

**School Environment and Teacher Effectiveness in Government Aided Secondary Schools in
Pader District**

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Declaration

I Paul Okot hereby declare that the dissertation entitled” School environment and teacher effectiveness in government aided secondary schools in Pader District” is my original work and has never been submitted for any award in any institution of higher learning or University.

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

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Approval

This is to certify that this dissertation entitled” School environment and teacher effectiveness in government aided secondary schools in Pader District was written under our guidance and supervision and we approve it for examination.

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

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

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Dedication

I dedicate this study to my Parents Mr. Amone Watmon Y.K (RIP) and Ms Lalam Rose Amone dear wife Ms Acan Francisca and Children Ogenrwot Eric Watmon, Auma Marry Emmanuela, Laker Mercy Blessing, Anena Charity Peace, Aber Immaculate Emily, Lanyero Salume, Oketayot Aron, Lubangakene Moses, Anena Spora, Lakica Sherries, Wanok Desmond Paul, Komagum Elijah, Gumpira Marvin and Lamara Jovia Charity.

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Abstract

The study investigated the effect of school environment on teacher effectiveness in Secondary schools in Pader District. The study was guided by the following specific objectives namely, to assess the status of school environment in secondary schools in Pader district, to assess the level of teacher's effectiveness in secondary schools in Pader district and to determine the relationship between school environment and teacher effectiveness in secondary schools in Pader District. The study was a mixed method orientation with convergent parallel mixed method research design. Data was collected from a sample of 244 respondents using Self-administered questionnaires (234) and interview guides (10). Quantitative data was analyzed using SPSS version 26.0 at descriptive statistics and inferential statistics levels and qualitative data analyzed using thematic analysis. Findings for research question one showed that the status of schools environment in secondary schools in Pader District was very poor and undesirable while findings for research question two showed that the level of teachers effectiveness in secondary schools in Pader District was very low and research question three revealed a strong positive significant correlation between school environment and teachers effectiveness in secondary schools. It was concluded that the quality of school environment was a significant determinant of teacher effectiveness in secondary schools in Pader District. The study recommended that government should increase funding to improve quality of school environment if teacher effectiveness is to be achieved.

Chapter One

Introduction

1.0 Overview

Teacher effectiveness is considered a critical issue in education globally. There has been considerable concern on the level of teacher effectiveness in government aided secondary schools in terms of low teacher preparation, low teacher quality and poor classroom management (Okumu, 2022; Odit et al, 2023). Numerous studies have reported teacher absenteeism, high attrition, inadequate syllabus coverage, and lack of lesson preparation as key features of teachers in government aided secondary schools in Uganda (Farouk, 2022; Ezati et al, 2019; Uwezo, 2023). Moreover, there is evidence linking teacher effectiveness to the quality of school physical environment (Opolot et al, 2015; Opio et al, 2024; Ackar, 2019)

This chapter therefore presents background to the study, problem statement, general objectives, Specific Objectives, Research questions, Significance of the study, study scope and the conceptual framework.

1.1 Background to the study

1.1.1 Historical perspective

The history of teacher effectiveness as an informal evaluation of teachers can be traced back as early as the fifteenth century, when students at the University of Bologna paid instructors according to their teaching abilities (Annadale, 1974) cited in Savoia, (2019). Uttl, White, & Gonzalez, (2017) stated that "the literature on students' evaluations of teaching effectiveness in USA consists of thousands of studies and dates back to the 1920s and earlier". In USA, by the late 1920s, students and expert evaluators were asked to describe teachers they considered to be effective, and to rate characteristics of good and effective teachers (Delaney, Johnson, Johnson, & Treslan, 2010). In the 1930s, scales were devised for the evaluation of teachers; these scales were based on qualities believed to be important in teaching which included ability to communicate well and ability to make learners pass examination (Ida, 2017).

As a preliminary step in developing a system of evaluating teacher Effectiveness, Troyer and Pace (1944) report that Columbia University formed a committee to formulate criteria that would later serve as the basis for teacher evaluations (Spivy, 2010). The criteria consisted of a set of principles and objectives for teachers. Prior to the 1960s, emphasis was placed on the personal characteristics of good teachers, such as age, sex and race (Franklin II, 2012). However, in the 1960s, the focus began to shift to teachers' behavior in the classroom because teacher behaviors were believed to have a direct effect on student achievement (Franklin II, 2012). Thus, both the teaching process and the product of teaching, in terms of student outcomes, became prominent issues in Teacher Effectiveness evaluation (Franklin II, 2012).

By the end of the 1960s, evaluators became concerned with making the evaluation of teacher effective process more objective (Hallinger & Kovačević, 2019), as seen by proposals for using pre-specified categories of behaviors as the basis for observations of teachers Effectiveness (Hein, Koka, & Hagger, 2015).

In sub-Saharan Africa, there has been an extraordinary interest in reforming pedagogical practices of teachers to improve teacher effectiveness and education quality by shifting away from teacher-centered instruction to child-centered instruction (CCP) (O'Sullivan 2004, 585).

In Uganda, since the colonial error, teacher effectiveness have been of great concern due to traditional teaching methods adapted from the colonial education system with teachers at the center of learning process, making it difficult to achieve the diverse learning needs of learners (Charles & Wani, 2013).

In an attempt to improve Teacher effectiveness in Uganda, the government of Uganda over the last few years has initiated an in-service programme for teachers to upgrade at various teacher-training institutions, Secondary Science and Mathematics Teachers Project (SESMAT), for training secondary teachers in modern teaching methods (MoES 2017). Every year Science and Mathematics teachers gather together for one holiday training at specified centers. These initiatives seem to be minimal in improving teacher effectiveness as reported by from UNEB executive secretary, (2020) that failure by some candidates in national examination is attributed to lack of exposure of candidates to sufficient practical work during the course of teaching and difficulty by

candidates in making scientific observations, recording data and making inferences from such observations and data (UNEB report 2020).

Similarly, the recent report from the ministry of education and sports, (2015) confirmed some element of teacher ineffectiveness in both primary and secondary schools as the report indicated that there have been increasing cases of examinations malpractices, high levels of rote learning, coaching of students and examination-oriented teaching, rampant absenteeism and general lack of preparation (MoES, 2015).

Historically, studies have been done to improve teacher effectiveness although limited and or no effort have been put on the internal and external factors that influence teacher effectiveness and how they influence Teacher effectiveness even in Pader district (Hong, 2012).

Whereas the issue of teacher effectiveness is critical globally, there is evidence that the quality of school physical environment play an important role in determining teacher effectiveness. Studies have shown that school physical environment that is appropriateness, suitability and availability fundamentally determined teacher effectiveness in government-aided secondary schools (Ackar Jr, 2016; Ackar jr & Danso, 2019; Opolot, 2018). Therefore the quality of school physical environment in terms of availability of school infrastructure can potentially enhance teacher effectiveness.

1.1.2 Theoretical Perspective

Hertzberg's motivator-hygiene theory, also known as the two factor theory was proposed by a behavioral scientist Frederick Herzberg in 1959 (Pakdel et al., 2018). According to Herzberg, there are some job factors that result in satisfaction while there are other job factors that prevent dissatisfaction (Alshmemri, Shahwan-Akl, & Maude, 2017). He classified these job factors into two categories, that is

(a) Hygiene factors which he considered as those job factors which are essential for existence of motivation at workplace and can lead to job dissatisfaction at workplace(Prasad Kotni & Karumuri, 2018). He argued that these factors are extrinsic to work and they are called dissatisfiers or maintenance factors as they are required to avoid dissatisfaction.

The hygiene factors symbolized the physiological needs which the individuals wanted and expected to be fulfilled which include: appropriate and reasonable pay structure, company policies which are not too rigid, Fringe benefits such as health care plan for the family members, safe, clean and hygienic physical working conditions, Interpersonal relations and job security.

(b) Motivational factors, which according to Herzberg yield positive satisfaction. He argued that these factors are inherent to work and are intrinsic which motivate the employees for a superior performance (Prasad Kotni & Karumuri, 2018). Motivational factors include: Recognition of the employees for their accomplishments of a given task, Growth and promotional opportunities for the employees, and responsibility of the employee towards their work.

Limitations of Two-Factor Theory is however that Herzberg assumed a correlation between satisfaction and productivity, but his theory stressed much on satisfaction and ignored productivity (Alfayad & Arif, 2017).

The Two-Factor theory empathize that Hygiene factors are extrinsic factor and can lead to job dissatisfaction at workplace if they are not present. Therefore, in order to achieve teacher effectiveness, these factors must be in play. The Motivational factors which according to Herzberg is an intrinsic factor which means is an internal factor, which must be made available in schools in order for teachers to effectively perform their task.

1.1.3 Conceptual Background

School environment refers to all the physical conditions and infrastructure of a school including indoor environment (classrooms, furniture, equipment and sanitation, hygiene facilities) and outdoor environment (playground, recreational spaces, sports facilities, land scape, green spaces), infrastructure and facilities (Buildings, structures, water, sanitation facilities, energy, lighting and waste management, safety and security) and accessibility and inclusivity (accessible for students with disabilities, inclusive spaces (Ezike, 2018)).

In this study therefore school environment will be measured in terms of Physical learning environment, Social learning environment and Psychological learning environment

Studies have shown that a well-designed and well managed school physical environment can support teachers moral and effectiveness and foster a sense of community and belonging among

teachers and students (Ezike, 2019; Ackar, 2016) Teacher effectiveness on the other hand is defined by Cambell et al., 2004 as the impact that classroom factors, such as teaching methods, teacher expectations, classroom organization, and use of classroom resources, have on students' performance. Whereas Holmes, Parker & Gibson (2019) defined teacher effectiveness as the ability to produce gains on student's achievement scores, taking account of a baseline measure of students' prior attainment and other characteristics of student intake by the teacher, Hermanutz, (2015) defined teacher effectiveness as a teacher's ability to produce higher than expected gains in students' standardized test scores. The concept of teacher effectiveness therefore may not be understood clearly without seeing its impact on the learner's academic growth.

Teacher effectiveness was operationalized in this study as Teacher preparation, Teacher quality, instruction process, assessment of learner's activities, classroom environment.

1.2.4 Contextual perspective

In Uganda, Education has been regarded as a means of national development and attempts have been made to provide quality Education in order to meet the needs and aspirations of the society (Ministry of Education and Sports Circular, (2018). These attempts however have been toppled with high rates of teacher's absenteeism as UNICEF report (2016) estimated that about 60 percent of Ugandan teachers in public schools are not present in class. In Pader district particularly, the quality of education still remains relatively poor. This is an indicator of teacher ineffectiveness as witnessed by drop in academic performance in Uganda Certificate of Education (UCE) over the past years. For example, in 2014, only 74 candidates got division one, 123 in 2015, 142 in 2016,

119 in 2017, 108 in 2019 and 11 candidates got division one in 2020. The level of teacher's effectiveness in secondary schools in Pader district is however questionable by most stakeholders as DEO, (2021) reports that most teachers hardly prepare schemes of work and lesson plans and neither do they conduct sufficient practical lessons or give time for remedial classes for academically weak students, report late to school, sometimes absent, low syllabi coverage and low level of participation in other school programs. These kinds of pedagogical practices are a sign of teacher ineffectiveness and no study have been conducted to ascertain the determinants of teacher effectiveness in secondary schools in Pader District.

