendro, and Weerasingle (2007) highlighted discrepancies between students who benefited from three consecutive highly effective teachers, leading to substantial student improvement, and those who were exposed to three consecutive low-effect teachers, resulting in minimal student progress. There is

increasing interest in the professional improvement of those providing education as the requirements, expectations, and demands of secondary teachers continue to come under scrutiny (Louhran, 2014). Teachers' personalities affect the entire learning process. Positive personality teachers are more likely to produce students who perform better (Akiri, 2013).

Teachers are more likely to remain engaged and committed to their profession when they perceive that their contributions positively impact on their educational institution and students, thus fostering their interest and reducing turnover rates. Research by Louis and Kruse (1995) underscored the pivotal role of school-level leadership in cultivating professional communities among educators. Additionally, factors such as teacher morale, efficacy, working conditions, and professional autonomy are crucial elements influencing teachers' emotional well-being, as highlighted by Hargreaves (2010). Principals who embody traits such as honesty, communication, participation, and collegiality, while also demonstrating supportiveness and reasonableness in their expectations, are preferred by teachers, as noted by Day et al. (2010). Such leaders collaborate with teachers rather than exerting control, fostering a shared vision for the school's success.

The findings of the Organization for Economic Co-operation and Development (OECD) (2013) suggest that school autonomy can be achieved in four main areas: curriculum and assessment, personnel, resource allocation, and governance and accountability.

Mahoney and Watson (2003) contend that the employee model of workplace governance involvement yields the most advantageous impact on performance. This perspective implies that decentralized decision-making and flexible regulations lead to enhanced performance outcomes. Consequently, teachers bear the responsibility of executing decisions formulated at the school level: therefore, involving teachers in the decision-

making process can benefit learning institutions. As a result, teachers may develop a sense of ownership and agency over their work, fostering a heightened sense of accountability for educational institution enhancement. Numerous research studies consistently illustrate the advantages for organizations when individuals involved in decision implementation actively contribute to problem-solving and decision-making processes (Howey, 2008).

Schneider (2004) postulated that authentic engagement of teachers in decision-making processes is associated with heightened job satisfaction and productivity. This hypothesis delved into understanding the relationship between teacher job satisfaction and their active participation in decision-making within educational settings. Environments characterized by open communication channels and principals perceived as democratic leaders tend to foster higher levels of satisfaction among teachers compared to institutions where principals adopt rigid and authoritarian approaches (Kottkamp, Mulhern & Hoy, 2007). Consequently, these conducive climates are conducive to performance enhancement, aligning with the central focus of the present study.

By emphasizing the importance of genuine teacher involvement in decision-making, Schneider's proposition highlights the significant role that organizational climate and leadership style play in shaping teacher satisfaction and ultimately influencing productivity levels. The findings underscore the potential benefits of fostering collaborative and participatory decision-making processes within educational institutions, not only in terms of job satisfaction but also in promoting overall performance improvement among teachers and consequently enhancing educational outcomes for students.

Maeroff (2008) and Rossmiller (2002) underscore that literature confirms a positive correlation between job satisfaction, participative decision-making, and transformational

leadership. Teachers typically exhibit greater job satisfaction when they view their principal as someone who shares information, wields authority, and fosters open communication with the staff. Conversely, reduced teacher involvement in decision-making tends to coincide with lower satisfaction levels (Imper et al., 2010; Rice & Schneider, 2004).

Outstanding principals distinguish themselves by actively involving teachers in decision-making processes. They demonstrate deliberate and introspective behaviors to support professional development, thereby creating avenues for teachers to implement ideas and initiatives derived from reflective practice. This collaborative approach fosters a culture of continuous improvement and innovation within the school community, ultimately enhancing student learning outcomes.

Empowering teachers to actively participate in decision-making regarding their roles fosters creativity and encourages a willingness to take risks. When teachers are involved in decision-making processes, they are more likely to take ownership of implementing decisions, experiment with new instructional approaches, offer additional support to students, and demonstrate flexibility in their teaching methods. Principals can support this by providing teachers with autonomy and flexibility in decision-making within their respective areas of expertise. By creating an environment where teachers feel empowered and valued, they are more motivated to exert effort towards achieving improved outcomes for their students.

In their study, Ekatushabe, Kwarikunda, Muwonge, Ssenyonga, and Schiefele (2021) explored the correlation between perceived teacher autonomy support (PTAS), cognitive appraisals, and learning-related boredom in the context of physics. The research

specifically sought to investigate potential gender differences and unravel the structural relationships among these variables.

The physics domain has not received sufficient attention in researching potential antecedents of boredom during learning activities, despite its potential to impede attention, motivation, learning, and achievement. The CVTAE was used as a framework to understand the relationships between the variables in the study.

In this study, 375 ninth-grade students, with females comprising the majority at 56%, were randomly sampled from five secondary schools situated in the Masaka district of Uganda. These students participated by completing standardized instruments designed to self-report their perceptions of perceived teacher autonomy support (PTAS), cognitive appraisals, and boredom experienced during physics learning.

The study revealed that students with elevated levels of self-efficacy, task value, and perceived teacher autonomy support (PTAS) tended to experience less boredom during their physics lessons. Additionally, female students exhibited a stronger perception of the value of learning physics compared to their male counterparts. Furthermore, the findings indicated that self-efficacy and task value partially mediated the relationship between PTAS and boredom, underscoring the importance of cognitive appraisals in this association. Notably, PTAS demonstrated significant direct negative effects on boredom.

The study's results suggest that encouraging autonomy in students through modifications in instructional practices among physics teachers is essential. The teachers' behaviors that support autonomy influence the formation of students' beliefs about their capabilities, interest, and boredom during physics learning. The study highlights the need for teachers to consider gender differences and adjust their instructional strategies to

support both male and female students. Parker et al. (2021) conducted a research study to explore the relationship between perceived teacher autonomy support, the expression of self-determination skills, and student engagement among African American high school students in Grades 9 through 12.

The study aimed to investigate possible gender differences in these relationships. The research included a sample of around 145 high school students who were African American, with approximately equal representation of females and males. The study found no significant differences in perceived teacher autonomy class engagement as well as self-determination between male and female African American students.

Using regression analysis, the researchers investigated whether perceived teacher autonomy support and self-determination skill expression could predict students' class engagement. The results found that the positive effect of perceived teacher autonomy support on student engagement was partially explained by the mediating role of self-determination skill expression.

These findings suggest that the positive influence of teacher autonomy support on student engagement may be linked to the cultivation of self-determination skills among students. The implications of this study are significant for teaching practices in African American high schools, indicating that teachers who offer autonomy support and foster self-determination skills could boost student engagement in the classroom. Consequently, promoting strategies for autonomy support and self-determination skill development among African American high school students is crucial, and educators should receive training to implement these strategies effectively. Additionally, considering the minimal involvement of teachers in active decision-making in some Kenyan schools, there may be an opportunity to explore and implement approaches that enhance teacher autonomy and involvement in decision-making processes.

The absence of staff meetings where teachers can freely discuss educational matters and the imposition of policies by principals can create a disconnect between teachers and the policies, hindering effective implementation due to a lack of ownership. Consequently, this dynamic can demotivate teachers, resulting in poor performance among students in affected schools (MOEST, 2013). As a result, there is a need to investigate the impact of teachers' autonomy on student achievement in public secondary learning institutions to understand how autonomy factors into overall educational outcomes.

2.1.8 Teachers' sense of purpose on Learners' Achievement

According to Travis (1995), many students start to despise the institution and its educational activities from their formative years in basic learning institutions. This distaste is partly explained by the unfavorable school climate, the conduct of the instructors, and the actions of the administration during the educational process.

The research argues that despite the suggested primary goal of learning institutions being learning, visible outcomes may include student resistance to studying. A child's home and family setting, their ethnic and cultural background, and the educational institution itself can all contribute to their disengagement from studying. A system of rules and procedures that are intended to preserve order, guarantee the educational process, and provide a secure environment are part of the administrative supervision of activities within a learning institution.

Although this paradigm has advantages, it frequently places a higher priority on control than education. According to Silberman (1970), a fixation on control undermines confidence and penetrates educational institutions' structures, resulting in rule breaking and student disciplinary measures. Many people believe that this disciplinary approach is incompatible with the fundamentals of educational institutions. Kozol (1967) pointed

out that the term "discipline" has been used to refer to both mental and physical harshness.

Furthermore, according to Travis (1995), disciplinary issues are among the top three causes of school dropouts. Discipline enforcement in our schools is notably inconsistent, and a lack of disciplinary action on its own can lead to student estrangement. It is reasonable to expect that students will react negatively to such discrepancies. Students may soon become dissatisfied with their educational environment if punishment and consequences are applied inconsistently (Travis, 1995).

Furthermore, a crucial aspect, similar to all models for healthy psychological development, is the need for belonging. Students need to feel a sense of purpose as members of the learning institution community (Larrivee, 2010). The presence of caring and supportive relationships with adults has been identified as a protective factor promoting resilience in young people. While most studies on this issue focus on parent-child relationship, educators have also been recognized as important role models in students' lives (Garmezy, 2011; Werner, 1993). Edwards (1995) suggests that until educators feel a strong sense of purpose and belonging within the learning institution, they cannot foster the same feeling in students. Historically, learning has been embedded within personal relationships and meaningful community activities. Education occurred within strong community bonds where dependence was common. Ryan and Powelson (2011) suggested that the increasing isolation of children from their parents has led to the development of unique youth cultures within schools, separate from the world of jobs and adult social interactions.

Students want teachers that address both the cognitive and emotive aspects of teaching and learning, according to research. The finest teachers, according to students, are those that show them respect and acknowledgement, which increases their desire to study.

Fifty-four students from four secondary schools in two California districts were interviewed by Stanford University's Center for Research on Secondary Education (Phelan et al., 2012).

Many of these first-year students expressed a need for caring teachers, particularly those they knew well. They also indicated a desire for challenging tasks without unnecessary criticism from their instructors or peers. These signs reflect a sense of purpose, which was further explored in the current study.

It appears that students want more from their teachers than just academic education; they also want to feel like they belong in their classrooms (Phelan et al., 2012). Teachers who help children develop a sense of purpose are more caring and supportive, spending a lot of time listening to their students and talking with them about social and personal issues (Solomon et al., 1997).

Lescroart and Sharma's (2022) observational study aimed to investigate how teachers' sense of purpose in life influences high school students' sense of life purpose and their academic performance. The study specifically examined whether this relationship was direct or indirect through the students' academic identity. The research involved a survey completed by 234 high school students, assessing their sense of life purpose, academic identity, and grades.

The findings, obtained through structural equation modeling, revealed an intriguing pattern. It was observed that the direct association between students' purpose of life and their grades did not reach statistical significance. However, there was an indirect relationship between these two factors through academic identity. In other words, students who possess clear goals and objectives in life often develop positive self-perceptions as learners, which can positively influence their academic performance.

The chapters began by focusing on teachers' psychological well-being, transitioning from considerations of biological composition to a blend of both control roles and psychological appraisal. The amalgamation of results from various statistical studies of teachers' psychological well-being reveals suppressive emotions regarding teacher wellness, particularly in the long run (Herbert & Cohen, 1993; Zorilla et al., 2001). Regarding work prevalence, teachers' psychological well-being was examined in terms of gender and personal disparities. In a study on gender differences conducted by Stone et al. (1990) on teachers' psychological well-being feedback, they opposed the neat physiological-related gender differentiation and found that women exhibited higher reactivity when six measures of teachers' psychological well-being were used. They concluded that there was a slim gap of gender-based physiological reactivity, and the assessment of teachers' psychological well-being was nearly identical. Thus, researchers discovered the roles of gender and psychological factors.

Langer's (2000) study explored the characteristics of effective schools and districts that led to higher student achievement in writing, reading, and English. Over the course of five years, the study was conducted in 44 middle and high school classrooms situated in 25 schools and districts across four states. These schools and districts were primarily focused on enhancing the literacy skills of their students, with a significant representation of institutions serving underprivileged and traditionally low-achieving students. According to the study, schools and districts that were successful in enhancing student achievement had established a positive climate that encouraged collaborative efforts. These institutions also facilitate teacher engagement in different professional communities, such as attending workshops, collaborating with colleagues, and engaging in ongoing professional development. The authors developed structured activities for professional development that provided teachers with a sense of control and value for

their teaching commitment. The study highlighted that effective schools and districts demonstrated a culture of support and encouragement for both colleagues and students, emphasizing the importance of lifelong learning. This culture of continuous learning and support was evident across all levels of the institution, from central administrators to classroom teachers. Effective schools and districts viewed these features as evidence of professional excellence and worked to cultivate them in their professional lives. Schools and districts can create a culture of achievement that benefits both teachers and students by fostering a positive climate that promotes collaboration, ongoing learning, and a commitment to excellence.

The relationship between a teacher's life purpose and students' academic success was a crucial component of the study's conclusions. According to the study, educators who have a strong sense of purpose in their work are more likely to foster a supportive learning environment where kids can accomplish well academically. Effective teaching practices that promoted high levels of learning were more likely to be used by teachers who saw their job as a chance to positively impact their students' lives and felt obligated to support their academic achievement.

The study further highlighted the importance of creating a caring attitude towards colleagues and students in fostering high levels of academic achievement. Student achievement was facilitated by teachers who prioritized establishing relationships with both their pupils and colleagues. This led to a collaborative and encouraging learning environment.

Additionally, the study emphasized the importance of lifelong learning in promoting high levels of academic achievement. Teachers who continuously sought to improve their knowledge and skills were better equipped to implement effective teaching strategies that enhanced student learning.

In a study published in 2020, Lavy and Gaama-Ghanayim examined the relationship between student-teacher relationships and academic accomplishment, with a focus on the effect that instructors' concern for their pupils plays. This study sought to investigate the possible importance of teachers exhibiting concern for their pupils, whereas previous research has mostly focused on the interactions and teaching strategies of teachers.

In this study, researchers analyzed data from a sample of 675 high school students aged 15-17 and their 33 homeroom teachers. According to the results, there was a notable connection between how students viewed their teachers' compassionate behavior and their self-confidence, general welfare, and involvement in school activities. Moreover, the results also suggested that the quality of the relationship between the tutors and the learners acted as a mediator in these associations, implying its significance for students' academic outcomes.

In addition, the study discovered that students' evaluations of their teachers' caring demeanor were linked to the teachers' sense of significance in their jobs. This implies that the teachers' sense of mission in their profession may increase their capacity to care for their students.

The study's findings emphasize how crucial teacher-student relationships—more especially, teachers' concern for their students—are to fostering successful academic achievements. The study also emphasizes how a teacher's sense of purpose may play a part in their work because it seems to be connected to their concern for their students.

A study conducted in 2022 by Paul and Jena delved into the dynamics of workplace spirituality (WS) and its impact on the professional well-being (TPW) of teaching professionals in Indian higher educational institutions. With sample size comprising 345 participants, the research aimed to unravel the intricacies of how WS influences TPW, particularly by examining the mediating role of positive psychological capital (PPC).

Employing advanced statistical techniques such as covariance-based structural equation modeling and mediation analysis, the researchers meticulously analyzed the collected data. Additionally, they employed the validation approach proposed by Preacher and Hayes (2008) to ensure the robustness of their findings.

The study's findings unveiled a notable positive association between workplace spirituality and teachers' professional well-being. Specifically, it highlighted a significant positive correlation between WS and TPW, suggesting that heightened experiences of workplace spirituality were linked to enhanced professional well-being among teachers. Furthermore, the research revealed that positive psychological capital (PPC) played a mediating role in this relationship, indicating that the influence of workplace spirituality on professional well-being was partially explained by the presence of positive psychological resources, suggesting that positive psychological resources play a crucial role in enhancing the positive effects of workplace spirituality on teachers' professional well-being. The study highlights the importance of teachers' psychological well-being in teaching and suggests that psychologically clear and receptive minds are essential for effective teaching.

The study's implications for a teacher's sense of purpose in life and learners' academic achievement are significant. The findings suggest that teachers' sense of spirituality can positively impact on their professional well-being, which in turn can enhance their teaching effectiveness. When teachers have a sense of purpose and meaning in their work, they are more likely to be motivated, engaged, and committed to their roles as educators, which can positively impact their students' academic achievement. Additionally, when teachers are psychologically well, they are better able to manage stress and cope with the demands of their profession, which can lead to a more positive and productive classroom environment. The study underscores the importance of

supporting teachers' well-being and spirituality to promote effective teaching and positive student outcomes.

Associations such as those cited by Pianta and Walsh (1996) help learners obtain a sense of purpose and participate in academic work that is meaningful. Meier (2012) underscores the necessity of caring associations with trainers as a requirement for secondary learning institutions level reform. When questioned about the qualities of trainers that influence the success of learners, concern and status of trainers, rather than skill alone, has been consistently cited for three decades (Rogers, 2012; Witty, 1967). Trainers in compassionate educational settings intentionally guide students in a variety of subjects. To encourage pro-social behavior, their rhetoric, ethnicity, social behavior, and civic engagement are incorporated into the official curriculum, often through the use of ethics or character education courses. Throughout the day, trainers in these settings casually discuss interpersonal concerns and incorporate the message of pro-social behavior into academic programs. This creates a respectful atmosphere where students are welcomed for who they are (Baker et al., 1997).

According to research, learning institution communities are essential for giving students a feeling of direction. According to Sergiovanni (2012), community is defined as the logical connections that enable people to express common beliefs and goals while working toward a common objective. These connections are essential components of purpose.

Khumalo's study in 2019 likely involved examining the behaviors of primary school principals within the framework of transformational leadership. This might include assessing how principals communicate their vision, empower teachers, provide support and encouragement, and promote professional growth. Teacher commitment is essential for providing quality primary education and achieving sustainable development goals,

making this a significant study area. The sample size of 95 out of 150 teachers is a respectable portion and should provide a reasonable representation of the population. It's essential to ensure that the sample is diverse enough to capture a range of perspectives and experiences. Based on the principles of transformational leadership, Khumalo's (2019) research concludes that primary school principals who embody the character of commitment can inspire and encourage teachers to demonstrate commitment. This, in turn, fosters a culture of commitment that serves as a basis for achieving sustainable development goals in primary education.

Indeed, the findings of Khumalo's study underscore the significance of transformational leadership in promoting teacher commitment, which in turn can yield numerous positive outcomes within educational settings.

Teachers are more likely to be interested, motivated, and invested in their students' achievement when they have a strong sense of commitment to their work. Because teachers are more motivated to go above and beyond to meet their students' learning needs, this increased degree of dedication can result in better academic accomplishment.

The report also highlights how important primary education is to reaching sustainable development goals and how important teachers are to delivering high-quality instruction. The study found that a strong sense of purpose in their work is what motivates dedicated teachers. Teaching requires a strong feeling of dedication and purpose, making it more than just a job. In the study, the idea of a teacher's life purpose is also examined. Teachers who are dedicated to their work are more likely to view it as a calling than merely a way to make a living. This sense of purpose can further increase their drive and dedication, which will improve their academic performance and general well-being.

The 2022 study by Cansoy, Parlar, and Polatcan seems like a significant contribution to the body of knowledge regarding teacher commitment and educational leadership. They

sought to shed light on the ways in which leadership practices affect teachers' attitudes and behaviors by analyzing the relationship between instructional leadership by school principals and teacher commitment as well as the mediating function of collective teacher efficacy.

The activities principals do to encourage teaching and learning inside their schools are referred to as instructional leadership. This can involve establishing academic objectives, giving teachers tools and assistance, keeping an eye on teaching methods, and encouraging a continual improvement culture.

Teacher commitment, as mentioned earlier, pertains to the dedication and engagement of teachers towards their profession, their school, and their students. It's a crucial factor in determining teacher effectiveness and job satisfaction.

The study by Cansoy, Parlar, and Polatcan, which was based on a survey of 247 teachers, offers important new information about the connections between teacher commitment, collective teacher efficacy, and instructional leadership behaviors displayed by school administrators. The results highlight how crucial good leadership techniques are in influencing the attitudes and actions of teachers in educational settings.

The study's finding that teacher commitment is significantly predicted by the instructional leadership behaviors of school administrators is consistent with other studies emphasizing the critical role that leadership plays in creating a healthy school environment and culture. Teachers are more likely to feel dedicated to their school and children when administrators exhibit effective instructional leadership, which includes establishing clear academic goals, offering resources and support, and creating a collaborative learning atmosphere.

This emphasis on instructional leadership as a key determinant of teacher outcomes aligns with current trends in educational leadership research, which increasingly

recognize the critical role of principals in shaping school culture and climate. Principals who prioritize instructional leadership are better positioned to create environments where teachers feel supported, motivated, and empowered to collaborate effectively.

The study findings have significant implications for promoting teacher commitment and, by extension, academic achievement. The argument made by the authors is compelling and aligns with contemporary understandings of effective educational leadership. They assert that the instructional leadership behaviors exhibited by school principals are pivotal in fostering teacher commitment, and this can be accomplished by cultivating a culture of collective teacher efficacy.

Instructional leadership encompasses a range of practices aimed at improving teaching and learning within schools, such as setting clear academic goals, providing support and resources for teachers, and promoting collaboration and professional development. When principals prioritize instructional leadership, they create environments where teachers feel valued, supported, and empowered to excel in their roles.

The authors suggest that school principals should prioritize instructional leadership practices that promote collaboration and a shared sense of efficacy among teachers. This would enhance teacher commitment and result in improved academic achievement among students.

According to Moss (2011), classrooms that prioritize task performance and competition above warmth can nonetheless provide satisfying results. These classes are less successful in encouraging student creativity by offering parental care. Anxiety and absence among students are encouraged by cultures that are competitive and controlling. It is important to remember that both teachers and students can be greatly impacted by the feeling of purpose that educational institutions foster.

According to Moss (2011), a high school's social structure, namely how much it promotes a feeling of community, can have an impact on students' learning results and the working environment for instructors. Employee morale is raised by the fact that trainers in communal learning institutions are probably happier with their jobs and that students think they like their role in teaching. Improved student achievements were linked to teachers' strong sense of school community (Moss, 2011).

2.2 Theoretical Literature Review

The current study was guided by Ryff's psychology model and complemented by the Production function theory. Ryff's model derived the independent variables while the production theory guided on measure and study of the dependent variable, learner's achievement.