1.2 Problem statement

Teacher effectiveness plays a critical role in determining the quality of education and students outcomes in secondary schools because teachers are responsible for planning and delivering lessons, managing classrooms, and assessing learners among others. However, teacher effectiveness does not depend solely on teachers' individual qualifications, commitment and professional competence but it can also be influenced by the environment in which teachers work (Odit et al., 2023). A supportive school environment characterized by adequate physical facilities, appropriate teaching and learning resources, supportive administration, and positive relationship among staff, learner discipline, professional collaboration, and teachers' psychological well-being can provide conditions that enable teachers to perform their duties effectively. In Uganda, despite considerable investment in education and teacher training, teacher recruitment, concerns still persist about the effectiveness of teachers in delivering the curriculum, managing classrooms and supporting students learning. National assessments have consistently indicated poor performance in key subjects, raising Questions about teaching quality (UNEB, 2025). Reports have also indicated that majority of teachers in secondary schools don't finish syllabus, don't scheme, no lesson plan and are always absent from school (UWEZO, 2024).

Although previous studies in Uganda have established that aspects of the school environment influence teacher effectiveness, limited empirical evidence exists on how the physical, social and psychological dimensions of the school environment collectively influence teacher effectiveness in government aided secondary schools. Existing studies have been largely conducted in other districts and have focused on selected dimensions of the school environment, making it difficult to generalize their findings to Pader District.

This study therefore seeks to investigate the relationship between school environment and teacher effectiveness in government aided secondary schools in Pader District, with particular attention to the physical, social and psychological dimensions of the school environment.

1.3 Purpose of the study

The purpose of the study was to investigate the effect of school environment on teacher effectiveness in secondary schools in Pader District.

1.4 Specific Objectives

This study was guided by the following specific objectives

- (i) To assess the status of school environment in secondary schools in Pader District
- (ii) To assess the level of teacher effectiveness in secondary schools in Pader District
- (iii) To establish the relationship between School environment and teacher effectiveness in secondary schools in Pader District.

1.5. Research Questions

- (i) What is the status of school physical environment in secondary schools in pader District? (ii) What is the level of teacher effectiveness in secondary schools in Pader District?

1.6 Hypothesis

- (i) There is no significant relationship between School physical environment and teacher effectiveness in secondary schools in Pader District.

1.7 Scope of the study

1.7.1 Geographical scope

Pader District is located in Northern Uganda and is part of the Acholi sub-region. It was created in 2001, carved from Kitgum District. The District is bordered by Lamwo District to the North, Kitgum District to the northeast, Otuke District to the South east, and Lira District to the South, Agago District to the East, Oyam district to the south east and Gulu District to the west. It covers a land area of 3,362 square kilometers consisting mainly of flat plains with scattered hills and fertile soils.

1.7.2 Content scope

In this study school environment was measured in terms of physical environment, social environment, and psychological environment (Ezike, 2018) while teacher effectiveness was measured in terms of teacher preparation, teaching quality and Classroom management (Okumu et al, 2022).

1.7.3 Time scope

This study focused on the period from 2020 - 2025. This was the period when Pader district experienced teacher ineffectiveness the most exacerbated by Covid 19. Many teachers radically changed after Covid 19 pandemic, with some absconding from duty, others not completing the syllabus while others don't teach even if they are within school (NAPE, 2021)

1.8 Significance of the study

The study provided evidence based insights into how teacher performance and school environment impact outcomes, this may help policy makers in formulating policies and revising national education policies, and also in allocating resources efficiently to areas that most influences achievement by strengthening teacher recruitment, training and evaluating systems. The study might also help the Ministry of education and sport in identifying gaps in the implementation of current policies related to teacher development and school infrastructure and design interventions and strategic plans to improve teacher effectiveness and learning environments. The school leaders will gain a deeper understanding of how the physical conditions of the school facilities influence teacher effectiveness and the importance of continuous professional development and motivational strategies for teachers

1.9 Conceptual framework

The conceptual framework is a diagrammatical illustration of the interconnected ness between the study variables (Herbeman &Herbaman, 1990)

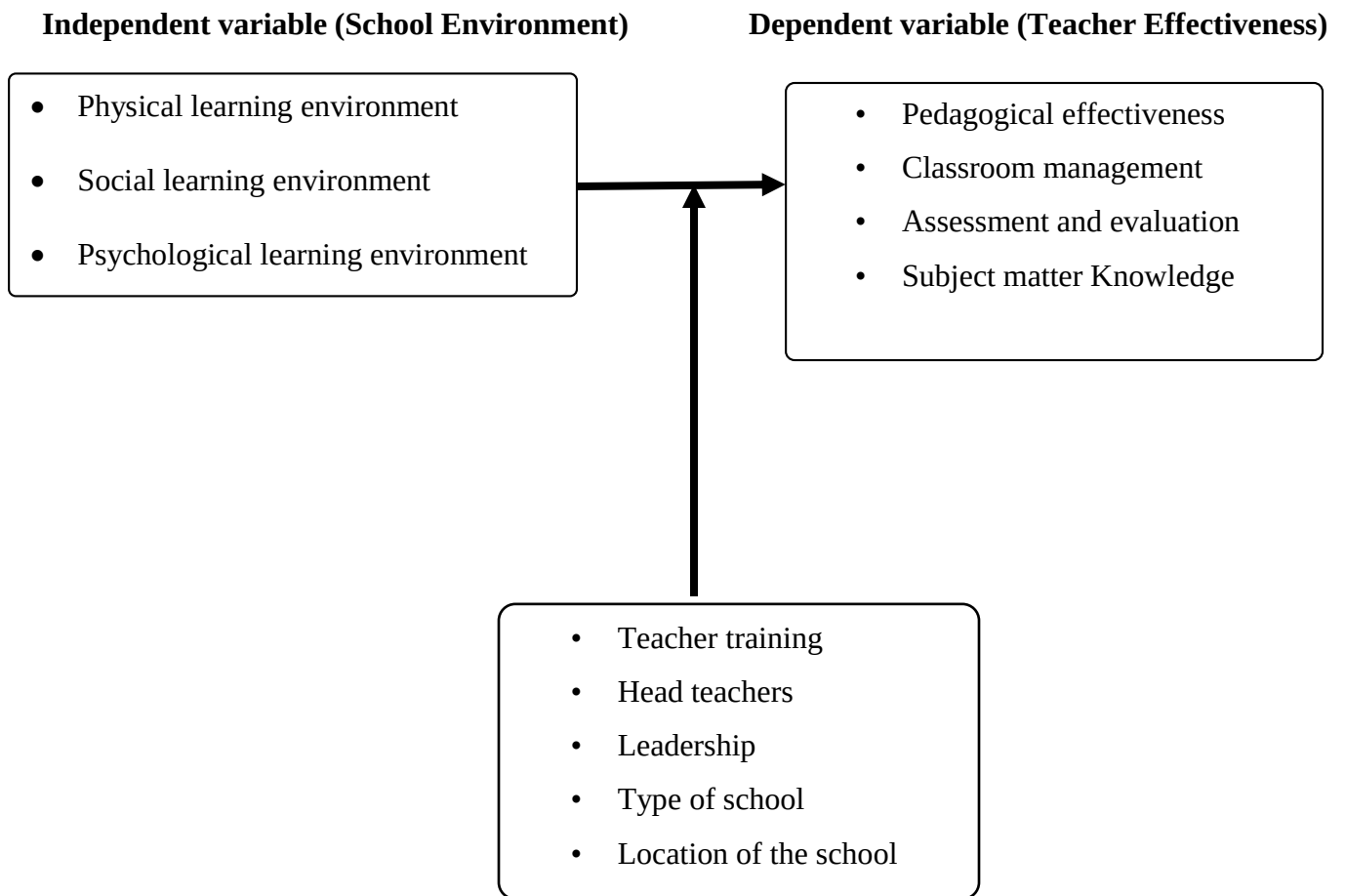


Fig1.0 Conceptual framework showing the assumed linkage between School environment and Teacher effectiveness

Source: Adopted with modification from Hetzbergs two factor theory

The framework above shows that there is an assumed relationship between the independent variable (School physical environment) and the dependent variable (Teacher effectiveness). The framework also shows that there are extraneous variables, which compound the relationship between school environment and teacher effectiveness.

Chapter Two

Literature Review

2.0 Introduction

This chapter presents reviewed literature according to the study specific objectives namely; The quality of school physical learning environment; the level of teacher effectiveness and the relationship between the school physical learning environment and teacher effectiveness in government aided schools.

2.1 The status of school learning environment in government aided secondary schools.

The physical environment of schools plays a crucial role in determining whether all children can fully participate in educational activities or face exclusion (Ackah-Jnr & Danson, 2018). For inclusive education to thrive, schools must be designed to be accessible, free of barriers, and welcoming, especially for children with physical disabilities (Ackah-Jnr & Danson, 2018). This includes considerations such as the layout and amenities of classrooms, including lighting, temperature control, ventilation systems, and the arrangement of furniture like desks, chairs, whiteboards, and computers. Unfortunately, many classrooms currently do not provide an optimal environment for effective teaching and learning, leading to student fatigue and frustration (Fisher, 2008).

A well-planned physical environment not only supports physical comfort but also enhances psychological well-being by minimizing distractions and creating a conducive atmosphere for learning (Tanner, 2008). The suitability of school grounds and playgrounds for physical activities is particularly important for promoting the health and well-being of all children, yet challenges like uneven terrain or limited play areas can restrict opportunities for active engagement (Ackah-Jnr, 2018). These limitations can hinder inclusive participation in outdoor activities such as sports and games, impacting both physical and social development within the school setting.

Despite the importance of a supportive physical environment, many schools face infrastructure challenges that affect the quality of education. Studies have shown that inadequate school facilities, including classrooms and amenities, can significantly impact teaching effectiveness and student learning outcomes (Blank, 2021). This neglect of school infrastructure over the years has underscored a need for more research into how physical environments influence educational

outcomes, alongside studies of pedagogical and social factors (Windsor, 1996). The physical conditions of schools, including their safety and health standards, are critical components that deserve more attention in educational planning and policy.

Research on the physical environments of inclusive schools has highlighted significant disparities in accessibility and suitability for students with disabilities (Ackah-Jnr & Danso, 2018). Many inclusive schools lack the necessary infrastructure to accommodate children with physical or sensory disabilities, limiting their participation in physical education and other school activities (Mudassir et al., 2015). Assessments of school environments often consider factors such as equipment availability, learning atmosphere, and the quality of relationships between students, teachers, and parents (Mudassir et al., 2015).

Effective planning for inclusive classrooms involves careful consideration of seating arrangements, lighting, colors, temperature control, and overall aesthetic design (Okoyere & Adams, 2003). Studies have shown that these elements can significantly impact students' physical responses and sensory experiences, influencing their comfort and concentration levels during learning (Sahion et al., 2011; Pulay et al., 2018). Issues such as temperature regulation, air quality, and adequate lighting are fundamental to creating a positive classroom climate that supports effective teaching and learning (Earthman, 2004; Cheryan et al., 2014).

Challenges in maintaining quality facilities like laboratories, libraries, and sports infrastructure can have a detrimental effect on the overall learning environment and academic performance of students, particularly in external examinations (Durugi et al., 2014). Despite these challenges, there remains a need for further exploration of school physical environments, especially in contexts like Northern Uganda, where understanding of the needs of special needs students in regular schools is still limited (Durugi et al., 2014)

2.1.2 Social learning environment

Empirical studies consistently show that the social learning environment plays a critical role in shaping students' academic engagement, behavior, and overall school experience. Recent research indicates that a positive social classroom climate characterized by supportive teacher–student relationships and collaborative peer interactions enhances both academic achievement and emotional well-being among learners (Wang & Degol, 2020). These findings suggest that when

students feel socially connected and supported within the school setting, they are more likely to participate actively in learning activities and demonstrate improved outcomes (Ryan & Deci, 2020).

Several studies emphasize the importance of peer interactions in the social learning environment. Research on cooperative learning demonstrates that peer collaboration significantly contributes to the development of social skills and cognitive growth among students (Gillies, 2021). Through group work and shared problem-solving, learners acquire communication skills, empathy, and teamwork abilities, which are essential for both academic success and personal development (Johnson & Johnson, 2022).

Longitudinal studies reveal that social competencies and classroom relationships are closely linked to students' academic engagement over time. Evidence shows that improvements in peer relationships and teacher support lead to corresponding increases in both behavioral and emotional engagement in learning (Eccles & Roeser, 2021). This indicates that the social learning Environment evolves over time and continuously influences students' motivation and participation (Wentzel, 2022).

Research also underscores the role of school climate in fostering social learning. A positive and cooperative school climate has been found to significantly enhance students' socio-emotional skills, which in turn contribute to better academic and life outcomes (Thapa et al., 2021). Schools that promote respect, inclusivity, and collaboration create environments where students feel safe to express themselves and interact meaningfully with others (OECD, 2021).

Furthermore, interventions aimed at improving the social environment have demonstrated measurable benefits. Studies on School-Wide Positive Behavioral Interventions and Supports (SW-PBIS) show that structured programs can improve students' social behavior, relationships, and perceptions of the school climate (Bradshaw et al., 2022). Such interventions highlight the importance of intentional strategies in cultivating a supportive and disciplined social environment within schools (Horner et al., 2021).

Recent empirical work highlights the growing importance of social learning in digital and technology-enhanced environments. A systematic review found that even in online settings, the

quality of social interaction remains a key determinant of student engagement and learning effectiveness (Bond et al., 2021). This suggests that the principles of social learning extend beyond traditional classrooms and must be considered in modern educational contexts (Hodges et al., 2020).

Theoretical and empirical perspectives further indicate that learning is inherently a social process shaped by interactions with peers, teachers, and the broader school community. Studies confirm that social connections within schools significantly influence educational outcomes by shaping students' attitudes, behaviors, and access to support systems (Bandura, 2021). This reinforces the idea that academic learning cannot be separated from the social context in which it occurs (Vygotsky, 2020).

Research grounded in person–environment fit theory suggests that the effectiveness of the social learning environment depends on how well it aligns with students' needs and expectations. When there is a mismatch between students' social experiences and their desired environment, engagement and performance tend to decline (Eccles & Wigfield, 2020). This highlights the need for schools to create inclusive and responsive social environments that cater to diverse student populations (Denissen et al., 2021).

Studies focusing on adolescent learners emphasize the strong influence of peers during this developmental stage. Evidence shows that peer dynamics, including social comparison and group interactions, significantly affect students' motivation and learning behaviors (Brown & Larson, 2021). This underscores the importance of managing peer influence positively to enhance academic outcomes and reduce negative behaviors such as disengagement (Kindermann & Skinner, 2021).

Overall, empirical literature demonstrates that the social learning environment is a fundamental component of effective schooling. Positive relationships, collaborative practices, supportive climates, and well-structured social interactions all contribute to improved student engagement, socio-emotional development, and academic achievement (Durlak et al., 2022). Conversely, weak or negative social environments can hinder learning and reduce the effectiveness of educational processes, highlighting the need for deliberate efforts to strengthen social dynamics within schools (Jones et al., 2021).

2.1.3 Psychological learning environment

Empirical studies indicate that the psychological learning environment is a crucial determinant of students' academic success, motivation, and emotional well-being. A supportive psychological environment characterized by feelings of safety, belonging, and respect has been shown to enhance students' engagement and willingness to participate in learning activities (Wang & Degol, 2020). When students perceive their classrooms as psychologically secure, they are more likely to take academic risks and express their ideas freely (Ryan & Deci, 2020).

Research highlights that students' sense of belonging is a central component of the psychological learning environment. Studies have found that learners who feel accepted and valued within their school community demonstrate higher levels of motivation and academic persistence (Allen et al., 2021). conversely, a lack of belonging is associated with disengagement, absenteeism, and poor academic performance (Osterman, 2021).

Teacher support was another key factor influencing the psychological learning environment. Empirical evidence shows that teachers who provide encouragement, empathy, and constructive feedback contribute significantly to students' self-confidence and academic resilience (Wentzel, 2022). Positive teacher–student relationships foster trust and emotional security, which are essential for effective learning (Roorda et al., 2021).

Studies also emphasize the role of emotional safety in classrooms. When students feel free from fear of ridicule, bullying, or harsh criticism, they are more likely to engage actively in discussions and collaborative tasks (Thapa et al., 2021). A psychologically safe environment promotes openness, creativity, and deeper understanding of content (Edmondson, 2020).

In addition, self-efficacy has been identified as an important outcome of a strong psychological learning environment. Research indicates that students who believe in their ability to succeed are more likely to set goals, persist through challenges, and achieve higher academic outcomes (Bandura, 2021). Teachers play a significant role in nurturing self-efficacy by providing appropriate challenges and positive reinforcement (Schunk & DiBenedetto, 2020).

The impact of stress and anxiety on learning has also been widely documented. Studies show that high levels of academic stress and fear negatively affect students' concentration, memory, and

performance (Putwain, 2021). A supportive psychological environment helps to reduce stress and promotes emotional regulation, thereby enhancing learning effectiveness (OECD, 2021).

Furthermore, research on classroom climate indicates that fairness and respect are essential components of the psychological learning environment. Students who perceive their teachers as fair and unbiased are more likely to develop positive attitudes toward learning and school (Gregory & Ripski, 2021). Fair treatment fosters trust and reduces behavioral problems, contributing to a more conducive learning atmosphere (Bear et al., 2021).

Recent studies also highlight the importance of mental health support within schools. Access to counseling services and emotional support systems has been shown to improve students' psychological well-being and academic engagement (Reinke et al., 2021). Schools that prioritize mental health create environments where students can cope effectively with personal and academic challenges (Suldo et al., 2022).

The role of motivation in the psychological learning environment is equally significant. Self-determination theory suggests that when students' needs for autonomy, competence, and relatedness are met, their intrinsic motivation increases (Ryan & Deci, 2020). Empirical studies confirm that psychologically supportive classrooms enhance intrinsic motivation, leading to improved academic outcomes (Niemic & Ryan, 2021).

Overall, empirical literature demonstrates that the psychological learning environment is fundamental to effective teaching and learning. A positive environment characterized by emotional safety, strong relationships, fairness, and mental health support enhances students' motivation, engagement, and achievement (Durlak et al., 2022). In contrast, a negative psychological environment can lead to anxiety, disengagement, and poor academic performance, underscoring the need for schools to prioritize students' emotional and psychological well-being (Jones et al., 2021)

2.2 The level of teacher's effectiveness in government secondary schools

A study by Nsubuga notes that only 40% of the syllabus is taught in secondary schools in Uganda. Teachers have dropped the curriculum that would have guided them in teaching". This is the picture of teachers' behaviors in the secondary schools in Pader District. On the other hand, Watala reported

that, “Museveni directs to sack lazy teachers.” He continued to say the Ministry of Education and Sports (MoE&S), District Education Officials are not supervising education activities. The study indicates that there is link between school physical environment and teacher effectiveness in secondary schools. The study is more interested in establishing teacher effectiveness in secondary schools as a result of school physical learning environment.

A study conducted by (Kasule, 2023) reported a shocking level of teacher absenteeism that exists in the developing world. The report by (MOES, 2012) continued to point out that, in Uganda, where absenteeism rate is 27%, many secondary schools’ teachers who were present were not actually teaching. The teachers sit in the classroom or under the tree conversing while learners are left alone in the classes. This kind of situation shows that teachers are not committed in teaching.

In a comparative study, (Hannon, 2021) observes that tardiness and absenteeism is prevalent in secondary schools because of large numbers and lack of appreciation for education by both teachers and students. While the two studies reveal a relationship between low teacher effectiveness and mentoring, they have not considered an important aspect of this study, which is motivation. Absenteeism is a creation of unhappiness; teachers might have not been motivated. Teachers can change the trend of behavior through with a conducive physical environment. This makes teaching ineffective (Okumu et al, 2024)

Studies have also found out that in most secondary schools in Uganda teachers did not have scheme of work and lesson plans (Blank &Kershaw, 2009; Davey &Ham, 2010). Therefore there is need to support teachers and improve their instructional effectiveness, schools need to make sure that the environment is improved which is good and fit for each teacher’s individual background, needs and school context.

In a recent study conducted in Uganda by the (MOES, 2022) reports that over 80% of classrooms in Universal Secondary Education (USE) were reported crowded leaving no space for teachers to move around and support students. The same government grant has been received in government-aided secondary schools in Pader District and the number of students has gone high. The study, however, observes that most teachers fail to control the class and no proper guidance is given to learners yet if mentoring is used, teachers could control their classes well.

Similarly (Ritchie, 2012) observes that schemes of work were inadequate, lessons poorly prepared and there was no continuous assessment, support supervision was irregular and ineffective. In relation to that (MOES, 2012) continued to report that in many cases where teachers prepare schemes of work, these fell short by two to four weeks , while others schemes of work and lesson plans were not aligned to the National Curriculum Development Centre teaching syllabus. The researcher notes that one of the biggest things challenge was the quality of the school environment in these schools.