2.2.1 Ryff's Model of Psychological well-being

The Ryff model served as the foundation not only for deriving the independent variables but also for measurement purposes. The Ryff Scale of Measurement outlines how respondents of a questionnaire statement can be scaled (Ryff, 1989). The scale ranges from 1 to 6, where 1 denotes strongly disagree, while the highest score of 6 denotes strongly agree with the respective statement.

Ryff's model (1989a) has been widely used by researchers interested in studying psychological well-being and has provided a comprehensive framework for understanding the various dimensions of human flourishing. However, like any theoretical model, it has also come under discussion and scrutiny.

Critics have raised concerns about the cultural and contextual applicability of the model, suggesting that it may not capture the full diversity of human experiences across different cultures and socio-economic backgrounds. Additionally, some researchers have questioned the measurement validity and reliability of the instrument developed by Ryff to assess these dimensions of well-being.

Despite these criticisms, Ryff's model continues to be a valuable framework for research and practice in positive psychology, providing a holistic perspective on psychological well-being and offering insights into the factors that contribute to a fulfilling and meaningful life. Researchers continue to explore and refine the model, taking into account diverse cultural perspectives and methodological considerations.

It's interesting to note that Springer and Hauser (2006) doubted the validity of Ryff's theory of psychological well-being. Instead, their study postulated four aspects of wellbeing - self-acceptance, personal growth, purpose in life, and environmental mastery – could be a mono-dimensional instead of distinct constructs as proposed by Ryff.

This finding challenges the conventional understanding of psychological well-being and highlights the need for further research to clarify the structure of well-being. To address this issue, the current study you mentioned took a proactive approach by ensuring that each category had not less than ten questions. This strategy aimed to enhance the internal consistency of the measurement instrument and provide more robust assessments of the individual dimensions.

The Ryff Scale became the cornerstone of the study by outlining the six major aspects of psychological well-being. These aspects were conceptualized into teacher classroom performance for better achievement through teachers' autonomy, the teacher acquiring environmental mastery, developing a purpose in life, experiencing personal growth, as

well as self-acceptance. High scores for the various statements derived from the psychological aspects of the teachers defined their levels of psychological well-being.

Ryff describes the meaning of the scores for each individual psychological aspect. A high score in autonomy is seen as the ability to regulate behavior independently. For example, research participants were asked whether they have confidence in their own opinions. In environmental mastery, the participants are assessed on their level of utilizing available opportunities and effectively maneuvering in the environment. On the other hand, personal growth describes how one continues to form and learn from new experiences that positively contribute to their behavior. Purpose in life is described as the level to which one has goal orientations and considers them meaningful. The purpose in life is concerned with focusing on goals and finding them meaningful, while self-acceptance focuses on maintaining a positive attitude for growth.

Contributing and Demeaning factors for psychological Growth

Seifert (2005) points out the possible contributing and demeaning factors for psychological wellbeing. Positive contributing factors may appear from life experiences such as marriage and job satisfaction. These aspects are deemed important in the course of facing a challenge such as threat where the individual retains confidence and thus overcomes the threats (Taylor & Brown, 1988). On the other hand, negative contributing factors for psychological wellbeing relate to unfulfilling contexts where negative social outcomes demean one's feelings. Such matters can be disabilities and ailments. The way that the results of Schultze-Lutter et al. (2016) fit into parts of Ryff's concept of psychological well-being and Martin Seligman's PERMA model is intriguing. Key aspects of well-being in both models are shown in educators' realization of the importance of maintaining optimism and positivity, especially through acknowledging one's limitations and handling challenging circumstances in a constructive manner.

First of all, maintaining optimism and positivity is in line with the PERMA model's positive affect dimension, which highlights the significance of feeling happy, thankful, and hopeful. Positive thinking and optimism are vital elements of wellbeing because they support adaptive coping mechanisms and resilience in the face of hardship.

Secondly, the recognition of one's limitations and coping with difficult situations positively corresponds to the self-acceptance dimension in Ryff's model. This dimension emphasizes the importance of acknowledging and accepting oneself, including recognizing one's weaknesses and imperfections, while maintaining a positive attitude and self-regard.

This emphasizes the significance of encouraging positive thinking and self-compassion among educators to support their overall well-being and effectiveness in their roles. Teachers can develop resilience and self-acceptance by accepting their limitations and adopting a positive and optimistic outlook. These traits are essential for preserving psychological well-being in demanding and challenging environments.

Following Ryff and Keyes' (1995) proposal to reduce the six theoretical dimensions of psychological well-being to five dimensions, the observation that self-acceptance and environmental mastery could be combined into one dimension due to a high correlation supports their visitation and investigation into the structure of psychological well-being, which showed that combining certain dimensions could reduce redundancy and improve conceptual clarity.

In Ryff's original model, self-acceptance refers to an individual's positive attitude towards oneself, including self-respect and self-confidence, while environmental mastery involves effectively managing and adapting to the demands and challenges of one's environment.

However, if self-acceptance and environmental mastery are highly correlated, it suggests that individuals who have a positive attitude towards themselves also tend to be adept at managing their environments and vice versa. In this case, combining these dimensions into one broader dimension may capture the underlying construction more accurately and efficiently.

Ryff et al.'s (2021) clarification provides valuable insights into the distinctiveness of each dimension within the model of psychological well-being. While previous research suggested the possibility of combining certain dimensions due to high correlations, Ryff et al. emphasized the unique challenges and experiences captured by each dimension.

In their clarification, Ryff et al. underscore that each dimension of psychological well-being represents different facets of positive functioning and personal growth. Self-acceptance, for example, involves not only recognizing one's limitations but also embracing them with positive feelings and attitudes. This dimension highlights the importance of self-awareness, self-compassion, and self-acceptance in fostering psychological well-being.

Ryff and Keyes' (1995) emphasis on the multidimensional nature of psychological well-being is particularly important in diverse and complex social environments. They underscore that well-being extends beyond mere happiness and satisfaction with one's life to encompass a range of dimensions that reflect positive functioning and personal growth.

In such environments, individuals face various social pressures and challenges that require them to manage their autonomy effectively. Autonomy, as a dimension of psychological well-being, reflects the individual's ability to navigate social pressures,

assert their independence, and make decisions in line with their own values and goals. This dimension is crucial for maintaining a sense of agency and self-determination in the face of external influences.

Psychological wellbeing may also be affected by psychological needs which may be extrinsic or intrinsic. Ryff's model depicts that financial stability can aspire people to score highly on a Ryff scale on wellbeing. Individuals may be afflicted to certain people or institutions to manifest their fulfillment

using the Scale of Psychological Well-Being (SPWB) in diverse cultural contexts, particularly in non-Western settings such as mainland China, Iran, and Hong Kong. However, as Gao and McLellan (2018) pointed out, the factorial structure of the SPWB may vary depending on the characteristics of the sample being studied.

In the case of adolescent studies in mainland China, Iran, and Hong Kong, there have been attempts to utilize the SPWB to assess psychological well-being. However, the results and findings regarding the construct validity of the SPWB in these contexts have been mixed.

In mainland China, studies such as those conducted by Li (2014) reported inconsistent findings regarding the construct validity of the SPWB. This suggests that while the SPWB may have been used in Chinese contexts, there are challenges in establishing its validity and reliability, possibly due to cultural differences and variations in sample characteristics.

Similarly, in the case of Iran, studies such as Lavasan's (2011) did not provide much information on the construct validity of the SPWB, indicating a lack of clarity regarding its applicability and effectiveness in assessing psychological well-being in Iranian adolescents.

On the other hand, the study conducted in Hong Kong by Chan (2017) promised evidence of using the SPWB with adolescents. While this study may offer insights into the potential applicability of the SPWB in a non-Western context like Hong Kong, it's essential to consider the specific cultural nuances and sample characteristics that may influence the validity and reliability of the scale.

The present study attempted to validate the Scale of Psychological Well-Being (SPWB) and use Ryff's theoretical model to examine teachers' psychological well-being and how it affects students' academic performance, which is consistent with the findings of Gao et al. (2018) about the benefits of the six-factor model of psychological well-being that fully encompasses various facets of positive functioning.

With elements like self-acceptance, constructive interpersonal connections, autonomy, environmental mastery, life purpose, and personal development, Ryff's theoretical model offers a strong foundation for comprehending psychological well-being in a variety of settings and demographics.

By utilizing this model, the current study aims to explore various facets of teachers' psychological well-being and their potential influence on learners' academic achievement. This holistic approach recognizes the interconnectedness of different dimensions of well-being and their implications for individual and collective flourishing.

Additionally, Ryff's model is relevant and applicable in non-Western contexts, as demonstrated by Gao et al. (2018)'s study of adolescents in mainland China, which makes it a promising theoretical framework for examining psychological well-being across various demographic and cultural groups.

The application of Ryff's theoretical model of psychological well-being has been difficult because there is conflicting information regarding the measures' psychometric soundness in various circumstances. In order to tackle this problem, future research that looks into

how instructors' psychological health affects students' academic performance should use a number of tactics to improve the model's operationalization.

Firstly, researchers could develop age-specific items tailored to the developmental needs and experiences of teachers and learners. Psychological well-being may manifest differently across different age groups, so having age-appropriate measures ensures that the relevant dimensions of well-being are accurately captured for each group.

Secondly, considering the significant role of cultural and contextual factors in shaping psychological well-being, future studies should develop context-appropriate items that reflect the unique cultural and social dynamics of the target population. This may involve conducting qualitative research to identify culturally relevant constructions and experiences related to psychological well-being.

Thirdly, rigorous psychometric validation is essential to ensure the reliability and validity of the measures used to assess psychological well-being. Future studies should conduct thorough psychometric analyses, including factor analysis, reliability testing, and validity testing, to establish the quality of the measures in the specific context of interest.

Lastly, longitudinal studies that track changes in teachers' psychological well-being and learners' academic achievement over time can provide valuable insights into the causal relationships between these variables. By examining how changes in teachers' well-being influence changes in learners' academic outcomes, researchers can better understand the mechanisms underlying this relationship.

In the current study, as teachers relate with the students in the schools, the development of relationships become essential in effectiveness of teaching and learning that form the basis of excellent academic performance. Higher subjective wellbeing is seen among teachers who seek out tasks that challenge their abilities. By so doing, they pass the same

to the students who benefit more in terms of academics and which translate to better academic outcome.

2.2.2 The Production Function Theory

The current study was also guided by the Production Function Theory. In the Production Function Theory, Collier (1994) explored educational production function analysis of schools in Texas and found two issues facing Texas public education as financial constraints and decline in the achievement of students. The study shows that the questions on the relationship between financial constraints and students' achievement continue to be significant. The study is justified by the need to know the characteristics of schooling that significantly determine academic achievement. The study used exogenous variables categorized as student factors, teacher factors and school factors.

Collier (1994) analyzed the relationship between the variables by examining the educational process for fifth grade students and classroom teachers. Both Cognitive and non-cognitive as outcomes of education were the endogenous variables. The study was carried out in four phases: identifying the sample, the collection of data, specifying a structural simultaneous-equation model and analyzing the collected data. The study findings showed that student teacher factors including psychological well-being factors and experience significantly influenced the students' achievement in cognitive outcomes.

Critical look at production function puts it on a (mathematical) function because of the concern that it carries in reference to it as a source of well-being (Saari, 2011). However, as a function from a mathematical point of view, the concern is customarily derived from the input and output sets. The production function is thus defined as the limit of output that can be realized from each possible combination of a given input (Mishra, 2007). Assuming that the maximum output of a teacher is obtained from given inputs into the

students without considering the technological and managerial influences, we consider the degree to which available factors can be combined. In this case of services input, the production function itself, the output- input relationship is non-monetary. This relates to the concern of teachers' well-being, which is input and the learners' academic achievement as the output. Their interlinking is illustrated in Figure 1.

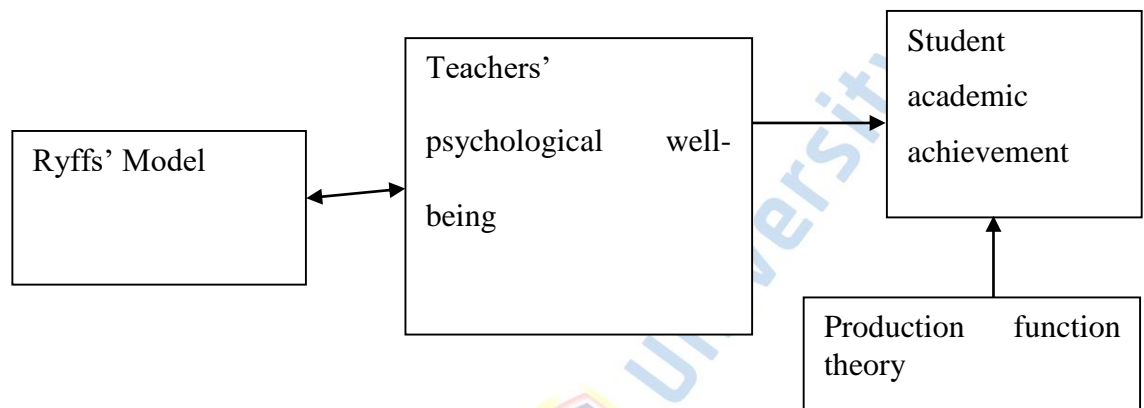


Figure 1: Theoretical framework

Source: Saari, 2011

2.3 Conceptual Framework

Miles and Huberman (2014: p18) define conceptual framework as graphical presentation that explains the things to be studied, that's relationship between independent and dependent variables. In figure 2 variables to be examined include The degree of autonomy, self-efficacy, interpersonal relationships, personal development, and sense of purpose in life of instructors are all evaluated in relation to the academic performance of students in public secondary schools. Conceptual framework Figure 2 illustrates the relationship between the variables for the study.

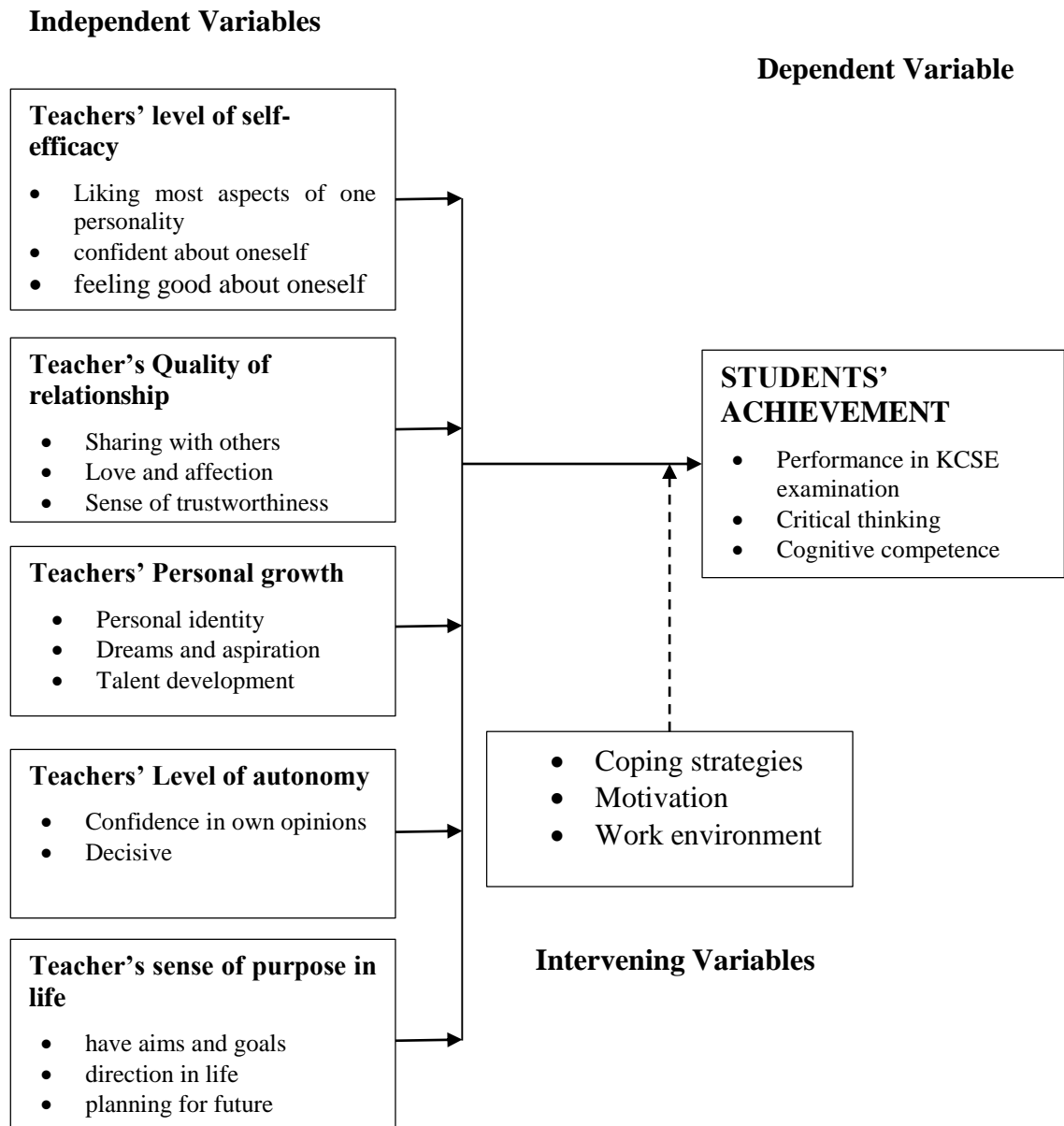


Figure 2 conceptual framework

2.4 Research Gaps

It's true from literature reviewed that teacher psychological well-being is an area that has been left by most scholars not only in Kenya but also in the world as a whole. Specifically, the study identified the following gaps: In Nigeria, a study conducted by Mabekoje (2013) among Nigerian Trainees Psychological Well-being realized that one's-esteem, social support and agreeableness significantly influenced teachers' psychological well-being. However, none of these studies have been conducted in Kenya. In another study conducted by Andrea, (2015) established that teachers' psychological well-being positively correlated with previous studies supporting the evidence. Investigating the effect of teachers' psychological health on students' academic performance is the goal of the current study, especially in Kiambu County's public high schools. Although earlier research has shed light on the relationship between teachers' psychological health and academic achievement, including Merike's (2015) study on teachers' psychological well-being and school satisfaction in relation to their readiness to assist students with mental health issues, there is still a lack of information about the unique circumstances of public high schools in Kiambu County.

Merike's study focused specifically on teachers' readiness to assist children with mental health problems, and while it established a strong relationship between teachers' well-being and academic outcomes, it only examined a specific subgroup of learners. The current study seeks to broaden this scope by investigating the influence of teachers' well-being on all learners in public high schools, regardless of whether they have mental health issues.

The current study intends to offer context-specific insights into the connection between student academic outcomes and teacher well-being by concentrating on public high schools in Kiambu County. This study will contribute to closing the current gap in the

literature by evaluating the impact of teachers' well-being within a particular geographic and educational setting.

This shows that the academic achievement of his/her learners in Economics was attributed to the teachers; self-efficacy, and the opposite is the same. In relation to this, Durowoju and Onuka (2012) and Moore and Esselman (2012) cited in accepted that trainer's efficacy moral convictions clearly affect cognitive accomplishments and success of students in learning institutions. According to Lin and Tsai (2009), Gordon (2011), and cemented by George (2011) that low self-efficiency trainers are associated with low students' accomplishments. Moreover, Durowoju and Onuka (2012) citing Henson (2011); and Lin & Tsai (2009) gave a report that learners whose trainers achieved high on self- efficiency did well on assessments that were standardized compared to their age mates who were trained by trainers with self-efficiency achievements that are low. The above study was concerned with teachers' self-efficacy on academic achievement; therefore, the current study wants to fill this gap by considering teachers psychological well-being and its influence on learner's academic achievement.

Durowoju and Onuka (2012) found that self-efficiency of trainers when put together with administration of classroom contribute less to learner's accomplishments in Economics. What is implied could be that those teachings could not combine essentially the two activities in order to engender students' improved learning outcome. Similarly, the above study also concentrated on teacher's self-efficacy in children's achievement. The suggested research looked at the influence of teacher's psychological well-being on learner's academic achievement.

Just 30% of the studies on teachers' psychological well-being were linked to students' outcomes, according to Hanushek's (2009) analysis of 140 research articles. The study by Zee and Komen (2016) offers a thorough summary of the literature on teacher self-

efficacy (TSE) conducted over the previous four decades, emphasizing its effects on several facets of classroom operations, students' academic progress, and instructors' mental health. In order to better comprehend the connection between TSE and its results, their research technique used a criteria-based review strategy, which entailed finding and examining 165 relevant papers.

Zee and Komen were able to offer important insights into the complex nature of teacher self-efficacy and its consequences for both instructors and students by using a methodical approach to analyzing the literature. By highlighting the importance of TSE in educational settings and combining findings from a variety of studies, their work adds to the body of existing research.

The findings from Zee and Komen's (2016) study demonstrate a positive correlation between TSE and multiple variables within the academic environment. However this study mainly focused on TSE, ignoring other elements like Teachers psychological wellness.

Granziera et al. (2023) studied the relationship between school-average teacher well-being. The study scope was on emotional exhaustion and behavioral engagement, and school-average student achievement. Using a whole sample of 486 teachers and a structural equation modeling, the teachers were categorized as either level 1 (L1) or level 2 (L2).

Despite the rigorous methodology, the study did not find a statistically significant association between school-level teacher behavioral engagement and student achievement. However, the effect size was substantial, indicating a potential correlation that warrants further investigation. As a result, Granziera et al. (2023) emphasize the need for more extensive studies, particularly focusing on school-level (L2) variables, to explore this possible connection in greater depth.

This study's findings underscore the complexity of the relationship between teacher well-being and student achievement and highlight the importance of considering contextual factors at the school level. While the initial results did not reveal a significant association, the substantial effect size suggests that there may be underlying mechanisms at play that require further exploration.