On the other hand,(Opolot- Okurut, 2020)noted that lack of sound content and pedagogical knowledge base, textbook driven teaching, lack of motivation and competence, lack of external support make teachers ineffective. Similarly a study by Mustafa and Cullingford, 2008) reported that inadequate training affects teacher's choice of instructional methods including deficiencies in the ways teachers are prepared. There is a link between inadequate professional skills and an ineffective teacher.

In another study Hannon (2009) reports that teachers and administrators in secondary schools are constantly behind schedule or disrespectful of time, lessons begin late, lunch is served late, students are tardy, meetings run far beyond scheduled time. (Hannon, 2009) continued to report that teachers can be guilty of dodging lessons, being late, making excuses and being lazy, some teachers are not working up to their potential. Meanwhile (Opolot-Okurut,2020) reported that despite these examinations, teachers rarely provide feedback to students.

Empirical studies show that teacher effectiveness in secondary schools is a key determinant of student academic achievement and overall school performance. Effective teachers are characterized by strong subject knowledge, clear instructional strategies, and the ability to engage students actively in the learning process (Hattie, 2021). Research consistently demonstrates that students taught by effective teachers perform better academically compared to those taught by less effective teachers (Darling-Hammond, 2020).

Instructional delivery is widely identified as a core component of teacher effectiveness. Studies indicate that teachers who use varied teaching methods, including learner-centered approaches, questioning techniques, and interactive strategies, significantly enhance student understanding and retention of content (Killen, 2021). Effective instructional practices also promote critical thinking and problem-solving skills among secondary school learners (OECD, 2021).

Classroom management is another important construct of teacher effectiveness. Empirical evidence shows that teachers who maintain well-organized and disciplined classrooms create environments that are conducive to learning (Emmer & Sabornie, 2020). Effective classroom management reduces disruptions and maximizes instructional time, thereby improving student engagement and academic outcomes (Evertson & Weinstein, 2021).

Assessment practices also play a critical role in determining teacher effectiveness. Research indicates that teachers who use continuous assessment, timely feedback, and diverse evaluation methods are better able to monitor student progress and address learning gaps (Black & Wiliam, 2021). Formative assessment, in particular, has been found to significantly improve student learning when used effectively (Wiliam, 2020).

Professional competence and ongoing development are essential for effective teaching. Studies show that teachers who participate in continuous professional development programs are more likely to adopt innovative teaching practices and improve their instructional skills (Desimone & Garet, 2021). Professional learning communities also provide opportunities for collaboration and knowledge sharing among teachers (Vescio et al., 2020).

Teacher commitment and motivation are equally important in influencing effectiveness. Research reveals that motivated teachers are more dedicated to their work, demonstrate higher levels of effort, and are more likely to go beyond basic teaching requirements (Day & Gu, 2020). Conversely, low motivation and job dissatisfaction can negatively affect teaching quality and student outcomes (Skaalvik & Skaalvik, 2021).

Teacher–student relationships have also been identified as a significant predictor of teacher effectiveness. Studies indicate that positive relationships foster trust, respect, and communication, which enhance student engagement and academic success (Roorda et al., 2021). Teachers who build strong connections with their students are better able to understand their needs and provide appropriate support (Wentzel, 2022).

Research further highlights the importance of teacher self-efficacy in secondary schools. Teachers who believe in their ability to influence student learning are more likely to implement effective teaching strategies and persist in the face of challenges (Bandura, 2021). High self-efficacy is

associated with greater enthusiasm, resilience, and instructional effectiveness (Tschannen-Moran & Hoy, 2020).

Leadership and support within schools also influence teacher effectiveness. Studies show that supportive school leadership enhances teachers' performance by providing guidance, resources, and a positive working environment (Leithwood et al., 2020). Instructional leadership, in particular, has been linked to improved teaching practices and student achievement (Hallinger, 2021).

Overall, empirical literature demonstrates that teacher effectiveness in secondary schools is a multifaceted construct influenced by instructional practices, classroom management, assessment, professional development, motivation, and school support systems. Effective teaching leads to improved student learning outcomes, while ineffective teaching contributes to poor academic performance and disengagement (Hattie, 2021). These findings highlight the need for continuous investment in teacher development and supportive school environments to enhance effectiveness in secondary education (Darling-Hammond, 2020)

2.3 The relationship between School physical environment and Teacher effectiveness in secondary schools

A study by Ezike (2018) found out that there was a strong positive relationship between the school indoor environment with teacher effectiveness noting that when the office space is well furnished, light and ventilated with enough chairs and sitting space it would enhance teacher effectiveness. He argued that when teachers come to school they require a workable indoor space to increase their concentration and preparation (Ezike, 2018)

Another study by AckarJnr (2020) found out that the appropriateness; suitability and availability of the school physical environment were positively correlated to teacher effectiveness and performance and vice versa. He underscored the importance of conducive working environment in schools which motivates teachers to come early to school and stay longer (Ackar Jnr, 2020)

Another study by Danso (2022) found out that school infrastructure and facilities were strongly related with teacher effectiveness. In that if the school infrastructure are well built with good

architectural plans and engineering with enough spaces and facilities for both indoor and outdoor then teachers are more effective as compared to disorganized structures (Danso, 2022)

In a cross-sectional study consisting of 405 teachers and students Opio et al (2024) found a strong positive statistically significant correlation between physical learning environment and teacher effectiveness and students academic achievement in secondary schools in Uganda with results showing that the quality of the physical learning environment fundamentally determined the routine, preparation and concentration of teachers and students. The study further revealed that conducive physical school environment was the most statistically significant predictor of teacher effectiveness (Opio et al, 2024)

Similarly a study by Okumu (2022) conducted in government aided secondary schools in Acholi sub-region revealed that apart from mentoring, a conducive learning environment predicted teacher effectiveness in government aided secondary schools noting that in schools with conducive learning environment, teachers were found to prepare, manage their classes and attended regularly (Okumu, 2022)

Studies have also found significant evidence of the relationship between classroom designs and teacher effectiveness particularly elements such as natural light, colour, temperature can influence both the teacher effectiveness and enhanced student academic performance (Opolot, 2020, Ackar, 2022, Danso, 2020) while other studies have found that the broader school climate encompassing both physical and social aspect also affects teacher perception and effectiveness (Opio et al, 2023). Others still have found a positive relationship between school facilities in that a well-maintained facility supported teacher effectiveness (Johnson, 2023)

Empirical studies consistently demonstrate that there is a strong and positive relationship between school environment and teacher effectiveness in secondary schools. Research shows that a supportive school environment comprising physical, social, and psychological dimensions enhances teachers' ability to deliver instruction effectively and manage classrooms efficiently (Hattie, 2021). When schools provide adequate facilities, positive relationships, and emotional support systems, teachers are more likely to perform their roles successfully (Darling-Hammond, 2020).

Studies focusing on the physical learning environment reveal that adequate infrastructure significantly influences teacher effectiveness. Well-equipped classrooms, teaching materials, and manageable class sizes enable teachers to implement diverse instructional strategies and maintain learner engagement (Earthman, 2021). Conversely, poor physical conditions such as overcrowding and lack of resources constrain teachers' performance and reduce instructional quality (Uline & Tschannen-Moran, 2020).

The social learning environment also plays a crucial role in shaping teacher effectiveness. Positive relationships among teachers, students, and school administrators foster collaboration, communication, and mutual respect, which enhance teaching practices (Wentzel, 2022). Empirical evidence indicates that teachers working in supportive and collegial environments are more motivated and committed to their work (Collie et al., 2021).

Research further shows that the psychological learning environment significantly affects teacher effectiveness. Schools that promote emotional safety, fairness, and respect create conditions where teachers feel valued and supported, leading to improved job satisfaction and performance (Ryan & Deci, 2020). A positive psychological climate reduces stress and burnout among teachers, enabling them to focus more effectively on instructional delivery (Skaalvik & Skaalvik, 2021).

Several studies highlight that school climate is a strong predictor of teacher effectiveness. A positive school climate—characterized by clear expectations, supportive leadership, and shared goals—enhances teachers' professional practices and student outcomes (Thapa et al., 2021). Teachers in such environments are more likely to adopt innovative teaching methods and engage actively in professional development (OECD, 2021).

Leadership within the school environment is another key factor influencing teacher effectiveness. Instructional leadership, in particular, has been shown to create conditions that support effective teaching by providing guidance, supervision, and resources (Hallinger, 2021). Empirical findings indicate that strong school leadership strengthens the relationship between the school environment and teacher performance (Leithwood et al., 2020).

In addition, studies reveal that teacher motivation acts as a mediating factor in the relationship between school environment and effectiveness. Supportive environments enhance teachers' intrinsic motivation, which in turn improves their commitment, instructional quality, and

classroom management (Deci & Ryan, 2020). Poor environments, on the other hand, lead to low morale and reduced teaching effectiveness (Skaalvik & Skaalvik, 2021).

Research also indicates that collaboration and professional learning communities within schools strengthen teacher effectiveness. Teachers who engage in collaborative planning, peer observation, and shared decision-making benefit from collective expertise and support (Vescio et al., 2020). Such collaborative environments are associated with improved instructional practices and better student learning outcomes (Desimone & Garet, 2021).

Furthermore, empirical studies suggest that the relationship between school environment and teacher effectiveness is reciprocal. While a positive environment enhances teacher performance, effective teachers also contribute to improving the school environment through their practices, attitudes, and interactions (Bandura, 2021). This dynamic interaction creates a cycle of continuous improvement within schools (Eccles & Roeser, 2021).

Overall, the literature provides strong evidence that the school environment is a critical determinant of teacher effectiveness in secondary schools. Positive physical, social, and psychological conditions enhance teachers' ability to deliver quality instruction, manage classrooms, and support student learning (Hattie, 2021). In contrast, poor school environments hinder teacher performance and limit educational outcomes, underscoring the need for comprehensive improvements in school conditions to enhance teacher effectiveness (Darling- Hammond, 2020)

2.4 Conclusion

Literature is abundantly clear about the influence of school physical environment on teacher effectiveness in secondary schools underscoring the importance of conducive school physical environment on teacher effectiveness and vice versa.

Chapter Three

Methodology

3.1 Introduction

This chapter presented the research Approach, research design, study population, sample size determination, sample selection, data collection methods, data collection tools, quality control, administration procedure, ethical considerations, and data analysis.

3.1. Research approach

The study used mixed methods approach. The mixed method approach is a combination of both qualitative and quantitative research approaches premised on a view that a situation couldn't be clearly understood from one dimension (Creswell, 2014). This approach according to Saunders et al, (2020) is based on the assumption that combining both quantitative and qualitative approaches best provides an understanding of a research problem. Quantitative approach is the type of research approach that describes phenomena numerically and underscores objectivity in data collection and analysis (Cohen et al, 2019). Its data are expressed in numbers and analyzed using statistical methods with emphasis on facts, causations and relationships while qualitative approach is a research approach that focuses on gaining a rich and complex understanding of people's experience, beliefs and behavior (Pandey & Pandey, 2021).

3.2. Research Design

The study used convergent parallel mixed method research design. The convergent mixed method design involved the collection of both quantitative and qualitative data at the same instance (Creswell, 2014). Therefore this study collected quantitative data using questionnaires from teachers in the schools while simultaneously conducting interviews with Head teachers. Data analysis using the convergent design was also done simultaneously with a goal of triangulation findings in mind (Creswell, 2014).

3.3. Study Population

The study population consisted of all the head teachers (10), all teachers (600) in all government-aided secondary schools in Pader District

3.4 Sample size Determination

The sample size was determined using Morgan and krejcie (1970) table of sample size determination (Morgan &Krejcie, 1970).

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Table 3.1: Sampling Frame

Category	Population	Sample Size	Sampling Procedur
Schools	10	10	Purposive
Teachers	600	234	Simple random
Head teacher	10	10	Purposive
TOTAL	620	254	

Source: Primary Data.

3.5 Sampling Techniques

The study used simple random sampling particularly the lottery method (Creswell, 2014) In the lottery method participants were be assigned codes and names written on pieces of paper and put in a box, the researcher were then shaken the box so that all the participants have the same chances of being chosen, he was then choose one code at a time until the sample size is reached (Creswell,

2014). The lottery method was used to select teachers and students because the population is relatively huge. The merit of this method was that it gives all participants equal chances of being selected for the study and there results of the study can be generalized to the study population. While purpose sampling was be used to select Head teachers, because the researchers believes that these head teachers have knowledge and understanding about the school physical environment and teacher effectiveness in secondary schools which will provide key information to the study (Neuman, 2014). The merit of judgmental sampling particularly expert judgmental sampling is that

information is obtained from key informants, who are experts in the field under study (Neuman, 2014).

3.6. Data Collection Methods

Data was collected from primary and secondary sources. Primary data was collected using questionnaires and key informant interviews

3.6.1 Questionnaire Survey/Questionnaires

Quantitative data was collected using questionnaire survey method. Questionnaire survey is the process of administering questionnaires to the participants in the study area (Creswell, 2014). It involved the entire process of questionnaire administration, which can be supported by research assistant or the researcher himself. The study used a closed ended self-administered questionnaire to collect quantitative data from teacher's school physical environment and teacher effectiveness in in Government secondary schools in Pader District. The questionnaire will be scored on a five point likert scale ranging strongly disagree (1), Disagree (2), Not sure (3), Agree (4), strongly Agree (5).

3.6.2 Interview/ Interview Guide

The interview is a structured conversation where one participant asks questions, and the other provides answers. In common phrasing, the word interview refers to a one-on-one conversation between an interviewer and an interviewee. The study used semi-structured interviews with open-ended questions that are probing in nature (Neuman, 2014). The study will conduct a key informant interview with the head teachers on school physical environment and teacher effectiveness in secondary schools. An interview schedule was developed after seeking an appointment with the respondents. The interviews will be useful in eliciting qualitative information relevant from Head teachers (Newman, 2014)

3.7 Quality Control

The instruments will be piloted to determine their validity and reliability. Data collection instruments were pre-tested to randomly selected respondents before it is used in the field. The questions in the interviews were discussed at peer review level. Quality control involved adjusting/modification of each item upon coming back from pre-field study in order to improve the validity and reliability coefficient.

Validity

Validity of a data collection instrument is the extent to which the tool measures what it claims to measure (Amin, 2005; Kahn 1986). To arrive at good conclusions for any study, the data used should be true and accurate; it is on this basis that researchers endeavor to construct data collection tools that accurately measure what they should be measuring. Validity also refers to truthfulness of research findings (Amin,

2006). To ensure validity of the research instruments, the self-made questionnaires and interview guides will be pre-tested in one school in Pader District. The pretest was conducted with teachers. This enables the researcher to check items, which appears ambiguous as well as make other relevant corrections before final administration.

Content validity index was computed to determine the validity of the tools to determine acceptable measures of at least 0.70 and above. Tools that fall in this limit are said to be valid

Reliability

Reliability refers to the extent to which a data collection instrument consistently measures a given concept (Neuman, 2014). An instrument with high reliability will produce the same results whenever it measures a specific concept (Cohen et al, 2018). Usually reliability is expressed numerically using a reliability coefficient. A high reliability coefficient means that the results would be consistently the same if the study is to be done again, this may be a result of the respondent making the same meaning of question items in the data collection tool which makes them answer in the same way in a given setting. Therefore cronbach alpha estimate of 0.70 and above is acceptable for educational research (Amin, 2006)

3.8. Ethical Consideration

The study complied with the ethical issues mainly issue of Confidentiality, voluntary participation; consent and proposal will be submitted to GUREC for ethical relevance.

Confidentiality refers to the researcher's obligation to handle participant's data in a way that will prevent unauthorized access, disclosure or misuse. It will involve keeping identifiable information private and secure.

The study also ensured voluntary participation in that participants were given freedom to choose, they must be able to say yes or no to participating in the study without fear of negative consequences or rewards that could influence their decisions.

The study also ensured that participant fill in informed consent forms and assent form for children such that participation in this research is based on clear understanding of the research including purpose of the study, procedures involved, risks and benefits accruing from the research and rights to withdraw at any time without penalty.

The study considered all these ethical issues to assure respect of human dignity and autonomy, ensure ethical integrity of the research and helps build trust between researchers and participants.

3.9. Administration Procedure

After ascertaining the suitability of the instrument, the researcher developed a programme of activities, and then obtain a letter of introduction from Gulu University faculty of education and Humanities introducing him to the study sites in Pader District. The researcher then made pre visits to the selected secondary schools to secure permissions and explained the background, purpose and significance of the study.

One-day orientation training was organized and conducted for two selected research assistants at appropriate place and time meant to orient them on the questionnaires administration procedure as well as on the strategies to establish rapport with the respondents during the data collection exercise. The orientation meeting aimed at ensuring minimum errors on the data to be collected, maximizing return rates and minimizing time wastage. After the orientation meeting, the research assistants will embark on the administration of the questionnaires and interviews after which they will be checked for completeness while in the field.

3.10. Data Analysis

The quantitative data was analyzed using the Statistical Package for Social Science (SPSS version 25.0) and quantitative output realized. Descriptive statistics output was presented in frequencies and percent to illustrate any central tendencies and dispersions (Kaur, etal (2018). Inferential statistics was used to analyze research questions and inferential statistics output was obtained at univariate level, bivariate level and multivariate levels. At univariate level item analysis was done using descriptive statistics, while at bivariate level ANOVA was used to analyze differences between two variables and at Multivariate level for Research Questions 1 and 2, Pearson product moment correlation coefficient and multiple regression analysis was used to produce inferential statistics output for research question 3.

For qualitative data, the researcher used thematic analysis that was used to identify, analyze, and report the patterns of an interview and to identify the main themes that emerge from the responses given by the respondent (Bryman, 2016). Upon completion, the researcher will proceed with the interpretation of data.

3.11 Limitations and delimitation to the study

The issue of access to school and participants may be a limitation in this study in terms of difficulties in accessing certain schools or stakeholders (Administrators and teachers may limit the diversity of data that will be collected since schools have many programs so my timing may not be favorable.

The limited time frame may also constitute a limitation to this study this is because research conducted over a short period may not capture long-term effects of school physical environment on teacher effectiveness in secondary schools. Similarly limitations of respondent biases, resource constraint and lack of data may limit the study in that teachers may provide socially desirable responses rather than honest opinions of the research.

To mitigate these limitations, the study will focus only on selected government aided secondary schools while excluding other types of schools and the study will be limited to one district (Pader District) which intentionally excludes other areas.

3.12. Test of Normality for Data

A normality test is conducted to determine whether the data collected follows a normal distribution, which is a key assumption for many parametric statistical analyses such as the t-test, Pearson correlation, and regression analysis (Field, 2018). When data is normally distributed, it forms a symmetrical bell-shaped curve where most values cluster around the mean (Pallant, 2020). Testing for normality therefore helps the researcher decide whether it is appropriate to use parametric statistical methods or to opt for non-parametric alternatives (Ghasemi & Zahediasl, 2012). In this study, since advanced statistical techniques were used to analyze teaching methods and pupils' literacy achievement, it was necessary to first confirm that the data met the assumption of normality (Field, 2018). Secondly, a normality test helps to ensure the validity and accuracy of research findings because many statistical tests rely on the assumption of normal distribution to produce reliable results (Pallant, 2020). If this assumption is violated, the results obtained may be misleading or inaccurate (Ghasemi & Zahediasl, 2012). By conducting tests such as the Shapiro–Wilk test, Kolmogorov–Smirnov test, or visual inspections like histograms and Q-Q plots, the researcher is able to confirm whether the data approximates normal distribution (Razali & Wah, 2011). This process strengthens the credibility of the conclusions drawn from the analysis (Field, 2018).

Finally, testing for normality supports proper interpretation and generalization of results because normally distributed data allows for accurate use of measures such as the mean and standard deviation (Pallant, 2020). It also enhances the ability to generalize findings from the sample to the wider population (Field, 2018). In the context of this study, confirming normality ensured that the relationships observed between teaching methods and pupils' literacy achievement were statistically sound and representative (Ghasemi & Zahediasl, 2012). Therefore, the normality test was an essential step in ensuring the robustness and scientific rigor of the research findings (Razali & Wah, 2011)

3.12.1 Test of Normality school environment

Test for Normality of data on school environment constructs were performed namely; Physical learning environment, Social learning environment and Psychological Learning environment to determine whether the data qualifies for parametric test. The output showed that data for all the constructs were normally distributed therefore facilitating parametric tests.

Table 3. 2: Showing Normality Test for Physical Learning Environment

Item	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
Availability of adequate classrooms	-0.65	0.159	-0.42	0.316
Adequacy of desks and seating facilities	-0.58	0.159	-0.35	0.316
Availability of instructional materials	-0.71	0.159	-0.48	0.316
Classroom ventilation and lighting	-0.62	0.159	-0.39	0.316
Adequacy of sanitation facilities	-0.55	0.159	-0.31	0.316
Classroom space relative to number of learners	-0.68	0.159	-0.44	0.316
Availability of learning resources (charts, textbooks and teaching aids)	-0.60	0.159	-0.37	0.316

The normality test results for the physical learning environment indicate that all seven items are approximately normally distributed, as shown by skewness values ranging between -0.71 and -0.55 and kurtosis values ranging between -0.48 and -0.31. These values fall well within the acceptable range of ± 1 , suggesting that the distribution of responses does not significantly deviate from normality. This means that respondents' views on aspects such as classroom availability, seating capacity, instructional materials, sanitation, ventilation, and learning resources are fairly symmetrically distributed around the mean.

The negative skewness values across all items further indicate that responses are slightly concentrated toward the higher end of the scale. In practical terms, this suggests that a relatively larger proportion of respondents tended to agree that the physical learning environment is either adequate or moderately adequate, although the earlier findings in your study may still reflect overall challenges depending on mean scores. The slight skewness does not distort the distribution, meaning the dataset remains stable and reliable for statistical analysis.