To further understand their impact on teacher well-being and student achievement, future study might examine school-level factors such organizational culture, leadership styles, and school climate in greater detail. Researchers can develop a more sophisticated grasp of the intricate dynamics within schools and pinpoint tactics for fostering the success of both teachers and students by carrying out more thorough investigations that take a wider range of elements into account. The findings showed a negative correlation between academic achievement at the school level and teachers' emotional weariness.

2.5 Summary of Literature

The chapters began by focusing on teachers' psychological well-being, transitioning from considerations of biological composition to a blend of both control roles and psychological appraisal. The amalgamation of results from various statistical studies of teachers' psychological well-being reveals suppressive emotions regarding teacher wellness, particularly in the long run (Herbert & Cohen, 1993; Zorilla et al., 2001). Regarding work prevalence, teachers' psychological well-being was examined in terms of gender and personal disparities. In a study on gender differences conducted by Stone et al. (1990) on teachers' psychological well-being feedback, they opposed the neat physiological-related gender differentiation and found that women exhibited higher reactivity when six measures of teachers' psychological well-being were used. They concluded that there was a slim gap of gender-based physiological reactivity, and the

assessment of teachers' psychological well-being was nearly identical. Thus, researchers discovered the roles of gender and psychological factors.

The development of teachers' psychological well-being survival mechanisms was considered, and it was found that individuals who felt more control over their psychological well-being tended to become more social. This was attributed to support and time spent around teachers through coping mechanisms. Moreover, Skinner argued for the gradual development of coping strategies and styles between childhood and adulthood, mostly through repetition of strategies and habit adoption, to ascertain if individuals could cope with psychological well-being challenges (Stone, 1990). According to Edwards (1995), the reflection of wellness in students is attributed to the development of a strong sense of belonging and satisfaction among teachers.

A research study by Komba, Hizza & Jonathan (2013) connected education providers, facilitators, and learning environments (including facilities, infrastructure, materials availability, and achievement) in four Moshi secondary schools. Describing Onderi, Kiplangat, & Awino (2014) citing Oriko (2012) and Reche et al. (2012), it was shown that long-distance walking to schools often resulted in students arriving at school on empty stomachs and feeling tired, and the non-use of verbal reinforcement strategies by teachers affected their academic accomplishment.

Several research studies have also explained how teachers' self-efficacy beliefs affect children's achievement in schools (Muijs & Reynolds, 2011; Tournaki & Podell, 2015). Teachers' self-efficacy beliefs profoundly shape classroom dynamics and student outcomes. High self-efficacy among teachers fosters a culture of innovation, as they confidently explore new teaching strategies and technologies to meet students' evolving needs. Moreover, their adeptness in classroom management cultivates a positive learning environment, promoting discipline and respect among students. Through varied teaching

methods tailored to diverse learning styles, these teachers engage students actively, enhancing understanding and retention of content. Empowering students to take ownership of their learning, teachers with high self-efficacy nurture autonomy and motivation, while also providing personalized support to address the unique needs of every learner, ensuring that all students have the opportunity to succeed.

In their recent review, Hascher and Waber (2021) undertook a comprehensive examination of studies on teacher well-being published from 2000 to 2019. While their primary focus was on exploring concepts, measurement approaches, and methodological considerations, they briefly touched upon the potential outcomes of teacher well-being. They noted that most studies in this area predominantly employed cross-sectional or correlative methods, which may provide limited insight into the causal relationships and long-term impacts of teacher well-being on various outcomes. Despite this limitation, the findings from these studies suggest a growing recognition of the importance of teacher well-being and its potential implications for both educators and students. However, further research utilizing longitudinal and experimental designs is needed to better understand the causal pathways and potential outcomes associated with teacher well-being.

The importance of the current study is highlighted by the lack of a thorough overview of research examining the effects of teacher well-being. There is still a significant knowledge vacuum about the precise outcomes linked to teacher well-being, despite the fact that previous study evaluations have offered insightful information about the conceptualizations, assessment techniques, and interventions pertaining to this topic. According to Klusmann and Waschke (2018), research on teacher well-being either highlights its benefits or cautions about the drawbacks of deteriorating well-being.

Therefore, in order to better understand how teacher well-being affects teachers, students, and educational environments, a detailed analysis of its results is necessary. By methodically gathering and assessing research that has examined the effects of teacher well-being, the current study seeks to close this knowledge gap and advance a more thorough comprehension of this important subject.



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The chapter on methodology provides a comprehensive roadmap for conducting the study, covering key aspects of the research process. It begins by outlining the overarching research methodology, whether qualitative, quantitative, or mixed methods, along with the theoretical framework guiding the study. The specific study design, such as experimental, correlational, descriptive, or case study, is then delineated, with justification for its appropriateness. The geographical location or setting of the study is described to provide context, followed by clarification of the target population and sampling frame. Details of the data collection instruments, validity and reliability procedures, and the process of data collection are provided, including any challenges encountered. The chapter also elucidates the analytical techniques used for data analysis and interpretation, aligning findings with research questions or objectives. Finally, ethical considerations during data collection, including measures to protect participants' rights and ensure confidentiality, are addressed, ensuring the integrity and ethical conduct of the research.

3.1 Research Methodology

The research used a mixed approach methodology, because it incorporated quantitative and qualitative approaches (Creswell, 2013). The above method chosen was also guided by the collection and analysis of data qualitatively and quantitatively. These two complemented each other (Creswell & Plano, 2007).

3.2 Research Design

The research used mixed research design. Here, the participants were given all the different research instruments concurrently. The analysis was done by comparing the instruments used. mixed methodology, correlational fits well. This design, being a very common and well-known approach, since both quantitative data and qualitative data was taken almost at once during phase one of the study (Creswell, 2013). The design helped obtain different but complimentary data on within the same theme (Morse, 2011) to apprehend problems under study. It made the findings comprehensive and rich. Multiple data collection tools used included questionnaires, observation schedule, document analysis and interview guide. The data was integrated at various stages of the inquiry. It helped the researcher to affirm and cross validate estimate of findings within the study (Creswell, 2013).

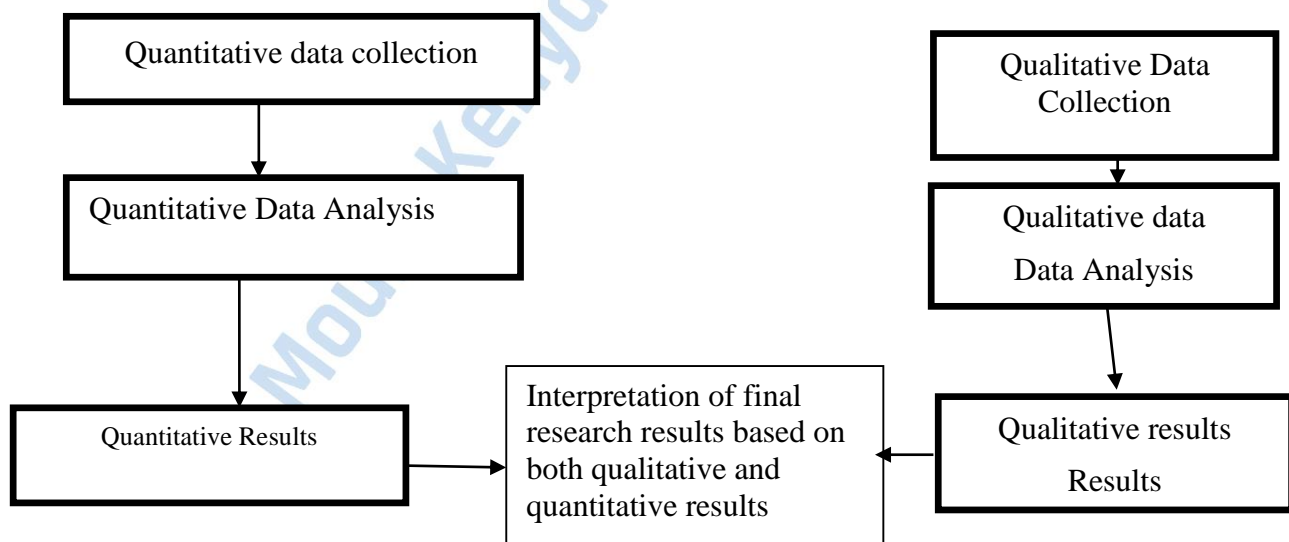


Figure 3: Mixed Research Design

Source: Creswell, 2014

3.3 Location of the Study

The current research was carried out across all public secondary schools within Kiambu County. The selection of Kiambu County as the research site was motivated by several factors. Firstly, the county offered ease of accessibility for the researcher, facilitating efficient data collection processes. Additionally, the decision was influenced by the existence of reports indicating poor academic performance in a majority of the public schools within the county, as highlighted in the Ministry of Education report of 2018. This context provided a relevant and meaningful setting for investigating the research questions related to teacher well-being and its potential impact on student academic outcomes. Furthermore, the researcher's familiarity with many learning institutions in the county contributed to a conducive environment for data collection, as there were no barriers or hostility due to suspicion. Overall, the choice of Kiambu County as the research site was strategic, allowing for a comprehensive examination of the research objectives within a context characterized by pertinent educational challenges and opportunities for meaningful insights.

3.4 Target Population

The target population of the study entailed 227 public secondary schools in Kiambu County, encompassing a diverse population of stakeholders including school principals, teachers, and learners. The focus on these key stakeholders was strategic, as each plays a crucial role in the educational ecosystem and contributes to the overall dynamics of teacher well-being and student achievement. Principals were identified as central figures in the study, given their managerial role in overseeing teachers and the overall functioning of the school. In the study, teachers are considered the main unit of analysis, with a total estimated population of 2606 in the public secondary schools of Kiambu County. This focus on teachers is driven by their pivotal role in shaping the educational experiences and outcomes of learners. Teachers serve as the primary agents of

instruction, interacting with students on a daily basis and guiding their learning journey. As such, they are seen as key determinants in the conceptualized influence of psychological well-being on learners' achievement. Through their pedagogical practices, classroom interactions, and support mechanisms, teachers have a direct impact on students' academic performance and overall well-being. Students' statistics show that there are about 113,500 (average of 500 per school) and are key components of the study. The learners are the subjects that depict the measurement of the achievement as a dependent variable in the study. In total, the population consisted of 116,333 subjects.

Table 1: Target Population

School Category	Principals	Teachers	Students	Total
Boys'	24	789	26200	27013
Girls'	33	1112	24000	25145
Mixed	170	705	63300	64175
Total	227	2606	113500	116333

Source: Kiambu County Education Office, 2018.

3.5 Sample Size and Sampling Procedure

A sample can be described as the population's smallest unit. Gay (2013) recommends that sample size of ten percent or beyond is fit in research. This research targeted all the 227 principals, 2606 Teachers and 113,500 students in all the 227 public learning institutions in the area. The sample size was 10% of the schools in the population making it 23 schools, thus 23 principals. Similarly, 10% of the teachers were sampled (261). However, for the students, due to the large population, Krejci and Morgan (1970) sampling tables were used; from the tables, any population about 100,000 yields a maximum sample of 384. Thus, the sample size for the students was 384. The researcher employed a stratified sampling technique to ensure a representative sample of schools

and participants for the study. With a population of 227 public secondary schools in Kiambu County, the schools were categorized into Boys' Schools, Girls' Schools, and Mixed Schools. Two Boys' Schools, three Girls' Schools, and 18 Mixed Schools were selected, ensuring proportional representation across all school types.

After selecting the schools, the principals of the chosen schools were included as study subjects. To select teachers from each school, the researcher used a proportionate sampling method based on the size of each school. This involved determining the number of teachers to be included from each school and then selecting participants using simple random sampling techniques.

Finally, the researcher observed classes taught by the selected teachers to gather data on student behavior and academic performance. This observational approach provided valuable insights into the impact of teacher well-being on student achievement within the classroom context. Thus, the sample size was 668 consisting of 23 principals and 261 teachers and 384 students depicted in Table 2.

Table 2: Sampling Grid

School Category	Principals		Teachers		Students		Total Sample
	Arithmetic	Sample	Arithmetic	Sample	Arithmetic	Sample	
Boys'	24/227*2	3	789/2606*26	1	26200/113500*	384	170
Girls'	33/227*2	3	1112/2606*2	61	24000/113500*	384	195
Mixed	170/227*	18	705/2606*26	1	63300/113500*	384	303
Total		23		261		384	688

Source: Researcher, 2023

3.6 Research Instruments

The study utilized standardized questionnaires as well as an interview guide to collect data and views on, influence of teachers' psychological wellbeing on learners' academic achievement' in the area. As per Weimer (2015), collection of data is the procedural undertaking that considers various set research methodologies including variables as well as observing systematic stages. Thus, the study followed the procedure to collect data and documents for analysis.

3.6.1 Teachers Questionnaires

Questionnaires were used for teachers since the subjects were able to read and write independently. This instrument was ideal in the current study in gathering information from those teaching since they individually recorded as well as interpreted these instruments. According to Creswell (2009), the questionnaire is one of the most powerful tools suited in collection of data. Questionnaires contained items consisting of five parts; part A, B, C, D, and E. Part A of the questionnaires contained inquiries on the demographics (level of education, age bracket, as well as period in training, and so on) and the other section sought information on influence of teachers' psychological wellbeing on learners' achievement in schools. Orodho (2008) recommends that where a study is using questionnaires and interview guides, both need to be presented to the unique presented sample which has similar characteristics of interest to the actual study sample.

3.6.2 Interview Guides for Principals

This study used a self-made interview guide for the principals because they have very busy schedules and could spare a few minutes to respond to questions asked orally. The interviews were purely questions that are open ended where the study respondents were

asked for the required information. This aimed at enabling the researcher to obtain more authentic information in this study. Interviews was used to help in clarification of matters that may not have been handled to satisfaction by the study participants through the questionnaire (Kothari 2015), explains that interviews have a unique role since they allow the researcher to probe the interviewees. A schedule for interview was prepared to elicit data from the subjects who have a lot of know-how on teachers' psychological well-being on learners' academic achievement.

3.6.3 Document Analysis

Archives are vital sources of information in numerous zones of examination, records, reports, printed shapes, letters and periodicals are among a few of the sources of information in archive investigation (John & James, 2006). Records once found require cautious investigation and elucidation. The analyst attempted to get a few of the official archives for investigation from the schools for investigation. The reports to be watched included students' advance report, examination of comes about from Dignitaries Office, course advance report, and teachers' records of exercise manual. The data got was valuable in supplementing the data gotten from the surveys and meet plan.

3.6.4 Observation Guide for Students

While interviews and group discussion help in finding deeper information about a phenomenon, the observation guide carries the role of informing the research to keep in mind of key aspects to be observed in relation to the research problem; and also helps the researcher to reflect his/her contributions to the behavior or response of the phenomenon under observation (Roller & Lavrakas, 2015). The study adopted observation guide to collect data on students and their relationship with teachers on their performance. An observation guide plays an important role regardless of the observer's influence. In

specific, the study used passive participant observation using the observation guide in appendices. This helped the researcher to maintain focus while also getting the leeway to reflect on the specific aspects related to each classroom of visit (Roller & Lavrakas, 2015).

3.7 Piloting of Research Instruments

Instruments' piloting was done on the basis of the initial data gathering. In this research, the researcher utilized 26 teachers (10% of actual sample) from three schools from Kiambu County of which were not considered during the actual study. The procedure that was in use in pretesting is similar to the one to be utilized during the main research in terms of information gathering and analysis. This gave the researcher the ability to have meaningful observations (Orodho 2008). In the pre-testing period, directions that are not clear, lack of enough writing space, questions that are clustered and phrasing that is wrong were detected and corrected. Questions that were vague were re-phrased; thus, instruments validity is enhanced.

3.7.1 Validity of Research Instruments

According to Mugenda and Mugenda (2003), validity encompasses the accuracy and meaningfulness of inferences drawn from research results. It pertains to the extent to which the sample or test accurately represents the information or constructs being measured (Orodho, 2015). In essence, validity ensures that the conclusions drawn from the research findings are both reliable and relevant, reflecting the true nature of the phenomenon under investigation. Validity is crucial in ensuring the credibility and trustworthiness of research outcomes, as it determines the extent to which the results can be generalized or applied to the broader population or context. This validity was measured with the aid of professionals from department of Psychology of Mount Kenya

University, who provided pertinent advice. Their referrals were included in the last questionnaire as well as in other instruments that were used in this research for data collection. In addition, the validity of the content was acquired to discover items that are not relevant, those that are ambiguous. Unnecessary items that are not necessary were trashed as others get added.

3.7.2 Reliability of the Research Instruments

The stability and uniformity of study findings over numerous tests or measurements is referred to as reliability. The degree to which research equipment consistently yield the same or comparable results when used again under the same circumstances is known as dependability. According to Van Teijlingen & Hundley (2011) pilot studies are an important element of a good study design. Carrying out a pilot study do not promise positive achievements in the actual research, but the chances are high (Van Teijlingen & Hundley, 2001). A test retest was applied to approximate degree to which those tools used in this study would give consistent results on repeated trials. An assumption that two tests' responses would be very alike since the latter reflect the similar content for those responding is made. A test-retest strategy was utilized which implied that the same members was issued with the inquire about apparatuses after 14 days' time and answers scored physically. Within the pilot consideration, the unwavering quality of the inquiry about disobedient was surveyed through test-retest unwavering quality utilizing Pearson's Item Minute Relationship Coefficient. This included comparing the responses obtained from members within the to begin with circular of information collection with those from the moment circular. A relationship coefficient of at slightest 0.7 was considered adequate to demonstrate a solid relationship between the tests, in this manner illustrating the unwavering quality of the survey substance.

The data gathered from the pilot study was entered into the Statistical Package for the Social Sciences (SPSS) version 24.0 in order to perform the analysis. The coefficient correlation between the replies gathered in the first and second rounds of data collection was then determined using correlation analysis. Table 3 displays the correlation analysis's findings, which provide light on how closely the questionnaire items from the two data gathering rounds were related. This examination gave assurance regarding the consistency of the measurements throughout time and enabled the evaluation of the research instruments' dependability.

Table 3 Correlations between the Halves of the Scores of Pre-test data

		X	Y
	Pearson Correlation	1	.711**
X	Sig. (2-tailed)		.001
	N	26	26
	Pearson Correlation	.711**	1
Y	Sig. (2-tailed)	.001	
	N	26	26

***. Correlation is significant at the 0.01 level (2-tailed).*

Source: Researcher, 2023

Table 3 shows the Pearson correlation coefficient, $r = .711$ which describes the correlation as significant at the 0.01 level (2-tailed). This described the questionnaires as reliable enough for use in data collection.

On the other hand, internal consistency was established by the use of Cronbach's Alpha coefficient of at least 0.64 which was perceived high enough for instrument judgment and declaring it consistent for the study (Orodho, 2010). The analysis results using SPSS version 24.0 is presented using Table 4.

Table 4 Pilot Data Internal Consistency Analysis Results

Case Processing Summary			
		N	%
Cases	Valid	22	92.3
	Excluded ^a	4	7.7
	Total	26	100

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics of Piloting			
Cronbach's Alpha ^a	Cronbach's Alpha Based on Standardized Items	N of Items	
0	0.714	48	

Source: Researcher, 2023

Table 4 shows that processing summary with a sample of 26 teachers. The analysis excluded 4 subjects as outliers and considered 22. The results show that the Cronbach Alpha is based on standardized items at .714. This was greater than a recommended threshold of 0.7 to infer internal consistency in the items (Hair *et al.*, 2010).

3.7.3 Credibility

Credibility or worthiness of the study is concerned in setting up a study that is authentic. This is an instance that is classic of “quality not quantity”. It relies mostly on the richness of information collected. In this study credibility was enhanced through triangulation of data collection and use of simple random sampling. This method emphasizes strength and minimizes the weakness of chosen data techniques (Best & Khan, 2013). This gives a meaning that it is good to look at something from many different perspectives (Neuman, 2010). Triangulation increased both the reliability as well as validity of the study findings (Bodgan & Biklen, 2013).

3.7.4 Dependability of the study

Dependability is concerned with ensuring there is consistency in the research results and when conducted again by a researcher from outside similar results were found. Dependability was enhanced by ensuring that each procedure in the research is given in

detail to give ability to a researcher from outside to carry out the research once again and get the same results. Triangulation method of data gathering enhanced dependability of this study as observed by Bodgan and Biklen (2013), since triangulation technique of data collection increases both reliability and validity of the study findings.

3.8 Data Collection Procedures

The researcher took several steps to ensure compliance and obtain necessary permissions for conducting the study. First, a letter of introduction was obtained from the School of Postgraduate Studies at Mount Kenya University. This letter likely served to formally introduce the researcher and the study to relevant authorities or stakeholders.

Subsequently, the researcher sought and obtained a permit from the National Commission for Science, Technology, and Innovation (NACOSTI) to conduct the study in the county. This permit would have been necessary to ensure that the research adhered to ethical guidelines and legal requirements governing research activities in the country. NACOSTI plays a crucial role in regulating research activities in Kenya, and obtaining their approval indicates that the study was conducted in accordance with established standards and procedures.

According to Mcmillan and Schumacher (2011), permission of the research has an assurance that the participants can act naturally and cooperate. Bodgan and Bilken (2013) agree that obtaining study permission involves more than getting to blesse that is official and lays the groundwork for rapport that is good with those responding.

3.9 Data Analysis Procedures

Panton (2012) underscored the importance of data reduction in the research process. This involves condensing extensive datasets into concise and meaningful pieces of information that capture the essence of the data. Social Science Statistical package (SPSS

ver. 24.0), according to Pallant (2015) gives a powerful statistical and system of management data that is powerful in a graphical environment by using descriptive menus and simple dialogue. In this study, primary information was gathered manually, classified and edited. The computer program was used to analyze quantitative data and generate tables charts, and graphs from the data. The results were shortened and brought out using frequency and percentage tables which gave room for easy interpretation based on variables and research objectives as well as research questions. The package helped in establishing the relationship between variables using regression model. Descriptive statistics that included measures of central tendency and dispersion were used for information analysis and interpretation of data. The non-computerized qualitative methods were used to analyze data collected from key informant interviews and observation guide, and data presented through narratives and thematic analysis. The regression of the variables was modeled as follows;

Where;

Teacher psychological well-being = t (Psychological well-being indicators)

$Y = t, X_1, X_2, X_3, X_4, X_5$

$Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + e_i$

Where: Y = Learners' Achievement Indicators (dependent variable);

X_1 - X_5 = Independent Variables

B_0 = Constant (intercept) the value of learners' achievement when determinant values are 0.