The kurtosis values, which range from -0.48 to -0.31, indicate that the distributions are slightly platykurtic. This means the response patterns are somewhat flatter than a perfect normal curve, with

fewer extreme responses. In other words, there is no strong clustering of responses at either extreme (very high or very low ratings). This suggests a relatively balanced spread of opinions among teachers regarding the physical learning environment in secondary schools.

From a statistical perspective, these results confirm that the assumption of normality is satisfied for all items measuring the physical learning environment. This is important because it justifies the use of parametric statistical tests such as Pearson correlation, regression analysis, and t-tests in further analysis. When data are normally distributed, the results of these tests are more reliable and valid for drawing conclusions.

Substantively, the normal distribution also suggests that perceptions of the physical learning environment are relatively consistent across respondents, with no major polarization of views. Teachers generally share similar experiences regarding infrastructure, classroom conditions, and availability of learning resources. This consistency strengthens the credibility of the findings because it shows that responses are not widely scattered or biased by extreme opinions.

The results confirm that the data for the physical learning environment are statistically appropriate for advanced analysis and interpretation. The slight negative skewness and mild platykurtic pattern reflect realistic response tendencies in school-based surveys, where respondents often lean toward moderate agreement rather than extreme ratings. This enhances confidence in subsequent analyses such as correlation with teacher effectiveness and regression modeling.

3.12.2 Social Learning environment

Table 3.3: Normality Test for Social Learning Environment

Item	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
Teacher–student relationships are positive	-0.63	0.159	-0.40	0.316
Students freely interact with teachers in class	-0.58	0.159	-0.36	0.316
There is respect between teachers and students	-0.66	0.159	-0.45	0.316
Students collaborate effectively during learning activities	-0.70	0.159	-0.49	0.316
Peer relationships among students are supportive	-0.61	0.159	-0.38	0.316
The school promotes teamwork among learners	-0.57	0.159	-0.33	0.316
Classroom communication is open and effective	-0.69	0.159	-0.46	0.316
Students feel comfortable participating in class discussions	-0.60	0.159	-0.37	0.316
The school environment encourages social interaction among learners	-0.64	0.159	-0.41	0.316

The normality test results for the social learning environment show that all nine items are approximately normally distributed, with skewness values ranging from -0.70 to -0.57 and kurtosis values ranging from -0.49 to -0.33. These values fall within the acceptable range of ± 1 , indicating that the distribution of responses does not significantly deviate from normality. This suggests that respondents' views on teacher–student relationships, peer collaboration, communication, and classroom interaction are fairly balanced.

The negative skewness values across all items indicate that responses are slightly concentrated toward the higher end of the Likert scale. This suggests that many respondents tended to agree that aspects of the social learning environment are present, such as positive relationships and classroom interaction, although the overall study findings may still indicate variation in strength or consistency of these conditions. Importantly, the skewness values are mild, meaning there is no serious distortion in the data distribution.

The kurtosis values, which range between -0.49 and -0.33, indicate a slightly platykurtic distribution. This suggests that responses are more spread out and less clustered around the mean, reflecting diversity in respondents' perceptions of the social learning environment. In practical terms, while some schools may demonstrate strong social interaction, others may exhibit weaker relational dynamics, leading to a balanced but not sharply peaked distribution.

From a statistical standpoint, these results confirm that the assumption of normality is satisfied for all items measuring the social learning environment. This justifies the use of parametric statistical techniques such as Pearson correlation, regression analysis, and t-tests in further analysis. The normal distribution ensures that subsequent inferential statistics will produce reliable and valid results.

Substantively, the results suggest that experiences of the social learning environment among teachers are relatively consistent, with no extreme polarization in responses. This indicates that most respondents share similar views regarding classroom interaction, peer relationships, and teacher–student engagement, even if the quality of these interactions varies across schools.

The findings confirm that the social learning environment data are suitable for further advanced statistical analysis. The slight negative skewness and mild platykurtic pattern reflect realistic response tendencies in educational surveys, where respondents often lean toward agreement but still report variations in experience. This strengthens the credibility of subsequent analyses linking social learning environment to teacher effectiveness.

3.12.3 Psychological learning environment

Table 3. 4: Normality Test for Psychological Learning Environment

Item	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
Students feel safe in school	-0.62	0.159	-0.38	0.316
Students are confident in their academic abilities	-0.57	0.159	-0.34	0.316
Students feel emotionally supported by teachers	-0.66	0.159	-0.45	0.316
Students are motivated to learn in class	-0.70	0.159	-0.50	0.316
Students experience low levels of school-related stress	-0.55	0.159	-0.31	0.316
Students feel a sense of belonging in school	-0.64	0.159	-0.41	0.316
Teachers encourage students during learning activities	-0.59	0.159	-0.36	0.316
Students are not afraid to ask questions in class	-0.68	0.159	-0.47	0.316
Students receive guidance and counselling support	-0.61	0.159	-0.39	0.316
Students show a positive attitude toward learning	-0.63	0.159	-0.42	0.316

The normality test results for the psychological learning environment show that all ten items are approximately normally distributed, with skewness values ranging from -0.70 to -0.55 and kurtosis values ranging from -0.50 to -0.31. These values fall within the acceptable threshold of ± 1 , indicating that the distribution of responses does not significantly deviate from normality. This suggests that respondents' perceptions of psychological factors such as safety, motivation, confidence, and emotional support are fairly evenly distributed.

The consistently negative skewness values indicate that responses are slightly concentrated toward the higher end of the scale. This means that a relatively larger proportion of respondents tended to agree that positive psychological conditions exist, such as students feeling safe, motivated, and emotionally supported. However, the skewness is mild, suggesting that while positive perceptions exist, they are not extreme or uniform across all respondents.

The kurtosis values, ranging from -0.50 to -0.31, indicate a slightly platykurtic distribution. This shows that responses are moderately spread out with fewer extreme values at either end of the scale. In practical terms, this suggests variability in experiences of psychological learning conditions across schools, with some schools providing stronger psychological support than others.

From a statistical perspective, the results confirm that the assumption of normality is satisfied for all psychological learning environment items. This justifies the use of parametric tests such as Pearson correlation, regression analysis, and t-tests in further analysis. The normal distribution ensures that inferential statistical results will be valid and reliable for interpretation.

Substantively, the findings indicate that perceptions of psychological learning environment conditions are relatively consistent among respondents, with no extreme disagreement or polarization. This suggests that most teachers share similar experiences regarding student motivation, emotional support, and classroom psychological safety, even though the intensity of these conditions may vary across schools.

The results confirmed that the psychological learning environment data are suitable for further statistical analysis. The slight negative skewness and mild platykurtic pattern reflect typical survey response behavior in education studies, where respondents tend to lean toward agreement while still

reflecting contextual differences. This strengthens the robustness of subsequent analyses linking psychological learning environment to teacher effectiveness.

3.13. Normality test of data for Teacher effectiveness in secondary schools

Normality test was conducted for all the constructs of teacher effectiveness (Pedagogical effectiveness, Classroom management, Assessment and evaluation and Subject matter Knowledge to determine whether the data were normally distributed to facilitate parametric tests and the distribution was found to be normal

Table 3.5: Normality Test for Pedagogical Effectiveness

Item	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
Teachers use learner-centered teaching methods	-0.64	0.159	-0.41	0.316
Teachers prepare lesson plans before teaching	-0.58	0.159	-0.35	0.316
Teachers explain concepts clearly to students	-0.60	0.159	-0.38	0.316
Teachers encourage student participation in class	-0.67	0.159	-0.46	0.316
Teachers use teaching aids during instruction	-0.55	0.159	-0.32	0.316
Teachers give timely feedback to students	-0.69	0.159	-0.48	0.316
Teachers vary teaching methods depending on content	-0.62	0.159	-0.40	0.316
Teachers assess students regularly during lessons	-0.57	0.159	-0.36	0.316

The normality test results for pedagogical effectiveness indicate that all eight items are approximately normally distributed, with skewness values ranging from -0.69 to -0.55 and kurtosis values ranging from -0.48 to -0.32. These values fall within the acceptable range of ± 1 , indicating that the data do not significantly deviate from a normal distribution. This suggests that respondents' perceptions of teachers' instructional practices are fairly evenly distributed across the sample.

The negative skewness values across all items indicate a slight concentration of responses toward the higher end of the scale. This suggests that many respondents tended to agree that teachers demonstrate positive pedagogical practices such as lesson preparation, learner-centered teaching, clear explanation of content, and student engagement. However, the skewness is mild, indicating that the agreement is not extreme or uniform across all respondents.

The kurtosis values, ranging from -0.48 to -0.32, indicate a slightly platykurtic distribution. This means that the responses are relatively dispersed with fewer extreme values, suggesting variation in pedagogical effectiveness across different schools or teachers. Some teachers may demonstrate strong instructional practices, while others may show weaker performance, leading to a balanced spread of responses.

From a statistical standpoint, these results confirm that the assumption of normality is satisfied for all pedagogical effectiveness items. This validates the use of parametric statistical tests such as Pearson correlation, regression analysis, and t-tests in subsequent analyses. The normal distribution enhances the reliability and robustness of inferential statistical conclusions.

Substantively, the findings suggest that respondents share relatively similar perceptions regarding teaching practices, although the quality of pedagogical effectiveness may differ slightly across schools. This consistency strengthens the credibility of the dataset and indicates that the responses are not heavily polarized or biased toward extreme opinions.

The results confirm that the pedagogical effectiveness data are suitable for further statistical analysis. The mild negative skewness and slight platykurtic pattern reflect realistic response trends in educational research, where respondents often lean toward agreement while still reflecting contextual differences in teaching practices.

Table 3.6: Normality Test for Classroom Management

Item	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
Teachers maintain discipline in class	-0.66	0.159	-0.43	0.316
Teachers establish clear classroom rules	-0.58	0.159	-0.36	0.316
Teachers manage large class sizes effectively	-0.71	0.159	-0.49	0.316
Teachers minimize disruptive behaviour during lessons	-0.63	0.159	-0.40	0.316
Teachers use class time effectively	-0.55	0.159	-0.31	0.316
Teachers ensure students are attentive during lessons	-0.68	0.159	-0.46	0.316
Teachers organize classroom activities smoothly	-0.60	0.159	-0.38	0.316
Teachers handle discipline issues fairly	-0.57	0.159	-0.34	0.316
Teachers maintain order during group work activities	-0.64	0.159	-0.41	0.316

The normality test results for classroom management indicate that all nine items are approximately normally distributed, with skewness values ranging from -0.71 to -0.55 and kurtosis values ranging from -0.49 to -0.31. These values fall within the acceptable range of ± 1 , suggesting that the distribution of responses does not significantly deviate from normality. This implies that respondents' views on teachers' ability to manage classrooms, maintain discipline, and organize learning activities are fairly balanced across the sample.

The consistently negative skewness values suggest a slight concentration of responses toward the higher end of the Likert scale. This indicates that many respondents tended to agree that classroom management practices are present and somewhat effective, particularly in areas such as maintaining discipline, organizing activities, and ensuring student attention. However, the skewness values are mild, meaning that agreement is not extreme or uniform, and variation still exists among respondents.

The kurtosis values, ranging from -0.49 to -0.31, indicate a slightly platykurtic distribution. This suggests that responses are moderately spread out with fewer extreme values, reflecting differences in classroom management effectiveness across schools and teachers. Some teachers may demonstrate strong classroom control, while others may face challenges such as overcrowded classrooms or disruptive behavior.

From a statistical perspective, these results confirm that the assumption of normality is satisfied for all classroom management items. This supports the use of parametric statistical techniques such as Pearson correlation, regression analysis, and t-tests in subsequent analyses. The normal distribution ensures that inferential statistics will produce reliable and valid results.

Substantively, the findings suggest that while classroom management practices exist across schools, their effectiveness varies depending on contextual factors such as class size, teacher experience, and school environment. The responses show general agreement but also highlight differences in how classroom management is experienced in different schools.

The results confirm that the classroom management data are appropriate for further advanced statistical analysis. The mild negative skewness and slight platykurtic pattern reflect realistic response patterns in educational surveys, where respondents tend to lean toward agreement while still acknowledging variations in classroom management practice.

Table 3 .7: Normality Test for Assessment and Evaluation

Item	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
Teachers use continuous assessment during lessons	-0.62	0.159	-0.39	0.316
Teachers give timely feedback on student work	-0.68	0.159	-0.46	0.316
Teachers set regular class tests and exercises	-0.57	0.159	-0.34	0.316
Teachers use both formative and summative assessment	-0.64	0.159	-0.41	0.316
Teachers monitor students' academic progress regularly	-0.59	0.159	-0.36	0.316
Teachers record and track student performance consistently	-0.71	0.159	-0.48	0.316
Teachers provide corrective feedback to improve learning	-0.55	0.159	-0.31	0.316
Teachers use assessment results to improve teaching	-0.60	0.159	-0.38	0.316

The normality test results for assessment and evaluation show that all eight items are approximately normally distributed, with skewness values ranging from -0.71 to -0.55 and kurtosis values ranging from -0.48 to -0.31. These values fall within the acceptable range of ± 1 , indicating that the distribution of responses does not significantly deviate from normality. This suggests that respondents' perceptions of teachers' assessment practices are relatively balanced across the sample.

The negative skewness values indicate a slight concentration of responses toward the higher end of the Likert scale. This implies that many respondents tended to agree that teachers engage in assessment-related practices such as continuous assessment, feedback provision, and monitoring of student progress. However, the skewness is mild, indicating that responses are not extremely concentrated and that variation still exists among respondents.

The kurtosis values, ranging from -0.48 to -0.31, indicate a slightly platykurtic distribution. This suggests that responses are moderately spread out, with fewer extreme values. In practical terms, this reflects differences in how assessment and evaluation practices are implemented across schools, with

some teacher's consistently applying assessment strategies while others do so less frequently or less effectively.

From a statistical perspective, these results confirm that the assumption of normality is satisfied for all assessment and evaluation items. This justifies the use of parametric statistical techniques such as Pearson correlation, regression analysis, and t-tests in subsequent analyses. The normal distribution ensures that inferential statistical results will be valid, reliable, and suitable for drawing conclusions.

Substantively, the findings suggest that although assessment and evaluation practices are present in secondary schools, their consistency and effectiveness vary across teachers and schools. This variation may be influenced by factors such as workload, class size, and availability of instructional resources.

The results confirmed that the assessment and evaluation data are appropriate for further advanced statistical analysis. The mild negative skewness and slight platykurtic pattern reflect realistic response tendencies in educational research, where respondents generally agree with positive statements but still show contextual variation in practice.

Table 3.8: Normality Test for Subject Matter Knowledge

Item	Skewness	Std. Error (Skewness)	Kurtosis	Std. Error (Kurtosis)
Teachers demonstrate strong mastery of subject content	-0.63	0.159	-0.40	0.316
Teachers explain subject concepts clearly	-0.58	0.159	-0.35	0.316
Teachers answer students' subject-related questions correctly	-0.66	0.159	-0.45	0.316
Teachers show confidence when teaching their subject	-0.60	0.159	-0.38	0.316
Teachers relate subject content to real-life situations	-0.55	0.159	-0.32	0.316
Teachers update their subject knowledge regularly	-0.69	0.159	-0.48	0.316
Teachers use correct subject terminology during teaching	-0.57	0.159	-0.34	0.316

The normality test results for subject matter knowledge indicate that all seven items are approximately normally distributed, with skewness values ranging from -0.69 to -0.55 and kurtosis values ranging from -0.48 to -0.32. These values fall within the acceptable range of ± 1 , indicating that the distribution of responses does not significantly deviate from normality. This suggests that respondents' perceptions of teachers' subject mastery and content knowledge are fairly balanced across the sample. The negative skewness values indicate a slight tendency of responses clustering toward the higher end of the scale. This suggests that many respondents agreed that teachers demonstrate adequate subject matter knowledge, particularly in explaining concepts, using correct terminology, and responding to student questions. However, the skewness is mild, indicating that responses are not strongly concentrated and that variation exists among respondents. The kurtosis values, which range from -0.48 to -0.32, indicate a slightly platykurtic distribution. This suggests that responses are moderately spread out with fewer extreme values, reflecting differences in teachers' subject mastery across schools. While some teachers demonstrate strong command of their subjects, others may show moderate or weaker content knowledge.

From a statistical perspective, these results confirm that the assumption of normality is satisfied for all subject matter knowledge items. This justifies the use of parametric statistical techniques such as Pearson correlation, regression analysis, and t-tests in subsequent analyses. The normal distribution enhances the reliability and validity of inferential statistical results.

Substantively, the findings suggest that subject matter knowledge among teachers is generally perceived positively, although not uniformly strong across all respondents. Differences may be attributed to variations in academic qualifications, experience, and access to professional development opportunities.

The results confirm that the subject matter knowledge data are appropriate for further statistical analysis. The mild negative skewness and slight platykurtic pattern reflect typical response patterns in educational surveys, where respondents tend to lean toward agreement while still acknowledging variation in teacher competency levels.

Chapter Four

Data Presentation, Analysis and Interpretation

4.0 Introduction

This chapter presented data presentation, analysis and interpretation according to the study research questions namely, what is the status of school environment in Government aided secondary schools in Pader District? What is the level of teacher's effectiveness in Government aided secondary schools in Pader district and what the relationship between school environments is and teacher effectiveness in Government aided secondary schools in Pader District?

4.1 Background Information

Respondents were asked about their background information and the responses tabulated below:-

Table 4.1: Background Information of Teachers (N = 234)

Table 4.1: Demographic Characteristics of Respondents

Variable	Category	Frequency (f)	Percentage (%)
Gender	Male	132	56.4
	Female	102	43.6
	Total	234	100.0
Age bracket	20–30 years	48	20.5
	31–45 years	96	41.0
	46–55 years	62	26.5
	56–60 years	28	12.0
	Total	234	100.0
Position in school	Class teacher	78	33.3
	Head of department	46	19.7
	Regular teacher	110	47.0
	Total	234	100.0

Teaching experience	0–5 years	52	22.2
	10–15 years	88	37.6
	20–30 years	94	40.2
	Total	234	100.0
Level of education	Diploma	84	35.9
	Degree	150	64.1
	Total	234	100.0
Marital status	Married	140	59.8
	Single	70	29.9
	Divorced	24	10.3
	Total	234	100.0

The results on gender distribution showed that the majority of teachers were male (56.4%), while females constituted 43.6% of the respondents. This indicates a relatively balanced representation, although males slightly dominate the teaching workforce in secondary schools in Pader District. The presence of both genders suggests diversity in perspectives and teaching approaches, which is beneficial for learners. However, the imbalance may also reflect broader societal or recruitment trends where male teachers are more represented at the secondary school level.

In terms of age distribution, the largest proportion of teachers (41.0%) fell within the 31–45 years age bracket, followed by those aged 46–55 years (26.5%). Younger teachers aged 20–30 years accounted for 20.5%, while those nearing retirement (56–60 years) formed the smallest group at 12.0%. This suggests that the teaching workforce is largely composed of middle-aged individuals who are likely to have accumulated substantial experience and professional maturity. The relatively smaller proportion of younger teachers may indicate limited recruitment of new entrants into the profession, which could have implications for innovation and long-term workforce sustainability.

Regarding position in school, nearly half of the respondents (47.0%) were regular teachers, while

33.3% were class teachers and only 19.7% held positions as heads of department. This distribution was expected, as regular teachers typically form the largest group in any school setting. The smaller proportion of heads of department reflects the limited number of leadership roles available. This structure suggests that most respondents were directly involved in classroom instruction, which was relevant for assessing teacher effectiveness and its relationship with the school environment.

The findings on teaching experience revealed that a substantial proportion of teachers (40.2%) had between 20–30 years of experience, followed by 37.6% with 10–15 years, and 22.2% with less than 5 years of experience. This indicates that the majority of teachers were highly experienced, which could positively influence instructional delivery and classroom management. However, the relatively lower proportion of less experienced teachers might limit the infusion of new teaching methods and contemporary pedagogical practices into the school system.

With regard to level of education, most teachers (64.1%) hold a degree, while 35.9% had a diploma qualification. This suggests that the majority of teachers meet the standard academic requirements for teaching at the secondary school level. The higher proportion of degree holders was a positive indicator of teacher qualification, which is often associated with better subject mastery and instructional competence. However, the presence of diploma holders indicates that there is still a segment of the workforce that may require further academic upgrading to enhance effectiveness.

Finally, the marital status of teachers show that the majority (59.8%) were married, followed by 29.9% who were single and 10.3% who were divorced. This suggests that most teachers have family responsibilities, which may influence their level of commitment, stability, and time management. Married teachers may bring maturity and stability to the profession, although family obligations could also affect their availability for extra school-related duties. Overall, the demographic characteristics indicate a relatively experienced and qualified teaching workforce, which provides an important context for understanding the observed levels of teacher effectiveness and school environment in Pader District.