X_1 - X_5 = measures the variation in *learner's achievement* with respect to *Teacher psychological wellbeing indicators* (X_1 - X_5), holding other factors constant (regression coefficient).

X_1 = teacher's level of Self Efficacy

X_2 =teacher's quality of relationship

X_3 =teacher's personal growth

X_4 =teacher's autonomy

X_5 =teacher's sense of purpose

e_i = **Error term** or **disturbance** in the relationship, represents indicators other than teachers' psychological well-being that influence Learner's achievement in public secondary schools

The multiple linear regression specified in equation sought to depict the influence of teachers' psychological well-being on learners' achievement in the midst of both internal and external factors which affect learners' achievement.

3.10 Ethical Considerations

The code of conduct in research was upheld throughout the research process. It included allowing the members secrecy, secrecy, and free assent to connect and to pull back from the investigator. To secure the respondents, genuine names of the members were not utilized amid the detailing of the discoveries. Consent was sought from all the respondents in this study. Plagiarism was avoided through acknowledgement of the work done by other authors on the topic under investigation (Mahnaz, 2014).

All cited materials were cited using guidelines from Mount Kenya University. According to Tylor & Bogdan (2008) the researcher should give assurance of privacy and confidentiality to those participating in the study. The analyst was educated on the moral concerns revered within the Kenyan structure and utilized them in persuading the respondents to allow data. The procedures are outlined below.

3.10.1 Obtaining the Permission allowing access to the Study Area

Acquiring authorization to conduct research involves more than just obtaining official permission; it also entails establishing a foundation of good rapport with respondents, as noted by Bodgan and Bilken (2013). Seeking approval from regulatory bodies such as the National Commission for Science, Technology, and Innovation (NACOSTI) and the county director of education is essential for ensuring that the research complies with ethical and legal standards.

3.10.2 Informed Consent

The respondents were allowed to give information voluntarily without being coerced. They signed a consent form before participating in the study.

3.10.3 Confidentiality and Privacy

The researcher guaranteed members that the data they give was treated with extreme care. This empowered them to give legit and consistent data. Therefore, the name of the respondents was not shown up on the information instrument except for a code that was seen just by the analyst. Taylor and Bogdan (2008) recommend that the analyst should ensure the classification and protection of the members.

3.10.4 Anonymity

By requesting respondents to provide information anonymously and using codes to identify them, the researcher ensured confidentiality and minimized the potential for biased responses. This approach, commonly used in research, allows participants to feel more comfortable sharing sensitive or personal information, knowing that their identities will remain confidential. Additionally, by anonymizing the data, the researcher

eliminated the risk of unintentional disclosure of respondents' identities, thus protecting their privacy.

3.10.5 Mien and Decorum

The researcher had a charming scene and palatable characteristics all through the examination method. The master kept up the most extraordinary respectability, qualities as demonstrated by the conventions of society and fitting set of standards within the field of study themes (Orodho, 2009).

3.10.6 Storage of Data Collected

Raw data collected was stored for future use. Data interpreted and analyzed was stored as soft copies in flash diskettes CDs and Google drive.



Mount Kenya University

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

In this section, the research findings are methodically organized to align with the predefined research objectives. Beginning with an overview of the response rate, the section provides transparency regarding participant engagement, crucial for assessing the sample's representativeness. Following this, a descriptive statistical analysis delves into the demographic profile of the teachers, offering insights into key characteristics such as age, gender, and educational background. The subsequent analysis focuses on exploring the relationships between independent variables—such as teacher self-efficacy, quality of relationships, and autonomy—and the dependent variable of learners' academic achievement. Employing statistical methods like correlation and regression, this examination elucidates the extent and nature of these associations. Finally, the research findings are meticulously presented in a structured manner, addressing each research objective systematically. This approach facilitates a comprehensive understanding of the study's outcomes, shedding light on the nuanced influences of teacher characteristics on learners' academic success and offering valuable implications for educational practice and policy.

4.2 Response Rate

A total of 211 out of 261 questionnaires were returned translating to an 84.7% return rate.

This is presented in Figure 4.

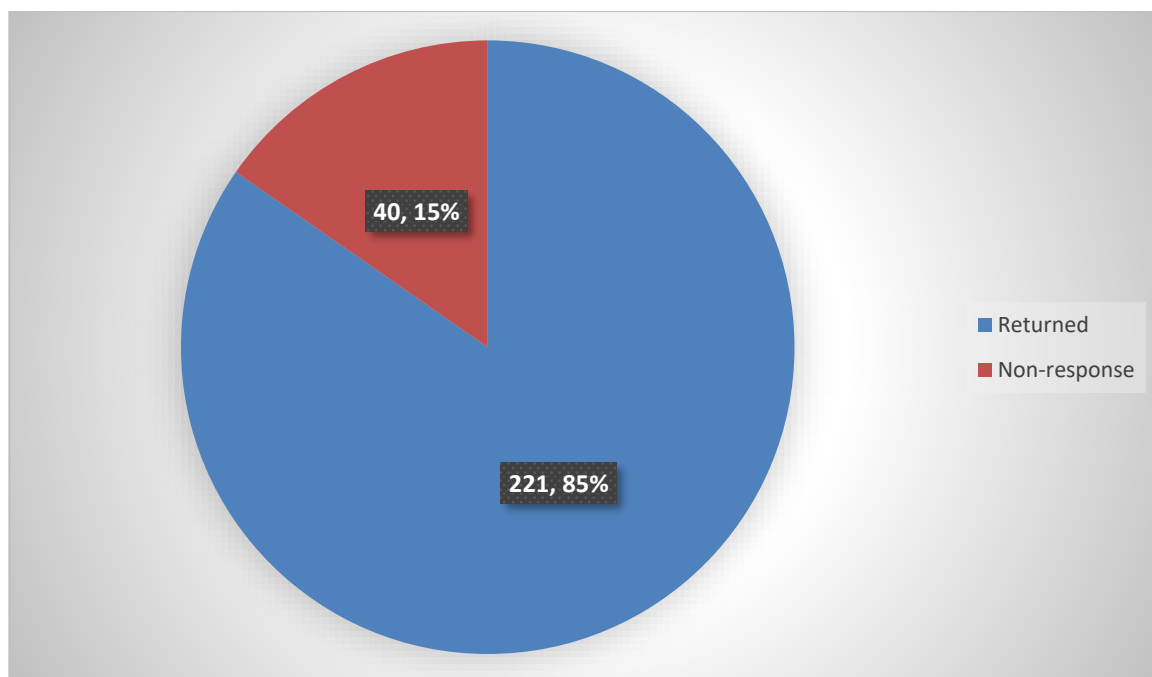


Figure 4: Questionnaire return rate

Figure 4 depicts a response rate of 85% with 221 teachers responding by filling up the questionnaires administered. With a total of 227 for a survey, the researcher considered it sufficient for use in conducting data analysis. In relation to this, a survey response rate of at least 80% is recommended by Fincham (2008). Analysis of the collected data from the portion of the respondents was generalized to entire targeted population of 227 public secondary schools in Kiambu County including the 227 school principals, their teachers and learners. Thus, the results from the collected and analyzed in this thesis is a reflection of the respondents but generalized to the target population.

4.3 Demographic Characteristics

The distribution of participants by age was meticulously presented in Table 5, providing a clear overview of the age composition within the sample. This analysis serves to characterize the profile of the study participants, offering valuable insights into the diversity and composition of the teacher cohort involved in the research. By systematically exploring demographic variables, the study lays a foundation for

understanding the broader context and background of the individuals contributing to the research findings, thereby enhancing the interpretability and relevance of the study outcomes.

Table 5 Distribution of Respondents by gender

	f	%
Male	105	47.5
Female	116	52.5
Total	221	100.0

Source: Researcher, 2023

Table 5 shows that the majority, 116(52.5%) of the teacher respondents were females while the (105) 47.5% were male males. This implies that the female teachers dominate the public secondary schools in Kiambu County. However, the deviation is minimal (5%) which shows some balance in the gender diversity in staffing in the studied schools. The emphasis of gender equality has been featured in many national and international concerns for development including Vision 2030, the MDGs that expired in 2015 and the current SDGs. Providing equal chance for both genders is thought to be one of the organs for sustainable development not only in social dimensions but also the economic ones.

Similarly, the teacher-respondents were required to indicate their age brackets by ticking the corresponding ages. The questionnaire item was structured in a close-ended options of age in years in brackets. The age of the respondents was found to be skewed from left highest to the right (fewest) as shown in figure 5.

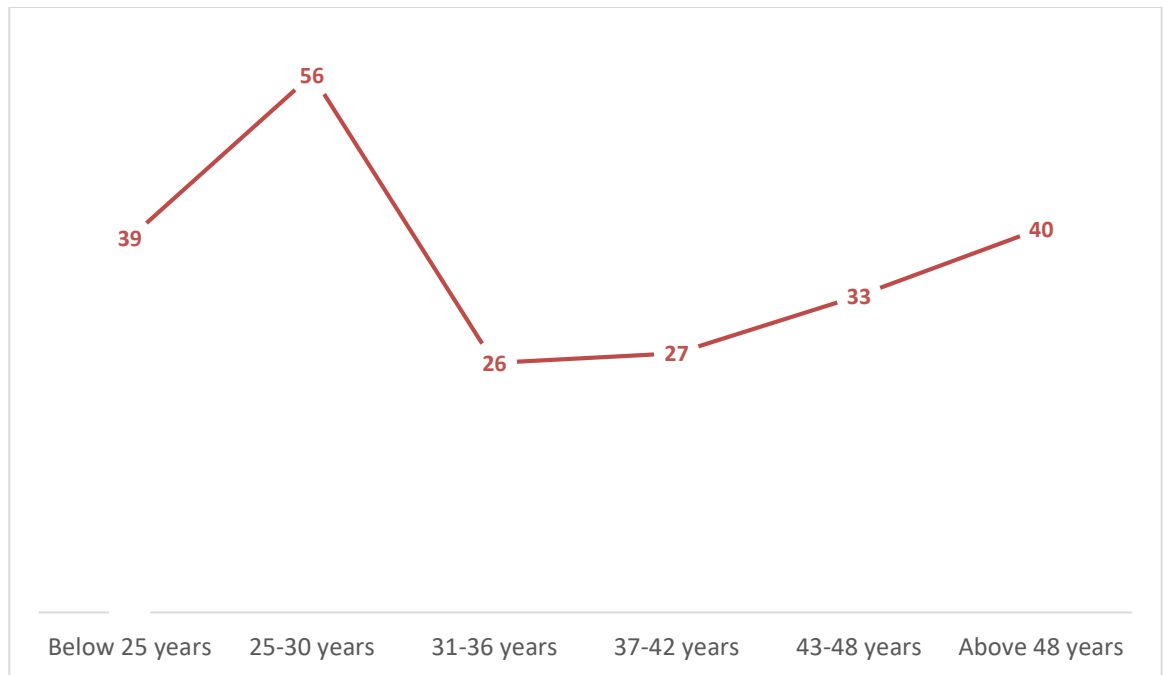


Figure 5 Age of the Teacher

Figure 5 shows that the age bracket 25-30 years had the most numbers 56(25.3%). While the fewest of the teachers 26(11.8%) were aged between 31-36 years, a comparatively higher portion of them 40(18.1%) were above 48 years of age. This demographic was important in the study subjects as the issues surrounding diversity in employment based on age is of concern to scholars (Heaslip, 2022). In other scenario, it is argued that the old are tired, the young are lazy and feel entitled while the middle-aged employees are square. Similarly, the age bracket would define the age that is dominant in the education sector employment. The findings showed that the youth dominated the sector with the majority being less than 36 years of age.

Some of the young bracket teachers are thought to be from teaching practice and are yet to complete their teaching course and majority being the teachers who have just started their teaching career and have not been in the field for long. Middle-aged teachers are skilled, and they have been in the field of teaching for quite a longer period of time. They understand better how the schoolwork as a system, and they have sound

recommendations on how the school can be improved. The older teachers are very experienced in the field as they have been in it for the longest time. These categories of teachers are much experienced and most of them occupy senior positions in the respective schools. According to the age, schools have almost equally distributed their functions. Right away from the young teachers to the older ones.

The study also analysed the experience of the teachers, and the results presented using Table 6.

Table 6 Distribution of the teacher-respondents by years of service

	f	%
0-5 years	43	19.5
6-10 years	54	24.4
11-15 years	36	16.3
16-20 years	43	19.5
Above 20 years	45	20.4
Total	221	100.0

Source: Researcher, 2023

Table 6 provides a detailed breakdown of the years of teaching experience among the teacher respondents, offering valuable insights into the distribution of experience levels within the sample. The largest proportion of respondents, comprising 54 individuals (24.4%), reported having 6-10 years of experience in the field of teaching. Conversely, the smallest group, consisting of 36 respondents (16.3%), indicated having 11-15 years of teaching experience. Notably, a notable portion of respondents (25 individuals, or 20.4%) reported having more than 20 years of teaching experience, suggesting a cohort of seasoned educators with extensive expertise in the field. This group likely comprises senior educators nearing retirement, bringing a wealth of knowledge and experience to their teaching practice. Additionally, a subset of respondents (43 individuals, or 19.5%) reported having between 16-20 years of experience or five years or less, highlighting a

diverse mix of experience levels within the sample. Importantly, the experience of teachers plays a pivotal role in content delivery to learners, as educators with more years of experience may possess a broader repertoire of teaching methods and strategies, facilitating more effective and engaging instruction. This nuanced understanding of the distribution of teaching experience among the respondents underscores the importance of considering educators' varying levels of expertise in shaping instructional practices and student learning outcomes.

The study also analysed data collected on highest level of education of the teachers. Using figure 6, the results are presented as shown.

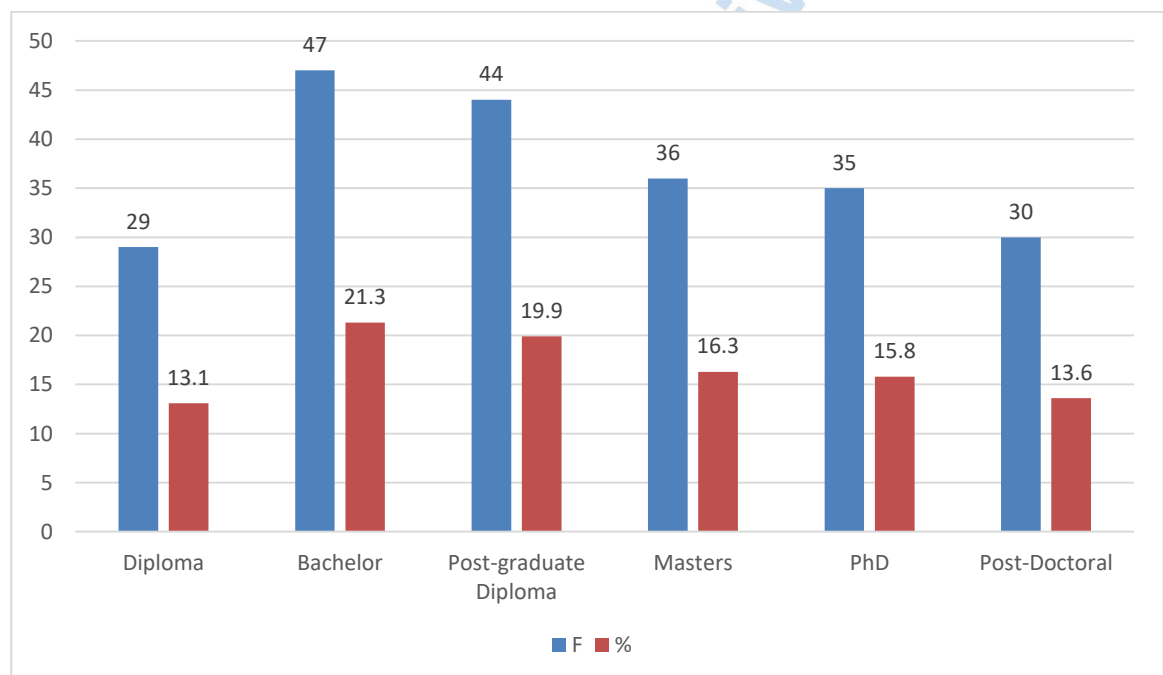


Figure 6 Highest level of education of the teachers

Figure 6 shows the highest portion of the teachers 47(21.3%) came from the teachers-respondents who had bachelor's degree as their level of learning. The fewest 29(13.1%) was derived from the teachers-respondents who were at diploma level of their learning. There is a slight difference (n= 3 teachers) between the bachelor's degree teachers-respondents and the post-graduate Diploma teachers-respondents at a portion of

19.9%(n=44). Another portion of the teachers (13.6%(n=30) represented the teachers who occupied the highest level of learning i.e., Post-Doctoral level. Most of these teachers are also professors in different higher institutions of learning. The slightest difference of 1 is identified between the master's level teachers at 16.3% (n=36) and PhD level of learning at 15.8% (n=35). From the research, the majority of teachers were advancing their level of education apart from the teachers occupying the Post-Doctoral level of learning.

4.4 Academic Performance of the Schools in the last three years

In a bit to understand the performance of the schools, the study used questionnaires to collect data on the KCSE indices of the schools in the last three years. Using descriptive statistics, the data was analyzed, and average scores ranked against the frequencies of the teacher respondents. The results are presented using Figure 7.

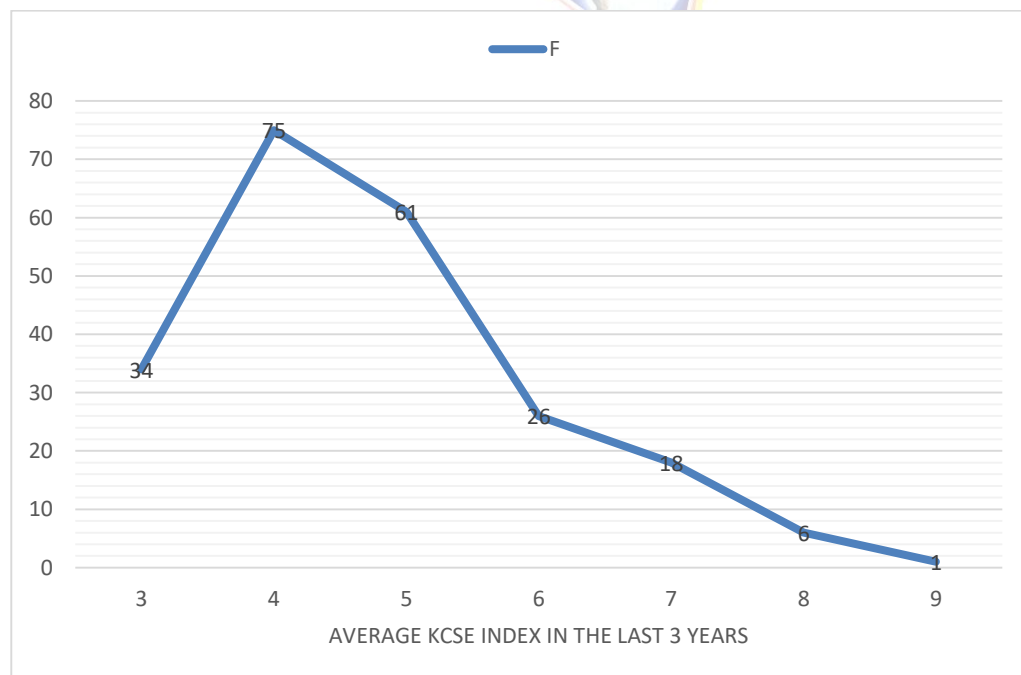


Figure 7 Academic Performance of the Schools in the last three years

Figure 7 shows that most teachers, 75(33.9%) indicated that the average of their schools for the last three years were approximately 4. Another portion of the teacher 61(27.6%) indicated that average KCSE index was at 5. Only one teacher (0.5%) put the average of KCSE of their school at 9.

Table 7 presents the results of a novel approach to assess the academic achievement of learners, utilizing a 5-point Likert scale ranging from "strongly disagree" to "strongly agree." The teacher questionnaire included statements derived from indicators of academic achievement, prompting respondents to rate their level of agreement with each statement. This method offers a nuanced understanding of teachers' perceptions regarding various aspects of learners' academic achievement, capturing subtle nuances and nuances that may not be captured through traditional assessment measures alone. By soliciting teachers' perspectives on factors contributing to academic achievement, such as student engagement, understanding of content, and mastery of skills, the study gains valuable insights into the multifaceted nature of academic success. These findings provide a rich source of data for understanding the complex interplay of factors influencing learners' academic performance and inform targeted interventions aimed at enhancing educational outcomes.

Table 7 Academic Achievement of Learners

		Strongly agree	Somewhat agree	Undecided	Somewhat disagree	Strongly disagree	Total
Pass exams in mean-grade	F	47	53	57	30	34	221
	%	21.3	24	25.8	13.6	15.4	100
Pass in my subject	F	55	39	60	30	37	221
	%	24.9	17.6	27.1	13.6	16.7	100
Show critical thinking skills	F	42	28	60	34	57	221
	%	19	12.7	27.1	15.4	25.8	100
Students complete the level	F	20	34	43	44	80	221
	%	9	15.4	19.5	19.9	36.2	100
Students show good decision-making skills	F	23	55	20	48	75	221
	%	10.4	24.9	9	21.7	33.9	100
Students apply learned experiences in life	F	30	64	25	45	57	221
	%	13.6	29	11.3	20.4	25.8	100

Source: Researcher, 2023

Table 7 shows that the largest portion of the teachers (25.8%) were neutral with the statement about the students passing in mean-grades. However, more teachers rated the statement agree (24%) and strongly agree (21.3%) compared to the disagree (13.6%) and strongly disagree (15.4%). The results show that more teachers (24.9%) strongly agreed that the students passed in their respective subjects compared to those who disagreed (13.6%) and strongly disagreed (16.7%). However, more teachers rated critical thinking among the learners at strongly disagree (25.8%) compared to only 19% who strongly disagreed. The results show that 36.2% of the teachers rated “Students complete the level” at disagree which implies challenges related to completion of the educational goal as desired in academic achievement.

Table 7 also shows that 33.9% of the teachers strongly disagreed that the learners showed good decision-making skills. On the contrary, about 29% of the teachers rated the learners applying learned experiences in life at agree. This implies diverse academic achievement among the learners in public secondary schools in Kiambu County. This

also conforms to the study theory on production. The Production Function Theory states that there is need to know the characteristics of schooling that significantly determine academic achievement. The exogenous variables diversely categorized to include teacher factors that have been examined. The academic achievement of the learners reflects both the cognitive and non-cognitive aspects as outcomes of education which are the endogenous variables.

4.5 Influence of Teacher's Level of Self-Efficacy on Learners' Academic Achievement in Public Secondary Schools in Kiambu County

Table 8 presents the findings related to the first objective of the study, which aimed to determine the influence of teachers' level of self-efficacy on learners' academic achievement in public secondary schools in Kiambu County, Kenya. The data were collected through a teachers' questionnaire designed to assess their level of self-efficacy in relation to learners' academic achievement. Descriptive statistics were employed to analyze the responses, providing insights into the distribution and central tendency of teachers' self-efficacy scores. The table displays various measures of central tendency, such as mean, median, and mode, along with measures of dispersion, such as standard deviation, to depict the variability in teachers' self-efficacy scores. Additionally, the table may include frequency distributions or percentages to illustrate the distribution of responses across different levels of self-efficacy.

Table 8 Influence of Teacher’s Level of Self-Efficacy on Learners’ Academic Achievement

Statement		SA	A	U	D	SD
I feel much accepted in my current school	f	36	49	47	50	39
	%	16.3	22.2	21.3	22.6	17.6
The school administration encourages self-efficacy among teachers	f	31	52	54	45	39
	%	14	23.5	24.4	20.4	17.6
I have created a mutual working relationship with my colleagues	f	36	62	37	48	38
	%	16.3	28.1	16.7	21.7	17.2
School organized seminars have improved my level of self-efficacy	f	18	54	51	55	43
	%	8.1	24.4	23.1	24.9	19.5
My level of self-efficacy is positively felt by learners	f	23	53	58	46	41
	%	10.4	24	26.2	20.8	18.6
I like most aspects of my personality.	f	38	48	50	45	40
	%	17.2	21.7	22.6	20.4	18.1
My personality has helped improve learner’s achievement	f	31	55	50	48	37
	%	14	24.9	22.6	21.7	16.7
I enjoy teaching students on various aspects of life	f	38	54	45	44	40
	%	17.2	24.4	20.4	19.9	18.1

Source: Researcher, 2023

Table 8 shows that 22.2% of the teachers somewhat agreed and tied with those who somewhat disagreed with the statement “I feel much accepted in my current school”. There was portion 47(21.35%) that was undecided with the statement. The table shows that 36(16.3%) strongly agreed that they felt accepted in their schools. It implies that the teachers were keen on transferring the same to the learners and impact their achievement as scholars have suggested that teachers who feel accepted effectively interact with their learners (Bonds, 2017).

Similar trends are seen in statements about whether “the school administration encourages self-efficacy among teachers”. The largest portion of the teachers, 54(24.4%) were undecided about the statement with 52(23.5%) somewhat agreeing that the school administration encouraged self-efficacy among teachers. A relatively small portion 31(14%) of the teachers strongly agreed with the statement. This shows that there was a variation in the level of agreement with the statement. This also implies that the need for the school administration to be in charge of encouraging teachers is lacking among most

of the teacher participants. This identifies the gaps that could exist in secondary schools in the concept of teacher self-efficacy and learners' achievement. In a related interview with the principals, it was found that the schools' administration lacks the capacity to have every individual teacher need catered for.

Our school has less capacity to ensure that the teachers' pay special attention regarding their wellness. This is as the efforts are tethered towards the student body. Sometimes, it becomes difficult to divide attention and be available for teachers depicted having some occasional reports about some teachers being depressed or even suffering burnout [KI 02, Male Principal]

Data analysis entailed use of inferential statistics on the teachers' level of self-efficacy on learners' achievement. The study adopted regression modeling to ascertain the level to which the self-efficacy affected learners' achievement in public secondary schools in Kiambu county, Kenya. The model summary of the modeling is presented in Table 9.

Table 9: Model Summary for Teacher's Level of Self-Efficacy on Learners' Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.256 ^a	.724	.712	1.395

a. Predictors: (Constant), I enjoy teaching students on various aspects of life, The school administration encourages self-efficacy among teachers, School organized seminars have improved my level of self-efficacy, I feel much accepted in my current school, My level of self-efficacy is positively felt by learners, I have created a mutual working relationship with my colleagues, I like most aspects of my personality., My personality has helped improve learner's achievement

Source: Researcher, 2023

Table 9 presents the results of the regression analysis, indicating that the adjusted R-squared value is 0.712, which implies that approximately 71.2% of the variations in learners' academic achievement can be attributed to teachers' level of self-efficacy. This finding suggests a strong relationship between teacher self-efficacy and learner achievement in public secondary schools in Kiambu County, Kenya. The estimated

standard error of 1.395 indicates the degree of accuracy in predicting learners' academic achievement based on teachers' self-efficacy scores.

Comparing these results to previous studies cited, such as those by Onuka and Emunemu (2010), Stipek et al. (2008), and Tournaki and Podell (2015), the current study goes beyond establishing the relationship between teacher self-efficacy and learner achievement by quantifying the extent of influence. This adds depth to the existing literature and provides valuable insights into the significance of teacher self-efficacy in shaping educational outcomes.

Furthermore, Table 10 presents the ANOVA results, which assess the overall significance of the regression model in explaining the variance in learners' academic achievement. These results provide additional support for the relationship between teacher self-efficacy and learner achievement, highlighting the importance of teacher factors in driving student success in public secondary schools in Kiambu County.

Table 10 : ANOVA Table Teacher’s Level of Self-Efficacy on Learners’ Academic Achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.318	8	1.290	.662	.0424 ^b
	Residual	412.795	212	1.947		
	Total	423.113	220			

a. Dependent Variable: Academic achievement

b. Predictors: (Constant), I enjoy teaching students on various aspects of life, The school administration encourages self-efficacy among teachers, School organized seminars have improved my level of self-efficacy, I feel much accepted in my current school, My level of self-efficacy is positively felt by learners, I have created a mutual working relationship with my colleagues, I like most aspects of my personality., My personality has helped improve learner’s achievement

Source: Researcher, 2023

Table 10 presents the ANOVA results, with an F-statistic of 0.662 and a significant level of 0.0424. The significance level indicates that the effect of teacher self-efficacy on learner achievement in public secondary schools in Kiambu County is statistically significant. This finding suggests that teacher self-efficacy plays a significant role in influencing learner achievement outcomes.

The significance level being less than the critical p-value of 0.05 supports the rejection of the null hypothesis, indicating that there is indeed an effect of teacher self-efficacy on learner achievement. This aligns with previous literature, such as the study by Stipek et al. (2008), which highlighted the importance of teacher influence on student enthusiasm and emotions related to educational objectives.

Teachers play a crucial role in motivating students to learn and enhance their emotional well-being. According to research, some of the ways that teachers can influence learning enthusiasm and emotion of students are: Displaying enthusiasm for the subject and the teaching process. This can make the students more attentive, curious, and joyful; Supporting students' autonomy, relevance, relatedness, and competence. This can foster students' intrinsic motivation, self-efficacy, and satisfaction; Providing feedback, guidance, and encouragement. This can help students overcome challenges, improve their skills, and feel more confident and valued. Therefore, teachers can have a positive impact on students' motivation and emotion by showing passion, care, and support in their teaching [KI 01, Female Principal]

Table 11 presents the results of the correlation analysis between the average self-esteem scores and the average KCSE scores for the last three years among the sampled teachers from public secondary schools in Kiambu County, Kenya. The Pearson correlation coefficient (r) is used to measure the strength and direction of the relationship between these variables.

Table 11 Correlation between Self-esteem Average Score and Average KCSE for the last 3 Years

		Self-esteem Score average	Average KCSE for the last 3 years
Self-esteem Score average	Pearson Correlation	1	.635
	Sig. (2-tailed)		.023
	N	221	221
Average KCSE for the last 3 years	Pearson Correlation	.635	1
	Sig. (2-tailed)	.023	
	N	221	221

Source: Researcher, 2023

The study conducted by Njenga, Njoka, and Ndung'u (2019) aimed to explore the relationship between students' self-efficacy and their academic performance in secondary schools in Kirinyaga and Murang'a counties. The researchers utilized a correlational

research design and distributed questionnaires to 412 students in their third year of secondary school. The data collected from the questionnaires were then analyzed using descriptive and inferential statistics to investigate the strength and nature of the relationship between self-efficacy and academic performance.

The findings of the study revealed significant insights into the role of self-efficacy in academic achievement. Through descriptive statistics, the researchers were able to assess the level of self-efficacy among the students and compare it across different groups, such as gender. Inferential statistics, on the other hand, allowed them to determine the existence and magnitude of the relationship between self-efficacy and academic performance.

While the study conducted by Njenga, Njoka, and Ndung'u (2019) focused on students' self-efficacy and academic performance, the findings are relevant to understanding the broader dynamics of self-efficacy and their impact on educational outcomes. The positive correlation between self-efficacy and academic performance observed in their study aligns with the findings presented in Table 11, which indicate a similar relationship between teacher self-efficacy and KCSE scores.

Their findings showed that there was a strong connection between self-efficacy and academic performance. On average, students' self-efficacy was 71.36%. Boys had slightly higher self-efficacy than girls, with 71.89% compared to 70.95%. Students in Kirinyaga county had higher self-efficacy than those in Murang'a county. Based on their findings, Njenga, Njoka, and Ndung'u (2019) concluded that it's important to help students develop their self-efficacy. They suggested using role models and experiential learning strategies. They also recommended giving teachers more training in teaching methods that can help students develop their self-efficacy.

During the interviews conducted with school principals, one principal highlighted the significant role that teacher self-efficacy plays in students' academic achievement. The principal emphasized that teachers who exhibit high levels of self-efficacy tend to be more motivated and committed to their teaching responsibilities. They expressed confidence in their ability to effectively impart knowledge and support students' learning, which ultimately contributes to improved academic outcomes.

Here, I am the only one and I serve all the teachers, non-teaching staff, and learners in this school. I also attend to external visitors and community needs to run the school smoothly, It may not be as practical for me as one person to check and work out individual teachers' self-efficacy [KII 02, Male].

This depicts the gaps that could emanate from the school administration point of view. With this finding, it becomes challenging to take into account those responsible for ensuring individual teacher self-efficacy to make sure that the teachers deliver in class. However, the principal did not deny having programs for the same. He noted;

We have some programs that tend to guide teachers on how to be themselves. It is also a requirement by the employer that programs that guide teacher self-efficacy are run in the schools. This makes it the reason for us to have a programme where teachers group and discuss individual opinions and how they are relating to each other in the school. This is meant to correct or clarify where two or more teachers could have clashed, and making it feel like it is impossible to freely interact and work within the context of a fellow teacher or students [KII 02, Male].

Table 11 also shows that the largest portion of the teachers 62 (28.1%) somewhat agreed with the statement “I have created a mutual working relationship with my colleagues”. The same statement is somewhat disagreed with 48 (21.7%) of the teachers. Thus depicts a diverse view of the relationship between teachers and their colleagues at workplace in the public secondary schools in Kiambu County, Kenya. Without a cordial and mutual working relationship between staff, motivation towards the goals is highly affected and thus the impediments on learners' achievement in the country. There exist arguments for

the need for others to effectively deliver at the workplace. Chernyak-Hai and Rabenu (2018) based their study on psychological theories to review the concept of social exchange theory (SET) as implemented in today's challenging work environments. The authors refer to the working concept in psychology as a hybrid need for effective delivery. Through working with others, the SET argument for dependence on others need colleagues to deliver on job mandates. However, the researcher noted that the 21st century work environment needs some adjustments in the work relationships among employees. These are thought to be essential for scoring the organizational goal today. The current study context set in a school context means that the psychological support and SET model in teaching in public secondary schools in Kiambu are still relevant. In order to underscore the learners' achievement, the teachers need the affirmation that their mutual relationship with their colleagues is guaranteed.

The table shows that the largest portion of the teachers 55(24.5%) somewhat disagreed that the schools organized seminars have improved their level of self-efficacy. The role of the school in motivating as well as checking on the welfare of the teachers is necessary and correlates to their performance in building holistic learners. This streams down to the school-level leadership that is crucial in professional community development (Louis & Kruse, 1995). In related interview findings from the principals, the study showed that the schools were creating in-service programs for teachers to build their capacity including psychological wellbeing.

One of the principals noted;

We often look at the concerns of our teachers in many ways. When we feel that teachers are much worn out, possibly from the kind of work they do, we ensure that we create room for their counseling. We conduct seminars with external speakers who mentor them in how to be resilient in the process. Similar, the teachers are advised on how to handle self-efficacy issues within their scope and even encouraged to reach out to the school management in cases of emerging stress issues [KII 01, female].

The findings imply that the concern of the schools in cultivating the self-efficacy of the teachers in secondary schools in Kiambu county was present. Apparently, a comparable portion of the teachers 54(24.4%) had rated the presence of the seminar at somewhat agreement.

Table 11 also depicts a relatively large portion of the teachers 53(24%) indicating that they somewhat agreed with the statement “My level of self-efficacy is positively felt by learners”. However, a higher portion of the teachers 58(26.2%) indicated being undecided with the statement. Vaillant’s (2015) argument emphasizes the critical role of teachers in shaping students' academic achievement and overall learning experiences. The author highlights the importance of cultivating values such as acceptance, support, and recognition among teachers, as these qualities are essential for creating a conducive learning environment.

A portion of the teachers 38(17.2%) strongly felt that they liked most aspects of their personality with 48(21.7%) of them being undecided with the statement. About 20.4% of them (n=45) and 18.1% (n=40) somewhat disagreed and strongly agreed with the statement. This implies gaps in the psychological wellbeing of the teachers in public secondary school in Kiambu county, Kenya. Self-acceptance, especially personality, are key in making effective workers. Lisa, Ilan and Carolyn (2018) argue that teacher personality measures teacher work performance with aspects of consciousness being key in classroom delivery. However, the researchers found no significant influence of teacher personality on student achievement.

The findings also show a similar trend on largest portion of the teachers 55(24.9%) who somewhat agreed with a statement “My personality has helped improve learner’s achievement”. The table finally shows the largest portion of the teachers 54(24.4%) indicating that they somewhat agreed with “I enjoy teaching students on various aspects

of life”. This implies that the teachers were keen on developing self-efficacy in their work. Through the observation method showing how the teachers interact with the learners showed that some teachers (5 of 13 observed) were friendly to learners, and they focused on underscoring the needs of the learners in the communication process. Some psychologists argue that various personality domains including extraversion, emotional stability, openness and conscientiousness affected teacher effectiveness in classroom delivery (Kim, Jörg & Klassen, 2019).

In triangulation of the quantitative findings with the interview findings from the principals, the study found lots of homogeneity. The interviews revealed that school administrators were keen on observing the teachers’ behavior as being a key determinant on job effectiveness. One of the principals noted;

The teachers’ personality affects how they deliver even in the classroom. We get concerned when teachers depict some emotional instability. We always feel that it will affect their effectiveness in teaching. These have been reported in the past and we were able to contain the situation early enough. Emotionally disturbed teachers fail to communicate effectively, have pedagogy lapses and even inconsistent with classroom instructional methodologies [KII 07, female]

The findings connote the existing literature which points at diverse teacher emotional effects related to psychology and emotional stability. Aura’s (2017) study provides valuable insights into the relationship between science self-efficacy, gender, and academic achievement in genetics among 12th-grade students in Kenya. By administering a science self-efficacy questionnaire to over 2,000 students and conducting an academic achievement test, the researcher was able to examine the correlations among these variables comprehensively. Through the use of descriptive and inferential statistics such as MANOVA and Pearson's Correlations, Aura analyzed the data effectively, uncovering significant relationships and patterns. The findings of the study revealed a

strong positive association between students' science self-efficacy and their academic achievement in genetics, highlighting the importance of self-belief and confidence in driving academic success in science-related subjects. This study contributes to our understanding of the factors influencing academic achievement and underscores the significance of promoting self-efficacy beliefs among students, particularly in the field of science education. These results of the study challenge the belief that female students perform worse in science-related courses and tasks, highlighting the need for biology teachers and science educators to recognize and support female students' strengths in genetics and other science disciplines.

The findings of the study carry significant implications for policymakers and educators. The findings recommend that promoting students' science self-efficacy is critical for improving academic achievement in genetics, and this can be achieved through effective teaching strategies, such as providing opportunities for hands-on experimentation and inquiry-based learning. Additionally, the study highlights the importance of recognizing and addressing gender-based disparities in science education. Teachers should be aware of the potential gender biases in their teaching practices and provide an inclusive learning environment where all students feel valued and supported.

A study conducted by Kaburi (2019) aimed to examine the relationship between academic performance and gender differences in self-efficacy in Kenya. The study was prompted by inadequate academic achievement equitably across genders in the national educational curriculum implementation process. Although mathematics and the English language are widely recognized as crucial subjects in education, the curriculum examinations' strong emphasis on grades and intense competition has overlooked the importance of self-efficacy as a crucial factor.

This study employed both quantitative and qualitative research methods to investigate the research questions comprehensively. The sample consisted of 240 form-four students from 24 public secondary schools, selected using purposive, stratified, and simple random sampling procedures. A questionnaire comprising thirty items was used to collect data from the students, allowing for the systematic gathering of information on various aspects related to the research objectives. The combination of quantitative data from the questionnaire responses and qualitative insights obtained through open-ended questions or interviews provided a holistic understanding of the phenomenon under study. Descriptive statistics were used to summarize and describe the quantitative data, while inferential statistics helped to analyze relationships and patterns within the dataset.

The study's findings highlight the significant positive impact of self-efficacy on academic success in both English and Mathematics among students. Moreover, self-efficacy emerged as a significant predictor of academic performance in both subjects, underscoring its importance in shaping students' educational outcomes. These results emphasize the critical role of educators and policymakers in fostering self-efficacy among students, particularly male students, to enhance their academic performance. Additionally, the findings advocate for a shift away from a narrow focus on grades and intense competition towards a more holistic approach that acknowledges and addresses the diverse needs and circumstances of students. By prioritizing the promotion of self-efficacy and adopting a comprehensive educational framework, stakeholders can better support students' overall academic development and success.

4.6 Influence of Teacher's Quality of Relationship with others on the Learners' Academic Achievement in Public Secondary Schools in Kiambu County

Table 12 presents the results of the analysis on the influence of Teacher's Quality of Relationship with others on Learners' Academic Achievement in public secondary schools in Kiambu County, Kenya. The data collected from teachers were analyzed using descriptive statistics to provide insights into how teachers rated their quality of relationship with others and its impact on learners' academic achievement. The table displays the means and standard deviations of the responses, providing a summary of the teachers' perceptions regarding the quality of their relationships with others and their association with learners' academic achievement. These findings contribute to understanding the role of interpersonal relationships in the educational context and their implications for student outcomes.

Table 12 Influence of Teacher's Quality of Relationship With Others on the Learners' Academic Achievement

Statement		Strongly agree	Somewhat agree	Undecided	Somewhat disagree	Strongly disagree	total
I am often troubled by a number of personal qualities, and I wish I could change them	F	29	53	53	46	40	221
	%	13.1	24	24	20.8	18.1	100
I often consider others' opinions in making my decisions.	F	40	51	48	40	42	221
	%	18.1	23.1	21.7	18.1	19	100
Often, I am unable to change or improve my circumstances.	F	42	52	46	42	39	221
	%	19	23.5	20.8	19	17.6	100
I often find myself bored because of a personal stagnation	F	28	50	55	48	40	221
	%	12.7	22.6	24.9	21.7	18.1	100
My decisions have an impact on learner's academic outcome	F	32	51	54	45	39	221
	%	14.5	23.1	24.4	20.4	17.6	100

Source: Researcher, 2023

Table 12 presents the distribution of responses from teachers regarding their quality of relationship with others, as assessed through various statements. The analysis reveals that a significant portion of teachers somewhat agreed with the statement " I am often troubled

by a number of personal qualities, and I wish I could change them," indicating some level of self-reflection and potential areas for improvement. However, the distribution of responses also shows variability, with some teachers strongly disagreeing with the statement, suggesting a diversity of perspectives among educators regarding their personal qualities.

Similarly, the data indicates mixed perceptions among teachers regarding their reliance on the judgments of others when making important decisions. While a considerable portion somewhat agreed with this statement, indicating some level of consideration for others' opinions, an equal number of teachers strongly agreed and somewhat disagreed. This variability in responses underscores the complexity of interpersonal dynamics among teachers and highlights the importance of understanding individual differences in approaches to decision-making and collaboration.

Table 12 reveals a similar pattern of responses regarding teachers' perceptions of their circumstances and personal stagnation. A significant portion of teachers somewhat agreed with the statement "Often, I am unable to change or improve my circumstances," indicating a perceived difficulty in effecting change or improvement in their professional or personal lives. This sentiment is further underscored by the substantial number of teachers who strongly agreed with the statement, suggesting a shared perception of challenges in altering one's circumstances.

Similarly, the data reflects a considerable level of uncertainty and agreement among teachers regarding the presence of personal stagnation, as indicated by responses to the statement " I often find myself bored because of personal stagnation." While a large portion of teachers were undecided about this statement, suggesting varying levels of self-awareness or reflection, a notable proportion strongly agreed or somewhat agreed with the notion of personal stagnation. This indicates a perceived lack of growth or

fulfillment among some teachers, potentially impacting their motivation and engagement in their professional roles.

These findings highlight the importance of addressing factors contributing to feelings of stagnation or disempowerment among teachers in public secondary schools in Kiambu County. Strategies aimed at promoting professional development, fostering a supportive work environment, and enhancing job satisfaction may help mitigate these challenges and support teachers in realizing their full potential. By addressing individual concerns and promoting a culture of growth and well-being, schools can cultivate a more positive and productive learning environment for both educators and learners.

Table 13 presents the model summary of the regression analysis conducted to assess the influence of teacher quality of relationship with others on learners' academic achievement. The adjusted R-squared value of 0.628 indicates that approximately 62.8% of the variation in learners' academic achievement can be explained by the predictor variables included in the model, specifically teacher quality of relationship with others. This suggests a moderate-to-strong relationship between these variables, with teacher quality of relationship with others accounting for a significant portion of the variance in learners' academic achievement.

Table 13 Regression Model Summary on Teacher Quality Relationship with Other and Learners' Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.9077 ^a	.824	.713	1.390

a. Predictors: (Constant), I think I have ability to adapt to the changing environment, I often become overwhelmed in improving bad circumstances around me, I often consider others' opinions in making my decisions, My decisions have an impact on learners academic outcome, I often find myself bored because of a personal stagnation, I am often troubled by a number of personal qualities, and I wish I could change them

Source: Researcher, 2023

Table 13 shows an adjusted R-square of .713 which implies that about 71.3% of variations in learners' academic achievement was attributed to teacher quality relationships with others. This was estimated at a standard error of 1.390.

The resulting ANOVA results are presented in Table 14.

Table 14 Regression ANOVA Table on Teacher Quality Relationship with Other and Learners' Academic Achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	10.251	6	1.709	.884	.038 ^b
1	Residual	411.726	213	1.933		
	Total	421.977	219			

a. Dependent Variable: Academic achievement

b. Predictors: (Constant), I think I have ability to adapt to the changing environment , I often become overwhelmed in improving bad circumstances around me, I often consider others' opinions in making my decisions, My decisions have an impact on learners academic outcome, I often find myself bored because of a personal stagnation., I am often troubled by a number of personal qualities, and I wish I could change them

Source: Researcher, 2023

Table 14 presents the results of the ANOVA test conducted to assess the significance of the relationship between teacher quality of relationship with others and learners' academic achievement in public secondary schools in Kiambu County. The F-statistics

of 0.884 indicates that there is a relationship between these variables, and the significance level (sig. = 0.038) is less than the critical p-value of 0.05. This suggests that the influence of teachers' quality of relationship with others on learners' academic achievement is statistically significant.

These findings support the results obtained from the regression analysis, providing further evidence of the impact of teacher quality of relationship with others on student outcomes. The qualitative results, as reported by one of the principals, also align with these findings, indicating a recognition of the importance of positive relationships between teachers and others in the school community.

The influence of teacher quality relationship with other and learners' academic achievement is a complex and multifaceted topic. There are many factors that can affect how teachers interact with their students and colleagues, and how these interactions impact student learning outcomes. Some of the main aspects of teacher quality relationships are the teacher qualifications. These include the level of education, certification, subject knowledge, and pedagogical skills of the teacher. Research suggests that teacher qualifications are related to instructional quality and student achievement, especially in mathematics and science [KI 04, Male Principal].

Existing literature points to such an effect. In 2008, Kiguru conducted a study in Gatundu Division, Thika District, Kenya, with the aim of understanding the relationship between teachers and learners and how it impacts the learners' academic performance. The researcher had a few key objectives in mind. Firstly, Kiguru wanted to explore how the teacher-learner relationship influences student performance. Similar to their first inquiry about teaching methods, they also explored how discipline influenced the student-teaching association. In this study we analyzed how important effective communication is for developing strong teacher-student relationships.

To gather comprehensive insights, Kiguru employed both qualitative and quantitative research designs. The qualitative design helped the researcher delve deeper into the

subject matter, while the quantitative design was useful for analyzing numerical data associated with the study. Data collection involved structured and unstructured interviews, and Kiguru also referred to both national and international documents for additional context.

The findings from Kiguru's study were illuminating. The research concluded that a positive teacher-learner relationship could indeed enhance the academic performance of learners. It has been noted that cultivating strong relationships between teachers and students can go a long way in ensuring discipline is upheld within schools, and the connection established from effective communication of ideas enhances the teacher-student relationship leading to desirable results in learning outcomes.

Kiguru's (2008) study stresses the value of building a constructive bond between instructors and learners, as the study suggests that teachers should work on creating an environment that encourages positive relationships since it's essential for effective learning. This could be achieved by implementing teaching methods that foster a good rapport with learners. The study aligns with our research interest in understanding the various factors influencing learners' academic performance, offering valuable insights into the role of teacher-learner relationships.

The current study further analyzed the data on the influence of teacher quality relationship with other and learners' academic achievement using correlation analysis. The correlation between the average quality of teacher scores and average KCSE for the last three years is presented in Table 15.

Table 15 Correlation between the Teacher Quality Relationship with Other and Learners’ Academic Achievement at KCSE for the last Three Years

		Quality of relationship Average	Average KCSE for the last 3 years
Quality of relationship Average	Pearson Correlation	1	.739
	Sig. (2-tailed)		.047
	N	221	221
Average KCSE for the last 3 years	Pearson Correlation	.739	1
	Sig. (2-tailed)	.047	
	N	221	221

Source: Researcher, 2023

Table 15 shows a Pearson correlation coefficient between the average quality of teacher scores and average KCSE for the last three years, $r = .739$. The correlation is a strong positive association which means that a unit increase in average quality of teacher scores would increase the average KCSE for the last three years by .739 units.

The study findings depict the postulation of existing literature which points out how teacher-learner relationships impacted academic performance. Ekasiba (2019) conducted a study in the Amukura division, Teso South district, to explore the correlation between teacher-learner relationships and academic achievement. This research contributes to the expanding literature that emphasizes the significance of favorable teacher-learner relationships in promoting academic success. Pekrun et al. (2017) posits that positive relationships between tutors and their learners create a supportive and motivating learning environment that facilitates academic success.

Moreover, the study by Ekasiba (2019) is consistent with previous research that has found a positive association between the teacher-learner relationship and student discipline. A study by Roorda et al. (2011) found that positive teacher-student relationships are linked to better student behavior and reduced instances of disciplinary

action. This underscores the role of teachers in maintaining a conducive learning environment by fostering positive relationships with their learners.

The sentiments were similar to the ones shared by one principal during an interview;

Positive teacher-student relationships are linked to better student behavior in several ways. According to research, students who have a positive relationship with their teacher are more likely to: Display prosocial behavior, such as helping, sharing, and cooperating with their peers; Develop self-regulation skills, such as autonomy, self-determination, and self-evaluation; Reduce aggressive behavior, such as bullying, fighting, and disrupting the class; and increase academic achievement, engagement, and motivation [Ki 03, Female Principal].

Tare (2020) conducted a correlational study in Kesses of Kenya using three hundred fifty-one participants. The data was collected by administering questionnaires to the pupils and conducting interviews with the teachers and head teachers, using interview guides.

The study utilized both quantitative and qualitative methods for data analysis. The study utilized both quantitative and qualitative methods to analyze the collected data. Through descriptive and inferential statistical analysis, significant correlations were observed between pupils' academic achievement and psychological factors such as self-esteem, self-efficacy, locus of control, and optimism, with a significance level of $p < 0.05$. This indicates that these psychological determinants play a crucial role in shaping students' academic performance.

In addition to the quantitative findings, the qualitative analysis identified key themes and sub-themes related to teacher-pupil relationships and academic achievement. The results underscored the importance of providing training to primary psychology teachers and encouraging educators to demonstrate warmth and sensitivity in their interactions with students. By fostering positive teacher-pupil relationships and promoting students' overall self-esteem, schools can contribute to improved academic outcomes.

The posing was similar to sentiments shared by one of the principals;

Training primary psychology teachers and motivating them to exhibit warmth and sensitivity can have positive effects on their students' social and emotional health and academic achievement. This can happen through some possible steps to achieve this goal including providing professional development courses for primary psychology teachers that cover topics such as child development, mental health, behavior management, and classroom strategies. These courses can help teachers enhance their subject knowledge, pedagogical skills, and confidence in teaching psychology. There is also a possibility of encouraging teachers to use creative and engaging methods to teach psychology, such as hands-on activities, experiments, games, and discussions. These methods can help students develop curiosity, critical thinking, and problem-solving skills, as well as foster a positive attitude toward learning psychology [KI 05, Male principal].

Munyambu's (2009) investigation in Masii Zone, Mwala District, Kenya delved into the correlation between the bond between teachers and learners and academic achievement.

The primary objective of the study was to analyze the impact of the relationship between educators and pupils on the performance of the latter, with a particular emphasis on the influence of discipline on this relationship. Additionally, the study aimed to explore the correlation between effective communication and positive teacher-learner relationships.

Through a combination of quantitative and qualitative research methods, Munyambu sought to understand the dynamics of teacher-pupil relationships and their implications for academic outcomes. The study likely involved surveys or questionnaires to gather quantitative data on the perceived bond between teachers and learners, academic achievement metrics, and disciplinary practices within the school setting. Additionally, qualitative methods such as interviews or focus group discussions may have been employed to gain deeper insights into the nature of teacher-pupil relationships and the role of effective communication in fostering positive interactions.

The research employed a mixed-methods approach, combining qualitative and quantitative methodologies to provide a comprehensive understanding of the subject under investigation. Qualitative methods, such as structured and unstructured interviews, allowed for the collection of rich, in-depth information, while quantitative methods

facilitated the analysis of numerical data. By utilizing both approaches, the study was able to capture a nuanced understanding of the dynamics of teacher-learner relationships and their impact on academic performance.

Structured and unstructured interviews were conducted with teachers to gather insights into their perspectives on the teacher-learner relationship and its influence on academic outcomes. Additionally, national and international documents were examined to contextualize the findings within a broader educational framework. Pupils also completed questionnaires, providing quantitative data on their perceptions of the teacher-learner relationship and its effect on their academic performance.

The findings of the study underscored the significance of positive teacher-learner relationships in enhancing academic achievement. Moreover, the research highlighted the role of such relationships in maintaining discipline among students. Effective communication emerged as a key factor in fostering positive teacher-learner relationships, emphasizing the importance of clear and open lines of communication between educators and pupils. Overall, the study's findings contribute valuable insights into the complex interplay between teacher-learner relationships, academic performance, and discipline within educational settings.

The researchers' recommendations emphasize the critical role of teachers in fostering positive relationships with learners to create a conducive learning environment. By prioritizing the development of strong and supportive teacher-learner relationships, educators can enhance students' overall academic experience and promote positive outcomes.

4.7 Influence of Teachers' Personal Growth on the Learners' Academic Achievement in Public Secondary Schools in Kiambu County

Table 16 presents the findings regarding the level of agreement with statements related to teachers' personal growth. The majority of teachers somewhat agreed with the statement "I feel like I have reached the limits of my capabilities" (23.5%), indicating a sense of limitation in personal growth among some educators. Additionally, a significant portion of teachers were undecided about whether they had a sense of personal stagnation (24.9%), suggesting uncertainty regarding their personal development. Conversely, a notable proportion of teachers somewhat disagreed with the statement "I feel like I have reached the limits of my capabilities" (21.8%), indicating a more optimistic outlook on their potential for growth. These findings suggest a varied perception of personal growth among teachers in public secondary schools in Kiambu County, highlighting the need for further exploration of factors influencing teachers' professional development and its impact on learners' academic achievement.



Mount Kenya University

Table 16 Influence of Teachers' Personal Growth on the Learners' Academic Achievement

Statement		Strongly agree	Somewhat agree	Undecided	Somewhat disagree	Strongly disagree	total
I think I have ability to adapt to the changing environment	F	26	52	48	51	44	221
	%	11.8	23.5	21.7	23.1	19.9	100
My experience has taught me how-to live-in harmony	F	29	48	52	50	42	221
	%	13.1	21.7	23.5	22.6	19	100
My affection has greatly impacted on learners' achievement	F	39	55	38	45	44	221
	%	17.6	24.9	17.2	20.4	19.9	100
The number of years I have worked as a teacher have really changed me as a person	F	44	44	45	42	46	221
	%	19.9	19.9	20.4	19	20.8	100
The school organizes seminars and inductions which has helped in my self-acceptance	F	39	46	44	41	51	221
	%	17.6	20.8	19.9	18.6	23.1	100
I have taken full responsibility for the learners' achievement in the subject area	F	36	49	45	50	41	221
	%	16.3	22.2	20.4	22.6	18.6	100
I have maintained self-fulfilling in teaching which has contributed to learners' achievement	F	40	50	45	48	38	221
	%	18.1	22.6	20.4	21.7	17.2	100
I have never tried self-destructive activities	F	40	40	47	50	44	221
	%	18.1	18.1	21.3	22.6	19.9	100

Source: Researcher, 2023

Table 16 shows that the largest portion of the teachers 51(23.1%) and 44(19.9%) rated the statement “I think I have ability to adapt to the changing environment” at somewhat disagree and strongly disagree. This implies that the ability to adapt to changing environment is a concern among the teachers in public secondary schools in Kiambu county, Kenya. These are the mentions of Ryff’s theory on personal growth that describes how one continues to form and learn new experiences that contribute positively to their behaviors.

Similarly, the largest portion of the teachers 50(22.6%) and another portion 42(19%) somewhat disagreed and strongly disagreed respectively with the statement “My experience has taught me how-to live-in harmony”. This implies that there are grey areas of experience teaching on living in harmony among the teachers in the sampled schools. Apparently, the largest portion of the teachers 55(24.9%) and another 39(17.6%) somewhat agreed and strongly agreed respectively with the statement “My affection has greatly impacted on learners’ achievement”. This reflected the applause of teacher affection on learners’ achievement in public secondary schools in Kiambu county, Kenya.

Table 16 also shows that the largest portion of the teachers 46 (20.8%) in public secondary schools in Kiambu county felt that the number of years they had worked as a teacher had not really changed them as a person.

The largest portion of the teachers, 51 (23.1%) strongly disagreed that the school organizes seminars and inductions which has helped in my self-acceptance.

The table shows that 50(22.6%) of the teachers had somewhat not taken full responsibility on the learners’ achievement in their subject areas. A close portion of the teachers 49(22.2%) had somewhat taken responsibility while 36(16.3%) had strongly taken full responsibility.

The largest portion of the teachers rated the statement “I have maintained to self-fulfilling in teaching which has contributed to learners’ achievement” as somewhat agree 50(22.6%) and strongly agree at 40(18.1%). This implies the presence of the self-fulfilling description of the teachers in the schools.

The largest portions of the teachers somewhat disagreed 50(22.6%) and strongly disagreed 44(19.9%) with the statement “I have never tried self-destructive activities”.

This implies that while there were portions of teachers who had tried self-destructive activities, the majority had not tried out. This depicts a better self-aware teacher who care about themselves.

The findings corroborate existing literature, in a study conducted by Oguta and Getange in 2019, they explored the role of professional development for teachers in improving the academic performance of students in public secondary schools. Despite education being widely recognized as a crucial aspect for growth both personally and societally, the disappointing results in students' achievements have led researchers to ponder on the benefits of ongoing teacher training

Their research aimed to answer a key question: Is there a significant relationship between teachers' professional growth and how well their students perform academically, and concurrent triangulation was the selected research design used in their study, combining different techniques and information sources enables us to gain a fuller perspective on what is happening.

This analysis involved gathering data from numerous participants such as over fifty-six different educational institutes along with precisely three hundred seventy educators alongside nearly four-hundred related students. They selected these participants using a combination of purposive, simple random, and stratified random sampling techniques. To gather information, they used questionnaires and interviews.

Prior to beginning with the core aspect of their research, they tested and validated their questionnaires through a smaller pilot study, making certain consistent measurements of intended variables in the questionnaire and verifying it for reliability are interrelated processes.

The data was collected by them then analyzed through various statistical methods like chi-squared test in addition to correlation and regression, through which they obtained insight into the relationship between teacher professional development and student academic achievement. Their findings suggested that professional development for teachers does indeed have a significant positive effect on student academic achievement in secondary schools. Based on these results, Oguta and Getange concluded that school administrators should work on ways to support and enhance professional development for teachers. This could involve creating proactive processes that encourage and facilitate ongoing teacher learning.

The study used regression modelling to assess the level of influence of the teacher's personal growth on the learners' academic achievement. The results are presented in Table 17.



Table 17 Regression Model Summary on Teachers' Personal Growth and Learners' Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.8882 ^a	.789	.738	1.360

a. Predictors: (Constant), I have never tried self-destructive activities, my experience has taught me how to live in harmony , I have maintained to self-fulfilling in teaching which has contributed to learners achievement, I have taken full responsibility on the learners achievement in the subject area, My affection has greatly impacted on learners achievement, The school organizes seminars and inductions which has helped in my self-acceptance, The number of years i have worked as a teacher have really changed me as a person

Source: Researcher, 2023

Table 17 shows an adjusted R-square of .738 which implies that 73.8% variations in learners' academic achievement would be attributed to teachers' personal growth at a standard error estimate of 1.36. Personal growth is one of the aspects described in Ryff's theory as a form of learning new experiences that contribute positively to the teachers' behaviors.

Through the regression modelling, ANOVA results were generated and are presented using Table 18.

Table 18 Regression ANOVA Table on Teachers' Personal Growth and Learners' Academic Achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	28.922	7	4.132	2.233	.033 ^b
1	Residual	394.191	213	1.851		
	Total	423.113	220			

a. Dependent Variable: Academic achievement

b. Predictors: (Constant), I have never tried self-destructive activities, my experience has taught me how to live in harmony, I have maintained to self-fulfilling in teaching which has contributed to learners achievement, I have taken full responsibility on the learners achievement in the subject area, My affection has greatly impacted on learners achievement, The school organizes seminars and inductions which has helped in my self-acceptance, The number of years i have worked as a teacher have really changed me as a person

Source: Researcher, 2023

Table 18 shows an F-Statistic of 2.233 which implies existence of some influence of teachers' personal growth on learners' academic achievement at sig. = 0.033. The significance level is less than the critical p-value =0.05 which makes the influence significant. Thus, there is significant influence of teachers' personal growth on learners' academic achievement in public secondary schools in Kiambu county.

Using correlation analysis, the study established the strength of the relationship between the average Personal growth score and the average KCSE for the last 3 years. The results are presented in Table 19.

Table 19 Correlation Analysis between the Average Personal Growth Score and the Average KCSE for the Last 3 Years

		Personal growth average	Average KCSE for the last 3 years
Average Personal growth score	Pearson Correlation	1	.633
	Sig. (2-tailed)		.625
	N	221	221
Average KCSE for the last 3 years	Pearson Correlation	.633	1
	Sig. (2-tailed)	.625	
	N	221	221

Source: Researcher, 2023

Table 19 shows that there is a strong positive correlation ($r=.633$) between the Average Personal Growth Score and the Average KCSE for the Last 3 Years at a significant level of .625 (2-tailed). This implies that a unit increase in the Average Personal Growth Score would increase the Average KCSE for the Last 3 Years by .633 units at significance level of .625 (2-tailed).

The study findings corroborate the existing literature in different dimensions. In the study conducted by Gathumbi, Mungai, and Hintze (2013), the importance of the quality of teachers in any country was highlighted. Teachers not only embody the social and cultural ethos of the country, but they also ensure its continuation and potential improvement through their practices within the classroom. In developing countries like Kenya, providing quality education is crucial to the development agenda. One approach to achieving this is through in-service training of novice and experienced teachers.

In-service training programs are a form of professional development that focuses on enhancing educators' skills and abilities in various aspects of teaching and learning. These programs serve multiple purposes, from training in the latest technology to

improving pedagogical practices and supporting innovation to achieve better educational outcomes. The study highlights the importance of support from educational institutions, cultures, and governments for the successful implementation of this level of professional development.

The study authors advocate incorporating in-service training as a systemic approach toward achieving continuous professional development for educators. They assert that implementing such an approach would revamp the existing ad-hoc and localized in-service training programs, often concentrated on general teaching aspects, to more effective and professional programs that improve student learning outcomes through specific measures.

The study discusses the challenges that need to be addressed by policymakers to develop a comprehensive policies and laws that institutionalize in-service training in Kenya. One of the challenges highlighted in the study is the lack of funding for professional development programs. The study recommends that governments should allocate adequate funds to support the implementation of in-service training programs. Another challenge highlighted in the study is the lack of coordination among stakeholders, including educational institutions, policymakers, and professional development providers. The study suggests that coordination can be improved by establishing a central coordinating body.

The study also highlights the need for in-service training programs to be tailored to the specific needs of educators. The programs of PD should be designed to address the unique challenges teachers face in their specific contexts. The study recommends that educators be involved in developing professional development programs to ensure that the programs are relevant and effective.

The study conducted by Mwihi, Josphat, and Wambugu (2019) aimed to investigate the relationship between principals' support for teachers' professional growth and its impact on students' academic success in Kirinyaga and Murang'a counties, Kenya. This research was motivated by concerns over the consistently low performance of students, particularly those scoring grades D+ and below, in national examinations.

The research findings revealed that there was no significant correlation between the level of involvement of principals in promoting teachers' professional development and students' academic performance. Despite efforts to support teachers' growth through in-service training, the study did not find a direct link between these initiatives and improved student outcomes. The authors recommended that principals play a more active role in ensuring that the skills and knowledge acquired by teachers during professional development programs are effectively implemented in the classroom.

The findings of the study underscore the complexity of the relationship between teacher professional development and students' academic achievement. While in-service training for teachers is undoubtedly important, the study suggests that its impact on student outcomes may be influenced by a myriad of factors beyond the direct involvement of principals in promoting professional development. This highlights the need for a holistic approach to improving student performance, one that considers not only teacher training but also other key determinants of academic success such as curriculum design, teaching methodologies, and the overall learning environment.

Moreover, the study emphasizes the importance of collaboration and coordination among various stakeholders, including teachers, school administrators, policymakers, and the Ministry of Education. Addressing the challenges facing the education sector in Kenya requires a concerted effort from all parties involved, working together towards common goals of enhancing teaching quality and student learning outcomes. By taking a

comprehensive approach to education reform, Kenya can better meet the needs of its students and ensure a brighter future for generations to come.

4.8 Influence of Teacher’s Autonomy on Learners’ Academic Achievement in Public Secondary Schools in Kiambu County

Table 20 presents the findings related to teachers' autonomy in public secondary schools in Kiambu County, Kenya. The majority of teachers somewhat agreed that they have the freedom to choose teaching methods and approaches that best suit their students' needs (28.2%). Additionally, a significant proportion of teachers somewhat agreed that they have control over the pace of teaching and learning activities in their classrooms (26.5%). This indicates a perceived level of autonomy among teachers in their instructional practices.

Table 20 Influence of teacher’s autonomy on learners’ academic achievement

Statement		SA	SWA	U	SWD	SD	total
I stay by my opinions even if others give contrary views	F	35	45	50	51	40	221
	%	15.8	20.4	22.6	23.1	18.1	100
Getting the appropriate feedback has helped in learners’ achievement	F	37	48	43	52	41	221
	%	16.7	21.7	19.5	23.5	18.6	100
Classroom instructions skills has helped in learners’ achievement	F	34	48	45	52	42	221
	%	15.4	21.7	20.4	23.5	19	100
I always put into practice professional debates and developmental lesson observations	F	36	50	41	51	43	221
	%	16.3	22.6	18.6	23.1	19.5	100
I rigorously monitor and evaluate what the students are doing in class	F	27	51	42	48	53	221
	%	12.2	23.1	19	21.7	24	100
I focus on the needs, interests and concerns of each individual learner	F	25	52	40	52	52	221
	%	11.3	23.5	18.1	23.5	23.5	100

Source: Researcher, 2023

The findings from Table 20 indicate that a significant portion of teachers in public secondary schools in Kiambu County expressed a lack of confidence in their opinions, as evidenced by 23.1% of respondents somewhat disagreeing with the statement " I stay by my opinions even if others give contrary views." Additionally, a notable percentage of teachers (22.9%) were undecided about this statement, suggesting uncertainty or ambivalence regarding the expression of their opinions.

Conversely, a smaller proportion of teachers (15.8%) strongly agreed with the statement, indicating a level of confidence in their opinions even when they differ from the consensus. However, this group represents a minority among the respondents.

The table shows that the largest portion of the teachers who participated in the study 52(23.5%) somewhat disagreed with the statement "Getting the appropriate feedback has helped in learners' achievement". However, another close portion of the teacher 48(21.7%) somewhat agreed with the statement. This implies that there were varied views on the level to which the teachers in public secondary schools in Kiambu county appreciated getting feedback in effective service delivery regarding academic achievement of the learners.

Similar trends are observed in the level of agreement with the statement "Classroom instructions skills has helped in learners' achievement" where the largest portion of the teachers 52(23.5%) somewhat disagreed. This paints the implication of a number of teachers not keen on acknowledging the role of classroom instructions skills in academic achievement the learners in public secondary schools in Kiambu county, Kenya.

Table 19 shows that almost equal portions of the teachers somewhat agreed 50(22.6%) and somewhat disagreed 51(23.1%) with the statement "I always put into practice professional debates and developmental lesson observations". This also reflects the

variations in how the teachers consider professional debates in development lessons regarding improving the learners' academic achievement in public secondary schools in Kiambu County.

On the contrary, the results show that the largest portion of the teachers 53(24%) strongly disagreed with the statement "I rigorously monitor and evaluate what the students are doing in class". This implies that the teachers may not be keen on monitoring and evaluating the students' classroom progress.

The table shows how the largest portions of the teachers 52(23.7%) somewhat disagreed and strongly disagreed with the statement "I focus on the needs, interests and concerns of each individual learner". This implies that the teachers hardly focus on the needs as well as the interests of the learners at individual levels. This is a psychological concern as different learners have different capacities and thus may need personalized attention at some point in their academic achievement goals.

In relation to existing studies, Mutinda (2022) focused on academic performance in Kitui County, Kenya. From 2012 to 2018, students' performance in the Kenya Certificate of Secondary Education was consistently low. Mutinda's research linked this performance to learner autonomy, attitude towards school, and interest in learning.

Four main goals drove this study. The first three were to determine the direction and strength of the relationship between each of the predictor variables (learner autonomy, attitude towards school, and interest in learning) and academic performance. The fourth was to develop a predictive equation for academic performance using these three variables.

The previous study, grounded in Vygotsky's sociocultural theory, employed a correlational research design to investigate the relationship between various factors and

students' academic performance. A total of 420 Form Three students from public secondary schools in Tseikuru Sub County were surveyed using an adapted questionnaire, with participants selected through proportionate sampling from each school and simple random sampling. Academic performance ratings were obtained from teacher assessment records, allowing for the examination of correlations between different variables and student achievement within the sociocultural framework.

The pilot study confirmed the validity and internal accuracy reliability of the test instruments, with findings consistent with the main study. Using SPSS, multiple regression analysis and Pearson product moment correlation revealed significant positive correlations between learner autonomy, attitude towards school, interest in learning, and academic performance.

The main conclusion of the study was that learner autonomy, attitude towards school, and interest in learning are both positive correlates and significant predictors of academic performance. The study recommended fostering learner autonomy, positive attitude towards school, and interest to learn among students.

Further, the study proposed more research on attitudes towards teachers and learning, as well as attitude towards a specific topic. It also called for research on the role of gender in the relationship between autonomy, attitude towards school, interest in learning, and learners' academic performance. Additionally, the study recommended exploring whether the relationship between autonomy, attitude towards school, and interest in learning varies depending on the school category and a comparative study between poorly performing and well performing schools.

The current study findings on autonomy of the teachers and achievement of the learners reflect the aspect that is conceptualized into teacher classroom performance for better

achievement. Ryff's psychology model looks that the autonomy of the teachers' high scores for the various statements derived from the psychological aspects to define their levels of psychological wellbeing. Such a high score in autonomy is seen as the ability in teachers to regulate behavior independently. This shows and spells the need for the teachers' confidence in their own opinions to impact on learners' achievement.

Regression analysis was utilized to determine the extent of influence of teacher autonomy on learners' academic achievement in public secondary schools in Kiambu County. Table 21 presents the regression model results, indicating the relationship between the predictors derived from the listed statements and the average scores in KCSE over the last 3 years.

Table 21 Regression Model for Influence of Teachers' Autonomy on Learners' Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.076 ^a	.606	.722	1.402

a. Predictors: (Constant), I focus on the needs, interests and concerns of each individual learner, I stay by my opinions even if other give contrary views, I rigorously monitor and evaluate what the students are doing in class, Classroom instructions skills has helped in learners achievement, I always put into practice professional debates and developmental lesson observations, Getting the appropriate feedback has helped in learners achievement

Source: Researcher, 2023

Table 21 shows an adjusted R-Square of .722 which implies that about 72.2% of variations in the learners' academic achievement is attributed to the teachers' level of autonomy. This is at the estimate standard error of 1.402.

Further statistics from the regression modelling of the variables on ANOVA is presented using Table 22.

Table 22 ANOVA Regression Results for Influence of Teachers' Autonomy on Learners' Academic Achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2.451	6	.409	.208	.974 ^b
1	Residual	420.662	214	1.966		
	Total	423.113	220			

a. dependent variable: academic achievement

b. predictors: (constant), i focus on the needs, interests and concerns of each individual learner, I stay by my opinions even if other give contrary views, i rigorously monitor and evaluate what the students are doing in class, classroom instructions skills has helped in learners achievement, i always put into practice professional debates and developmental lesson observations, getting the appropriate feedback has helped in learners achievement

Source: Researcher, 2023

Table 22 indicates that the F-statistic is 0.208 with a significance level of 0.974, suggesting that teacher autonomy does not have a significant influence on learners' academic achievement, as the significance level is greater than the critical p-value of 0.05. Additionally, Table 23 displays the correlation analysis between the average teacher autonomy score and the average KCSE scores for the last 3 years.

Table 23 Correlation between Teachers' Autonomy and Learners' Academic Achievement

		Teachers' autonomy average	Average KCSE for the last 3 years
Average Teachers' autonomy score	Pearson Correlation	1	.726
	Sig. (2-tailed)		.704
	N	220	220
Average KCSE for the last 3 years	Pearson Correlation	.726	1
	Sig. (2-tailed)	.704	
	N	220	221

Source: Researcher, 2023

Higher levels of teacher autonomy are linked to improved academic performance, as shown by Table 23, which shows a substantial positive connection ($r = 0.726$) between instructors' autonomy and students' academic achievement in Kiambu County's public secondary schools. This result is consistent with earlier studies that examined the relationship between learner autonomy, attitude toward school, interest in learning, and academic achievement, such as Mutinda's study conducted in Kitui County, Kenya. Mutinda's research, which was based on Vygotsky's sociocultural theory, highlighted how social interactions and cultural contexts influence how people learn.

The study, using a correlational design, surveyed 420 Form three students in Tseikuru Sub County, Kitui County, selecting participants from public secondary schools via random sampling. Findings revealed significant positive correlations between learner autonomy, attitude toward school, interest in learning, and academic performance, indicating their predictive value in student achievement.

Oduor studied the effects of self-autonomy and self-efficacy on the academic performance of high school pupils in 2016. The purpose of the study was to examine the effects of students' engagement, introspection, academic and social self-efficacy on their academic achievement. The results highlight the critical roles that self-efficacy and self-autonomy play in students' academic achievement and point to the necessity of interventions that support these elements in order to improve learning outcomes.

Further research avenues include exploring attitudes towards teachers and learning, gender differences, and comparative studies between schools of varying performance levels.

Similar findings emerged in the qualitative results through interviews with the principals, where one noted;

Self-autonomy and self-efficacy play complementary roles in fostering academic success. Students with a strong sense of self-autonomy are empowered to take ownership of their learning journey, making informed decisions and setting meaningful goals. Conversely, those with high self-efficacy possess the belief in their capabilities to overcome obstacles and achieve their objectives. Together, these psychological attributes cultivate intrinsic motivation, resilience, and effective learning strategies, and to overcome difficulties and failures [KI 08] .

Locke and Latham's achievement theory framed a mixed-methods study, revealing the significant impact of self-autonomy and self-efficacy on academic performance. Learners' involvement, reflection, and social self-efficacy emerged as crucial predictors. These findings underscore the importance of educators nurturing autonomy, self-efficacy, and social skills to enhance student academic achievement.

The study in Bondo Sub-County investigated learner-autonomy, self-efficacy, and academic success among 407 students and 12 teachers. Findings indicated positive correlations between academic performance and learner involvement, reflection, and social efficacy. The study recommends educators encourage student participation and establish peer tutoring programs to enhance adaptation to the learning environment. These interventions could contribute to improved academic outcomes in schools.

4.9 Influence of Teachers' Sense of Purpose in Life on Learners' Academic Achievement in Public Secondary Schools in Kiambu County

The study sought to determine how instructors' life goals affected students' academic performance in public secondary schools in Kenya's Kiambu County. Through surveys, main interviews, document analysis, and observation schedules, both quantitative and qualitative data were gathered. The questionnaire utilized a 5-point Likert scale to gauge teachers' agreement with statements regarding their sense of purpose in life and its influence on learners' academic achievement. Descriptive statistics, including

frequencies and percentages, were employed to analyze the collected data, as presented in Table 24.

Table 24 Influence of teachers’ sense of purpose in life on learners’ academic achievement

Statement		Strongly agree	Somewhat agree	Undecided	Somewhat disagree	Strongly disagree	Total
Some people lose focus on multiple issues that derail their growth unlike me	F	35	48	46	43	49	221
	%	15.8	21.7	20.8	19.5	22.2	100
Am constantly seeking for a true mission of life	F	30	51	43	55	42	221
	%	13.6	23.1	19.5	24.9	19	100
I purpose for meaningful life	F	27	49	46	57	42	221
	%	12.2	22.2	20.8	25.8	19	100
I seek for tasks that improve my life significance	F	28	50	49	52	42	221
	%	12.7	22.6	22.2	23.5	19	100
I would love to be meaningful in life	F	20	52	66	48	35	221
	%	9	23.5	29.9	21.7	15.8	100
I create a sense of life that will give meaning	F	31	44	56	47	43	221
	%	14	19.9	25.3	21.3	19.5	100
I feel that I am satisfied with my life purpose	F	25	42	49	57	48	221
	%	11.3	19	22.2	25.8	21.7	100
My life has no clear purpose	F	22	48	55	52	44	221
	%	10	21.7	24.9	23.5	19.9	100

Source: Researcher, 2023

Table 24 reveals that a significant portion of teachers (22.2%) strongly disagreed with the notion of wandering aimlessly through life, while a notable minority (2.17%) somewhat agreed. This suggests a varied perception of purpose among teachers in Kiambu county. Similarly, the majority of teachers (24.9%) somewhat disagreed with the idea of constantly seeking a true-life mission, indicating a need for further exploration of purpose. Furthermore, a considerable portion (25.8%) somewhat disagreed with the notion of having a purpose for a meaningful life, as well as seeking tasks to improve life significance, highlighting varying perspectives on purpose among educators.

The table shows that the largest portion of the teachers were not even sure and decide on whether they would love to be meaningful in life. The same rating in undecided is seen

in the statement “I create a sense of life that will give meaning” with the largest portion of the teachers 56(25.3%).

Table 25 Regression Summary Model for Influence of Teachers’ Sense of Purpose in Life on Learners’ Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.196 ^a	.438	.702	1.385

a. Predictors: (Constant), *My life has no clear purpose, I purpose for meaningful life, I would love to be meaningful in life, I seek for tasks that improve my life significance, I feel that I am satisfied with my life purpose, Am constantly seeking for a true mission of life, I create a sense of life that will give meaning, Some people lose focus on multiple issues that derail their growth unlike me.*

Source: Researcher, 2023

Table 25 indicates an adjusted R-square value of 0.702, suggesting that approximately 70.2% of the variance in learners' academic achievement can be attributed to teachers' sense of purpose in life, with an estimated standard error of 1.385. Following this, Table 26 presents the ANOVA results.

Table 26 ANOVA Results for Influence of Teachers’ Sense of Purpose in Life on Learners’ Academic Achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	16.267	8	2.033	1.060	.393 ^b
1	Residual	406.846	212	1.919		
	Total	423.113	220			

a. *Dependent Variable: Academic achievement*

b. *Predictors: (Constant), My life has no clear purpose, I purpose for meaningful life, I would love to be meaningful in life, I seek for tasks that improve my life significance, I feel that I am satisfied with my life purpose, Am constantly seeking for a true mission of life, I create a sense of life that will give meaning, Some people lose focus on multiple issues that derail their growth unlike me.*

Source: Researcher, 2023

Table 26 displays an F-statistic of 1.060, suggesting some influence of teachers' sense of purpose in life on learners' academic achievement in public secondary schools in Kiambu

County. However, this influence is significant at the 0.393 significance level, which is greater than 0.05. Therefore, while there might be some influence, it is not statistically significant.

Compared to other studies, Kariuki and Mbugua's 2018 shed light on student motivation and its critical role in learning. The researchers focused on academic motivation, an area that has seen extensive theoretical and empirical exploration. The study addresses a pressing issue in Kenyan high schools: students' lack of motivation and its impact on academic performance. It aimed to identify motivational factors related to teachers that influence students' academic performance, utilizing a descriptive survey research design. The target population included 270 principals, 270 class teachers, and 9980 students. The study selected a sample of 27 principals, 27 class teachers, and 27 schools, along with 370 students, using purposive and stratified sampling methods. Questionnaires were employed as the primary data collection tool, and data analysis was conducted using SPSS version 19. The findings indicated high agreement among teachers and students regarding the importance of clear expectations, positive teacher-student relationships, and the effectiveness of rewards in motivating students. Moreover, the research concluded that student motivation, fostered by teachers' sense of purpose in life, positively influences academic performance. These findings underscore the significance of a supportive and engaging learning environment cultivated by teachers.

Table 27 Correlation between the Teachers’ Sense of Purpose in Life and Learners’ Academic Achievement

		Average KCSE for the last 3 years	Sense of purpose average
	Pearson Correlation	1	
Average Sense of purpose score	Sig. (2-tailed)		
	N	221	
	Pearson Correlation	.652	1
Average KCSE for the last 3 years	Sig. (2-tailed)	.443	
	N	221	221

Source: Researcher, 2023

Table 27 shows a strong positive association ($r = 0.652$) between students' academic success in Kiambu County's public secondary schools and instructors' feeling of life purpose. However, because the correlation is higher than the crucial p-value of 0.05, its significance level (0.443) is insufficient to demonstrate a meaningful impact. This implies that although a correlation exists, academic achievement is not significantly impacted by it. In contrast, Cheruse (2021) looked into the relationship between students' academic success in elementary schools in Kericho County, Kenya, and the transformational skills of the headteachers.

The study revealed a significant correlation between the intellectual stimulation provided by headteachers and students' academic performance, whereas other leadership traits showed no statistically significant relationship with academic outcomes.

Significant relationships exist between most headteachers' transformational leadership abilities and learners' academic performance. The study's findings are relevant to a teacher's sense of purpose in life and their impact on learners' academic achievement. First, the head teacher's intellectual stimulation, which had a significant relationship with learners' academic performance, can be seen as an essential competency for inspiring and

motivating teachers to provide high-quality education. Intellectual stimulation refers to the ability of the headteacher to challenge and encourage teachers to be innovative and creative and critically examine their assumptions and practices. This can result in teachers feeling more engaged and enthusiastic about their work, translating into improved academic performance among learners.

Interviews highlighted the link between leadership skills and academic performance, implying a connection between competencies and teachers' sense of purpose, affecting dedication and overall life purpose. Leadership traits could indirectly affect teachers' commitment and motivation, influencing students' academic success.

Another one posited;

Teachers who work under a headteacher who exhibits positive behaviors such as respect, kindness, and empathy are more likely to feel valued and appreciated. This, in turn, can lead to teachers feeling more committed to their work and motivated to help their students succeed academically [KI 06]

The study aligns with the theoretical model by emphasizing the importance of teachers' sense of purpose in shaping their goal orientations and meaningful engagement in teaching and learning. According to Ryff's psychology model, teachers' focus on academic goals is facilitated by meaningful self-acceptance and a positive attitude, ultimately contributing to the academic success of learners.

4.10 Multiple Regression Analysis

The study employed multiple regression analysis with independent variables including teachers' self-efficacy, quality of relationship, personal growth, autonomy, and sense of purpose, while the dependent variable was the academic performance of schools over the

last three years. This statistical approach aimed to assess the combined influence of these variables on school academic achievement.

Table 28 Multiple Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.8029 ^a	.674	.616	1.298

a. Predictors: (Constant), Sense of purpose average, Personal growth average, Self-esteem average, Teachers' autonomy average, Quality of relationship Average

Source: Researcher, 2023

Table 28 presents a summary of the multiple regression analysis model, indicating an R-value of 0.8029 and an R Square value of 0.674. The adjusted R square, at 0.616, suggests that around 61.6% of the variance in Average KCSE for the last 3 years is explained by the teachers' psychological well-being. Table 29 outlines the ANOVA results of the multiple regression analysis.

Table 29 Multiple Regression Analysis ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2.526	5	.505	.300	.013 ^b
1	Residual	360.652	214	1.685		
	Total	363.177	219			

a. Dependent Variable: Average KCSE for the last 3 years

b. Predictors: (Constant), Sense of purpose average, Personal growth average, Self-esteem average, Teachers' autonomy average, Quality of relationship Average

Source: Researcher, 2023

The psychological health of instructors and students' academic achievement in Kiambu County's public secondary schools are related, as shown by Table 29's F-statistic of 0.3. Furthermore, a statistically significant link between these variables is shown by the

significance level of 0.013, which is below the essential p-value of 0.05. The multiple regression analysis's coefficients are shown in Table 30.

Table 30 Multiple Regression Analysis Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.717	1.176		4.012	.000
Self-esteem average	.097	.188	.035	.516	.606
Quality of relationship Average	.078	.146	.037	-.532	.595
Personal growth average	.069	.160	.029	.429	.669
Teachers' autonomy average	.053	.156	.023	.340	.734
Sense of purpose average	.134	.179	-.051	-.751	.454

a. Dependent Variable: *Average KCSE for the last 3 years*

Source: Researcher, 2023

The standardized coefficients for the five independent variables are 0.035, 0.037, 0.029, 0.023, and -0.051 for the average of self-esteem, the average of quality of relationships, the average of personal growth, the average of teachers' autonomy, and the average of sense of purpose, respectively, as shown in Table 30. The following regression model would be created using the data to examine the association between the academic achievement of the students and the teachers' well-being.

$$\text{Learners' academic performance} = .035X_1 + .037X_2 + .029X_3 + .023X_4 - .051X_5 + 1.176$$

Where;

X1 = Self-esteem of the teachers

X2 = Quality of relationship of the teachers

X3 = Personal growth of the teachers

X4 = Teachers' autonomy

X5 = Sense of purpose of the teachers

From the model, the study showed that considering all other factors constant, a unit increase in Self-esteem of the teachers would increase the learners' academic performance by .035 units; a unit increase in Quality of relationship of the teachers would increase learners' academic performance by 0.037 units; a unit increase in Personal growth of the teachers would increase the learners' academic performance by 0.029 units. The model also shows that a unit increase in teachers' autonomy would increase the learners' academic performance by .0023 units while a unit increase in the sense of purpose of the teachers would decrease the learners' academic performance by 0.051 units.

The model also shows that a constant = 1.1756 implying that without the factors of the teachers' psychological wellbeing, the learners' academic performance would be at 1.1756 units.

The study findings reflect the contribution of Ryff's theory in the learning context where the teachers' wellbeing is key in learners' academic performance. Ryff Scale's six major aspects of psychological well-being link to the teacher's classroom performance for better achievement. The five conceptualized included teachers' autonomy, the teacher developing a purpose in life, experiencing personal growth, as well as self-acceptance. Seifert (2005) points out the possible contributing and demeaning factors for psychological wellbeing. Psychological wellbeing may also be affected by psychological needs which may be extrinsic or intrinsic. From the findings, it is revealed that as

teachers relate with the students in the schools, the development of the relationships become essential in effectiveness of teaching and learning form the basis of excellent academic performance of the public secondary school learners in Kiambu county.

Similarly, the contributions of the teacher factors in the learners' academic performance in public secondary schools in Kiambu county is reflected in the Production Function Theory by Collier (1994). The author opines that the questions on the need to know the characteristics of schooling that significantly determine academic achievement. The current study used exogenous variables, specifically the teacher psychological wellbeing to predict the academic outcomes among the learners in public secondary schools in Kiambu county.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter offers a comprehensive summary of the study's outcomes, conclusions, and recommendations, all centered on the research questions explored. Through an investigation into public secondary schools in Kiambu County, Kenya, the study delved into five principal thematic areas to understand how teachers' psychological well-being influences learners' academic achievement. The findings revealed that teachers' self-efficacy plays a vital role in shaping learners' academic success, underscoring the significance of educators' confidence in their capacity to impact student outcomes positively. Additionally, the quality of teachers' relationships, particularly with students, emerged as a critical determinant of academic achievement, with positive teacher-student interactions fostering improved student performance. Furthermore, the study highlighted the importance of teachers' personal growth, indicating that continuous professional development significantly influences learners' academic achievement. Moreover, granting teachers autonomy in decision-making and encouraging innovation in teaching practices were found to positively affect student outcomes. Lastly, the study underscored the pivotal role of teachers' sense of purpose in life, emphasizing how educators' intrinsic motivation and dedication to their profession directly correlate with student success.

5.2 Summary

5.2.1 Teachers' level of self-efficacy influence on learners' academic achievement in public secondary schools in Kiambu County

The study uncovered several pathways through which teachers' self-efficacy influences learners' academic achievement in public secondary schools in Kiambu County. It revealed that teachers' sense of acceptance in their school environment, coupled with positive working relationships among staff, positively impacted classroom delivery and student performance. Cultivating teachers' self-efficacy further boosted learner achievement, while the teachers' personality traits and enjoyment in teaching various subjects also contributed to academic success. Despite these findings, the study indicated that while teachers' self-efficacy influenced learner achievement to some extent, the effect was not statistically significant. Nonetheless, changes in teachers' self-efficacy positively correlated with improvements in learner achievement, as measured by KCSE performance.

5.2.2 Teachers' quality of relationship with others influence on learners' academic achievement in public secondary schools in Kiambu County

Significant differences in the personal characteristics of instructors and their influence on student achievement in Kiambu County's public secondary schools were found by the study. The difficulties in addressing teachers' personal stagnation are highlighted by the fact that whereas some teachers indicated a wish for change and progress, others were unaffected by similar worries. Interestingly, with almost 70.3% of the variances ascribed to this component, the caliber of instructors' interpersonal interactions was found to be a significant determinant of students' academic success. The results demonstrated a statistically significant impact on student outcomes and a strong and favorable association between the academic achievement of students and the quality of the relationships that teachers have with them.

5.2.3 Teachers' personal growth influence on learners' academic achievement in public secondary schools in Kiambu County

The study highlighted concerns among teachers in public secondary schools in Kiambu County regarding their ability to adapt to a changing environment. Teacher affection emerged as a crucial factor influencing learners' academic achievement, emphasizing the importance of educators' emotional connection with students. A notable portion of teachers expressed that their years of experience had not significantly changed them, and some did not fully take responsibility for learners' achievement in their subject areas. The study identified a self-fulfilling description among teachers, with some indicating attempts at self-destructive activities. However, the majority demonstrated self-awareness and a caring attitude toward personal growth, contributing to learners' academic success. Approximately 73.8% of variations in academic achievement were attributed to teachers' personal growth, indicating a significant influence supported by strong positive correlations.

5.2.4 Teacher's autonomy influence on learners' academic achievement in public secondary schools in Kiambu County

The study revealed a lack of confidence among many teachers in public secondary schools in Kiambu County regarding their opinions, as well as varied attitudes toward feedback and classroom instruction skills' role in academic achievement. Teachers showed differing levels of engagement in professional debates to enhance lesson development and were not consistently monitoring and evaluating student progress. Moreover, individual students' needs and interests were not consistently prioritized. Approximately 72.2% of variations in academic achievement were attributed to teachers' autonomy, with a significant influence observed, supported by a strong positive correlation ($r= 0.726$).

5.2.5 Teacher's sense of purpose in life influence on learners' academic achievement in public secondary schools in Kiambu County

The study highlighted varied perceptions among teachers regarding their sense of purpose in life and its relationship to improving learners' academic achievement. While some teachers demonstrated a clear sense of purpose geared towards enhancing academic outcomes, others lacked such clarity. Despite this, the study revealed a significant influence of teachers' sense of purpose in life on learners' academic achievement in public secondary schools in Kiambu County ($F=1.060$, sig. $=.393$). However, the correlation between teachers' sense of purpose and learners' academic achievement was found to be insignificant and weak ($r= .652$, sig. $.442$).

5.3 Conclusion of the Study

The study findings reflect various elements of psychological wellbeing of the teachers influence their delivery for learners' academic achievement. However, different elements influence the achievement in different magnitudes and varied significance levels. Regression analyses showed that about 72.2% variations in the learners' academic achievement attributed to teachers' level of self-efficacy, 70.3% attributed to teacher quality relationship with others, 73.8% attributed to teachers' personal growth, 72.2% attributed to the teachers' level of autonomy, and 70.2% of the variations attributed to teachers' sense of purpose.

The study concludes that there was significant influence of teacher self-efficacy ($F= .662$, sig. $.724$), teachers' personal growth ($F = .884$, sig. $= .508$), teachers' autonomy ($F=.208$, sig. $= .974$) and teachers' sense of purpose in life ($F=1.060$, sig. $=.393$) on learners'

academic achievement in public secondary schools in Kiambu County. On the other hand, correlation analyses showed that the independent variables had different strengths of relationship with the learners' academic achievement; Correlation with teacher's level of self-efficacy being weak positive and insignificant (2-tailed); with teachers' quality of relationship with others being strong positive and insignificant (2-tailed); with the teachers' personal growth being strong positive and insignificant (2-tailed); with teachers' autonomy being strong positive and insignificant (2-tailed); and with teachers' sense of purpose in life being strong positive and insignificant (2-tailed).

5.4 Recommendations of the Study

This section presents the recommendations made from the study findings. The recommendations are presented in the following subsections

5.4.1 Recommendations for Practice

Given the outcomes of this study and guided by the research objectives, the study recommends that;

- i. School managers establish strategies for promoting teacher's level of self-efficacy as it will moderate the teachers' performance in relation to the academic achievement of the learners.
- ii. The principals in public secondary schools introduce some mentorship programs for teachers with a focus on building their personal growth. With these, the teachers will feel appreciated and recognized for their need to grow as they mentor students.
- iii. The teachers as school staff within public secondary schools in Kiambu county need to initiate working groups that target building on quality of relationships among themselves. This can help not only sharing and advising each other but

also learn from one another in the concept of social learning concept in psychology.

- iv. The board of management in public secondary schools in Kiambu County should develop mechanisms that track and address the teacher's level of autonomy. The teachers need to feel free to use diverse techniques in teaching and learning rather than being bound within some techniques put across by the board of management. This can be an approach to addressing high-handedness by some principals.
- v. The TSC to work with principals to integrate some modules on building a personal sense of purpose in life with the ongoing teacher professional development programs. The teachers feel that their professional development is already taken off by the introduction of TPD in early 2021. This scatters the focus and thoughts about having a sense of purpose as a teacher.

5.4.2 Recommendations for Policy formulation

The study made the following recommendations for policy formulation by various stakeholders:

- i. Teachers Service Commission; the teacher employer and Registrar can create County Guidance and Counseling units (CGCU) in each of 47 counties in Kenya that can be used to promote teachers' psychological well-being and in turn improve the learning outcomes of learners in Kenyan schools.
- ii. The TSC designed a policy tool to measure and address teachers' psychological wellbeing just like it introduced TPAD that measures teachers' performance.

5.4.3 Recommendations for further Study

The study recommends a further quasi-experimental study to be carried out on the effects of psychological well-being of teachers on professional burn-out teachers. The essence

of students' academic achievement may be an extraneous aspect measured from the wellbeing of the teachers rather than remaining the framework of the teachers themselves.

More inquiries about is required to distinguish the causal joints between teachers' wellbeing and their potential results. To do these, future ponders must consolidate complex strategies of information collection and investigation. Analysts are empowered to actualize such approaches to assist construct a stronger information base on this imperative matter.



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APPENDICES

Appendix I: Letter of Introduction

Dear Sir/Madam

RE: PERMISSION TO CARRY OUT RESEARCH

I am a student undertaking a PhD course in Education psychology. I am required to submit, as part of my research work on **AN ASSESSMENT OF TEACHERS' PSYCHOLOGICAL WELL-BEING ON LEARNERS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN KIAMBU COUNTY, KENYA**

I have selected your school to participate in the study to help me complete my degree. I humbly request your participation by giving appropriate responses to the questions that will be asked. I also notify you of the pure academic use of the data to be collected and that your privacy is guaranteed. Your participation will remain anonymous and ths no name nor identification will be indicated anywhere on the research tools. The stuyd findings will be published online and may be individually shared with you on request.

Regards.

Yours faithfully,

Edith Njoroge

Appendix II: Consent Form

I am Edith Njoroge, a student taking PhD degree in educational psychology of Mount Kenya University. It is my humble request that you respond to the questionnaire with accurate information based on this research titled Teachers psychological wellbeing and its influence on learners' academic achievement in public secondary schools in Kiambu County, Kenya. The information given was treated with maximum confidentiality. It will not be used for any other purpose other than this research.

Please read and complete this form carefully and fill in the appropriate sections accordingly.

- The study details have satisfactory been explained to me YES /
 NO
- I understand the scope and level of engagement in the study YES /
 NO
- I understand that I may withdraw my participation in the study YES /
without necessarily giving explanations NO

I understand that all the information I give will be treated with privacy YES /
and confidentiality. NO

I give my consent to participate in this study and have been given a copy of this form for my own information.

Signature..... Date.....

Appendix III: Interview Guide for Principals

Dear respondent,

The researcher is a student undertaking a Doctor of Philosophy in Education Psychology in Mount Kenya University carrying out research on, **INFLUENCE OF TEACHERS' PSYCHOLOGICAL WELL-BEING ON LEARNERS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN KIAMBU COUNTY, KENYA.**

I kindly request that you respond to the following questions appropriately.

a) General Information

Kindly tick (✓) appropriately

1. Gender

Male

Female

2. Years of teaching experience

0-5 years

6-10 years

11-15 years

Over 15 years

3. Age bracket

Experience

0-5 year

6-10 years

11-15 years

Above 15

years

Age

Below 30 years

30-34

35-39

40-44

Gender

Male

Female

45-49

Above 49 years

SECTION B: Teachers' Psychological wellbeing and learners' achievement

3. How do you deal with each of the following teachers' psychological well-being in your school?

i. Weak empathy

ii. Mistrust

iii. Disrespect

iv. Selfishness

5. How would you describe the psychological characteristics of teachers in your schools?

(Tick all that applies)

Courtesy

Confident

Trustworthy

Self-accepting

Affectionate

1. What common reaction(s) do you receive from teachers when you consult them on matters involving learners' achievement in your school?

Show interest

Give opinions

Show ability to change achievement

Show multiple life aspects

☒ Show strong personality

7. Have you previously had a case of teachers being depressed at work?

Yes No

If yes, how did you react to it?

.....
.....
.....

8. How do you handle conflict among teachers in your school?

.....
.....
.....

9. What measures have been put in place aimed at building teachers' confidence in your school?

.....
.....
.....

10. Do you think your school has a conducive environment to enable teaching and learning to take place?

Yes No

11. Do you think teachers in your school have a positive expectation towards achieving goals and mission?

Yes No

Appendix IV: Questionnaire for the Teachers

Section A: General Information

1. Gender: Male Female

2. Experience

0-5 years 11-15 years

6-10 years 16-20 years

Over 20 years

3. Level of Education

Diploma

Post Graduate diploma

Degree

Masters

PhD

Post-PhD

4. Age

Below 25 years

25-30

31-36

37-42

43-48

Above 48 years



Section B: Influence of teachers’ level of self-efficacy on learners’ achievement

Please rate your levels of self-efficacy, which refers to the degree of positive attitudes you

have about yourself, your past behaviors and the choices that you have made.

Key; Strongly A-1 Somewhat Agree-2 Undecided-3 Somewhat Disagree-4 Strongly Disagree

Statement	1	2	3	4	5
I feel much accepted in my current school					
The school administration encourages self-efficacy among teachers					
I have created a mutual working relationship with my colleagues					
School organized seminars have improved my level of self-efficacy					
My level of self-efficacy is positively felt by learners					
I like most aspects of my personality.					
My personality has helped improve learner’s achievement					
I enjoy teaching students on various aspects of life					

Section C: Influence of quality of relationships with others.

Please rate the overall quality of your relationship with others in your school.

Key; Strongly Agree -1 Somewhat Agree-2 Undecided-3 Somewhat Disagree-4 Strongly Disagree-5

Statement	1	2	3	4	5
I am often troubled by a number of personal qualities, and I wish I could change them					
I often consider others' opinions in making my decisions					
I often become overwhelmed in improving bad circumstances around me.					
I often find myself bored because of a personal stagnation					
My decisions have an impact on learners' academic outcome					

Section D: influence of teachers' personal growth on the learners' achievement

Please rate your level of personal growth in your school

Key; Strongly Agree -1 Somewhat Agree-2 Undecided-3 Somewhat Disagree-4 Strongly Disagree-5

Statement	1	2	3	4	5
I think I have ability to adapt to the changing environment					
my experience has taught me how-to live-in harmony					
My affection has greatly impacted on learners' achievement					
The number of years i have worked as a teacher have really changed me as a person					
The school organizes seminars and inductions which has helped in my self-acceptance					
I have taken full responsibility for the learners' achievement in the subject area					
I have maintained self-fulfilling in teaching which has contributed to learners' achievement					
I have never tried self-destructive activities					

Section E: Influence of teachers' level of autonomy.

Please rate your level of autonomy in your school

Key; Strongly Agree -1 Somewhat Agree-2 Undecided-3 Somewhat Disagree-4 Strongly

Statement	1	2	3	4	5
I stay by my opinions even if others give contrary views					
Getting the appropriate feedback has helped in learners' achievement					
Classroom instructions skills has helped in learners' achievement					
I always put into practice professional debates and developmental lesson observations					
I rigorously monitor and evaluate what the students are doing in class					
I focus on the needs, interests and concerns of each individual learner					

Section F: Influence of teachers' sense of purpose in life.

Please rate the level of your sense of purpose in life

Key; Strongly Agree -1 Somewhat Agree-2 Undecided-3 Somewhat Disagree-4 Strongly

Statement	1	2	3	4	5
Some people lose focus on multiple issues that derail their growth unlike me					
Am constantly seeking for a true mission of life					
My purpose for meaningful life					
I seek for tasks that improve my life significance					
I would love to be meaningful in life					
I create a sense of life that will give meaning					
I feel that I am satisfied with my life purpose					
My life has no clear purpose					

Please rate the level of your students' academic achievement

In reference to the last three years, indicate the KCSE indices of your school.

	2019	2020	2021	Average
KCSE Index				

Rate the level of agreement for your students on the following academic achievement aspects;

Key; Strongly Agree -1 Somewhat Agree-2 Undecided-3 Somewhat Disagree-4 Strongly

Statement	1	2	3	4	5
Pass exams in mean-grade					
Pass in my subject					
Show critical thinking skills					
Students complete the level					
Students show good decision-making skills					
Students apply learned experiences in life					



Appendix V: Documents Analysis Checklist

Checkbox	Items to be analyzed	Aspects to be considered	Comments
<input type="checkbox"/>	Students' progress reports from class teachers	Mean score Standard deviation across terms Teachers' comments	
<input type="checkbox"/>	Academic results analysis reports from Dean of Studies	Target mean scores Attained means scores Variance Performance trends across years	
<input type="checkbox"/>	Teachers' records of work	Defined purpose of a subject Spelt coverage duration Assessment and Evaluation timings Supervisory monitoring Innovation signs	
<input type="checkbox"/>	Disciplinary records from Deputy Principals Office	Termly cases recorded Ways of handling cases Disciplinary committee membership Closure of cases Trends in reported cases	

Appendix VI: Observation Guide for Students

Observe the following;

A. SELF-EFFICACY OF TEACHERS

- 1 Instructional strategy that the teacher uses in the class
- 2 How the teacher communicates directions to the learners
- 3 The class control techniques
- 4 The teacher closure of a lesson
- 5 Situation where the teacher encourages a learner who is correct in a response.

B. QUALITY OF LIFE OF TEACHERS

- 6 The mutual relationship that exist between the teachers and his/her learners
- 7 The response period between teacher questioning and the learner responding.
- 8 The communication that take space between teachers and students
- 9 Strategies used by the teachers to create a good relationship between them and their learners
- 10 Assess whether teachers hold meetings with students. If so, note and explain how often.

C. PERSONAL GROWTH OF TEACHERS

- 11 Teacher movements in the classroom during a lesson.
- 12 Teacher scheduling of reflection time
- 13 Teacher journal keeping
- 14 Teacher reflection on classroom and student problems, situations, and experiences

D. AUTONOMY OF TEACHERS

- 16 Individual teacher rules among various classrooms.
- 17 Teachers initiated classroom routines and procedures.
- 18 Teacher demonstration of expectations for student learning
- 19 The teacher's grading scheme.

F. SENSE OF PURPOSE OF TEACHERS

- 20 The classroom arrangement suggested by individual teachers.

- 21 Student incentives the teacher uses.
- 22 Strategies the teacher use to develop students' social skills

G. STUDENTS' ACHIEVEMENT

- 23 Verbal and nonverbal cues the teacher use, and how students respond to them
- 24 The teacher response to disruptive behavior
- 25 Students' opportunities to impact grades



Appendix VII: ERC CERTIFICATE



REG: PHDED/44402/2016

Dear Sir/Madam,

RE: INFLUENCE OF TEACHERS' PSYCHOLOGICAL WELL-BEING ON LEARNERS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN KIAMBU COUNTY, KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **1035**. The approval period is **21/10/2021 - 20/10/2022**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

The Chairman
Mount Kenya University
Ethics Review Committee
P. O. Box 342 - 0100, Thika

Dr. Peter G. Kirira
Chairman, Mount Kenya University IERC

Main Campus: General Kere Road, P.O. Box 342-0100 Thika, Kenya

Appendix VIII: University Introduction Letter



DIRECTORATE OF GRADUATE STUDIES

PHDED/44402/2016

21st December, 2021

*The Director, Research Coordination Division
National Commission for Science, Technology & Innovation
Utalii House, 8th & 9th Floor
P.O Box 30623- 00100
NAIROBI*

Dear Sir/Madam,

RE: EDITH NJOROGE - REGISTRATION NO. PHDED/44402/2016

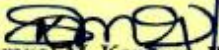
The purpose of this letter is to introduce the above named student who is pursuing Doctor of Philosophy in Education in the Department of Educational Management and Curriculum Studies in the School of Education.

The title of his research is *"Influence of Teachers' Psychological Well-Being on Learners' Academic Achievement in Public Secondary Schools in Kiambu County, Kenya."*

He has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data for his research between December, 2021 and May, 2022.

Any assistance accorded to him will be highly appreciated.

Thank you.


Dr. Samuel M. Karenga, Ph.D.
Director, Graduate Studies
Enc.

Mount Kenya University
P. O. Box 342 - 01000, THIKA
Office of the Director
Graduate Studies

Main Campus, General Kago Road, P.O. Box 342-01000 Thika. Tel: +254 67 2820 000,
Cell: +254 720 790 796, 0709 153 000
Email: info@mku.ac.ke, Web: www.mku.ac.ke
Chartered and ISO 9001 : 2015 Certified Institution.

Unlocking Infinite Possibilities

Appendix IX: NACOSTI Research Permit



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 611517
Date of Issue: 14/February/2022

RESEARCH LICENSE



This is to Certify that Ms. Edith Nduhi Njoroge of Mount Kenya University, has been licensed to conduct research in Kiambu on the topic: INFLUENCE OF TEACHERS' PSYCHOLOGICAL WELL-BEING ON LEARNERS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN KIAMBU COUNTY, KENYA for the period ending : 14/February/2023.

License No: NACOSTI/P/22/15650

Applicant Identification Number: 611517

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



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Appendix X: County Authorization Letter



OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION
COUNTY COMMISSIONER, KIAMBU

Telephone: 066-2022709
Fax: 066-2022644
E-mail: countycommkiambu@yahoo.com
When replying please quote

County Commissioner
Kiambu County
P.O. Box 32-00900
KIAMBU

Ref. No: **ED.12/1(A)/VOL.V/155**

15th March, 2022

Edith Njoroge
Mount Kenya University
P.O BOX 342-01000
THIKA - KENYA

RE: RESEARCH AUTHORIZATION

Reference is made to National Commission for Science, Technology and Innovation Letter Ref No. 611517 dated 14th February 2022

You have been authorized to conduct research on **'TEACHERS' PSYCHOLOGICAL WELL-BEING ON LEARNERS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN KIAMBU COUNTY, KENYA**.

The data collection will be carried out in Kiambu County for a period ending 14th February 2023.

You are requested to share your findings with the County Education Office, Kiambu, upon completion of your research.

P. P. Kimeu

Festus Kimeu
FOR: COUNTY COMMISSIONER
KIAMBU COUNTY

Cc National Commission for Science, Technology and Innovation
P.O. Box 30623-00100
NAIROBI

County Director of Education
KIAMBU COUNTY

All Deputy County Commissioner *(For information and record purposes)*
KIAMBU COUNTY

"Our Youth our Future. Join us for a Drug and Substance free County".

Appendix XI: Similarity Index

edith Njoroge

TEACHERS' PSYCHOLOGICAL WELL-BEING AND LEARNERS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS...

- Postgraduate 2025
- POSTGRADUATE 2024/25
- Mount Kenya University

Document Details

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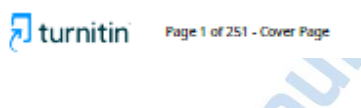
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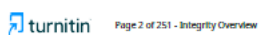
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- 5% Submitted works (Student Papers)

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 Matches with in-text citation present, but no quotation marks

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- 5% Submitted works (Student Papers)

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Appendix VII: Map of Study Locale



MOL