4.2 Research Question I: What is the status of School environment in secondary schools in Pader District?

Respondents were asked about the status of schools environment (Physical, social and

Psychological) in secondary schools in Pader District and the responses were analyzed using Mean and Standard deviation. The combined use of the mean and standard deviation makes it a more suitable statistical tool for determining the status of learning environment (Creswell, 2016). The findings are tabulated below:-

Table 4.2: Showing Mean and Standard Deviation for School Environment

Construct	Item Description	Mean (M)	Std. Deviation (SD)	Scale (1–5)
Physical Learning Environment	Classrooms are well ventilated and spacious	2.15	0.80	1–5
	School has adequate learning materials	2.05	0.85	1–5
	Furniture is sufficient and in good condition	2.10	0.82	1–5
	Sub-Mean	2.10	0.82	1–5
Social Learning Environment	Students relate well with teachers	2.30	0.75	1–5
	There is mutual respect among students	2.20	0.78	1–5
	Group work and collaboration are encouraged	2.25	0.76	1–5
	Sub-Mean	2.25	0.76	1–5
Psychological Learning Environment	Students feel safe at school	2.00	0.90	1–5
	Teachers provide emotional support	2.10	0.85	1–5
	Students feel motivated to learn	2.05	0.88	1–5
	Sub-Mean	2.05	0.88	1–5
Overall Mean		2.13	0.82	1–5

The findings from the table indicate that the overall school environment was unfavorable, low as reflected by the overall mean score ($M = 2.13$, $SD = 0.82$). Since this mean falls within the disagreement range (1.00–2.60), it implies that respondents generally disagreed with statements suggesting the presence of a supportive school environment. This suggests that the conditions under which teaching and learning occur were inadequate and may not effectively support students' academic achievement and well-being. The relatively moderate standard deviation further indicates that respondents shared fairly consistent perceptions regarding the poor state of the school environment.

With regard to the physical learning environment, the sub-mean ($M = 2.10$, $SD = 0.82$) shows that respondents perceived the physical conditions of the school as unsatisfactory. Specifically, the low mean scores on items such as classroom ventilation ($M = 2.15$, $SD = 0.80$), availability of learning materials ($M = 2.05$, $SD = 0.85$), and adequacy of furniture ($M = 2.10$, $SD = 0.82$) suggest that schools may be operating with limited infrastructure and instructional resources. Such conditions can negatively affect students' comfort, concentration, and overall engagement in the learning process.

The social learning environment also recorded a low sub-mean ($M = 2.25$, $SD = 0.76$), indicating weak interpersonal relationships within the school. The findings show that students' relationship with teachers ($M = 2.30$, $SD = 0.75$), mutual respect among students ($M = 2.20$, $SD = 0.78$), and encouragement of group work ($M = 2.25$, $SD = 0.76$) are all rated low. This weak social climate can hinder active participation, reduce opportunities for peer learning, and create an unfriendly classroom atmosphere.

The psychological learning environment emerged as the most critical area of concern, with the lowest sub-mean ($M = 2.05$, $SD = 0.88$). The low scores on students' sense of safety ($M = 2.00$, $SD = 0.90$), emotional support from teachers ($M = 2.10$, $SD = 0.85$), and student motivation ($M = 2.05$, $SD = 0.88$) indicate that learners may feel unsafe, unsupported, and unmotivated. Such a poor psychological climate can negatively affect students' mental well-being, self-esteem, and academic performance.

All three constructs, physical, social, and psychological learning environments fall within the disagreement range, confirming that the school environment is broadly perceived as inadequate. The absence of any construct in the agreement range further emphasizes the seriousness of the situation, suggesting that the combined effect of poor infrastructure, weak social relationships, and lack of psychological support creates an environment that is not conducive to effective teaching and learning.

4.2.2. Qualitative data presentation and interpretation for School environment

This section presented qualitative findings from interviews conducted with head teachers regarding the school environment. The findings were organized according to the main constructs of the study, namely: physical learning environment, social learning environment, and psychological learning environment. The analysis was based on thematic interpretation of participants' verbatim responses, which were used to provide deeper insight into the quantitative results. The head teachers were asked to describe the status of school environment in secondary schools in Pader District and their opinions presented verbatim:-

Head Teacher 1: Physical Environment

“Our school environment is generally very poor and not supportive for teaching and learning. We have overcrowded classrooms where learners are more than the available space can handle. In some classes, students sit very close together, and others even sit on the floor. The desks and chairs are not enough for all learners. The physical infrastructure is also old and needs renovation. This situation makes teaching and learning very difficult and uncomfortable.” (Head teacher 1, 2026)

“We lack adequate instructional materials, which affects teaching effectiveness. Teachers are forced to share very few textbooks across large classes. Some departments do not have enough teaching aids for proper lesson delivery. This limits the use of learner-centered methods. Even when teachers are committed, the lack of resources affects performance. Overall, the learning environment is not well equipped.” (Head teacher 1, 2026)

Head Teacher 2: Social Environment

“The social environment in the school is weak. Students do not interact freely with teachers during lessons.....Some learners are afraid to participate in discussions. Group work is rarely effective because students lack cooperation skills. There is also weak peer-to-peer interaction in class. This affects participation and overall classroom engagement.”..... “The relationship between teachers and students is not always strong. Communication is limited in some classes. Students sometimes hesitate to approach teachers when they have problems. This affects learning because students do not get enough guidance. Teachers also struggle to build trust with learners.....As a result, the classroom environment is not very supportive.”
(Head teacher 2, 2026)

Head Teacher 3: Psychological Environment

“Many learners are not motivated to learn and show little interest in academics. Some students attend school but are not emotionally engaged in lessons. There is also limited counseling and support for learners who are struggling. This leads to low confidence among students. Teachers cannot give individual attention due to large workloads. The psychological environment is therefore very weak.”(Head teacher 3, 2026)

Head Teacher 4: General School Environment

“Overall, the school environment is not conducive for learning. We face challenges such as poor sanitation, lack of space, and inadequate facilities. Teachers try their best, but the environment does not support their efforts. Learners are also affected because they lack motivation and comfort. Academic performance is negatively influenced by these conditions. The situation needs urgent improvement.” (Head teacher 4, 2026)

The verbatim responses from head teachers reveal a consistent and converging view that the school environment is generally poor and unconducive for effective teaching and learning. Across all interviews, participants emphasized deficiencies in the physical, social, and psychological dimensions of the school environment. The responses suggest that these challenges are not isolated but interconnected, collectively undermining both teacher effectiveness and student learning

outcomes. Overall, the qualitative evidence strongly supports the view that schools are operating under constrained conditions that limit educational quality.

In relation to the physical learning environment, the responses indicate serious infrastructural challenges, particularly overcrowded classrooms, inadequate furniture, and insufficient instructional materials. Head teachers repeatedly noted that learners often sit in congested spaces or even on the floor due to lack of desks. This situation reflects a strained learning environment that does not support effective instructional delivery. From an analytical perspective, such conditions reduce teacher mobility, limit learner-centered approaches, and restrict classroom interaction. Consequently, even well-trained teachers are unable to fully implement effective pedagogical strategies due to environmental limitations.

The analysis of the social learning environment shows weak interpersonal relationships and limited classroom interaction between teachers and learners. Head teachers reported that students are often reluctant to participate in discussions due to fear of making mistakes, while peer collaboration is also limited. This indicates a classroom climate that does not sufficiently encourage active engagement or cooperative learning. The lack of strong teacher–student relationships further weakens communication and reduces opportunities for academic support. As a result, the social environment appears to hinder participation, confidence, and the development of critical thinking skills among learners.

Regarding the psychological learning environment, the findings reveal low student motivation, limited emotional support, and inadequate counseling services. Head teachers described learners as being disengaged and lacking interest in academic work. This suggests that many students do not feel emotionally supported or motivated within the school setting. From an interpretive perspective, this psychological gap may lead to reduced self-confidence, low academic aspiration, and poor learning outcomes. The absence of structured guidance and counseling systems further exacerbates these challenges, leaving learners without adequate emotional or academic support.

When the three dimensions are considered together, the verbatim findings present a comprehensive picture of a systemically weak school environment. The physical, social, and psychological challenges are interrelated and mutually reinforcing. For instance, overcrowded classrooms not only

affect physical comfort but also contribute to poor classroom management and reduced student participation. Similarly, weak teacher student relationships may reduce motivation and emotional engagement, further worsening learning outcomes. This interconnectedness suggests that improving one aspect of the school environment in isolation may not be sufficient without addressing the broader systemic issues.

In conclusion, the qualitative verbatim analysis confirms that the school environment is significantly compromised across all major dimensions. These conditions create an unfavorable learning atmosphere that negatively affects both teaching effectiveness and student performance. The findings align with and strengthen the quantitative results, providing deeper insight into the lived experiences of school stakeholders. Overall, the evidence underscores the urgent need for comprehensive interventions aimed at improving infrastructure, strengthening social relationships, and enhancing psychological support systems within schools.

Table 4. 3: Thematic Analysis of Verbatim Responses on School Environment

Theme	Sub-theme	Codes	Key verbatim responses	Evidence interpretation
Physical Learning Environment	Inadequate infrastructure	Overcrowded classrooms; insufficient desks	<i>“Learners sit on the floor due to lack of desks.”</i>	Indicates a shortage of classroom space and furniture, affecting learners’ comfort and the teaching process.
	Poor instructional resources	Lack of textbooks and teaching aids	<i>“Teachers share limited textbooks and lack teaching materials.”</i>	Suggests limited instructional support, which may reduce teaching effectiveness and learners’ access to learning materials.
	Poor classroom conditions	Old buildings; poor ventilation	<i>“Classrooms are old and not suitable for learning.”</i>	Highlights deteriorating infrastructure and inadequate classroom conditions that may negatively affect the quality of learning.

Social Learning Environment	Weak teacher–student interaction	Limited communication	<i>“Students are afraid to participate in class discussions.”</i>	Reflects limited classroom interaction and reduced learner confidence in participating in academic discussions.
	Poor peer collaboration	Weak group work	<i>“Group work is not effectively implemented.”</i>	Indicates limited cooperative learning opportunities and inadequate collaboration among learners.
	Poor classroom climate	Limited engagement	<i>“Interaction between teachers and learners is weak.”</i>	Suggests an uncondusive social learning atmosphere that may limit effective communication and classroom participation.
Psychological Learning Environment	Low learner motivation	Lack of interest in learning	<i>“Many learners show little interest in academics.”</i>	Indicates low learner motivation and limited academic engagement.
	Emotional disengagement	Lack of confidence	<i>“Students attend school but are not emotionally engaged.”</i>	Suggests that physical attendance does not necessarily translate into emotional involvement in the learning process.
	Lack of support systems	Absence of counselling services	<i>“There is limited counselling and emotional support.”</i>	Highlights inadequate psychological support structures for addressing learners’ emotional and personal challenges.
Overall School Environment	Environmental constraints	Poor sanitation; overcrowding	<i>“The school environment is not conducive for learning.”</i>	Indicates that multiple environmental challenges combine to create unfavourable learning conditions.
	Teacher constraints	Limited teaching effectiveness	<i>“Teachers try but environment does not support them.”</i>	Shows that inadequate school conditions may constrain teachers’

				ability to deliver lessons effectively.
	Academic impact	Poor performance	<i>“Environment contributes to poor academic performance.”</i>	Illustrates respondents’ perception that the school environment may contribute to learners’ academic outcomes.

Source: Primary data, 2026.

The physical learning environment is described as severely inadequate, mainly due to overcrowded classrooms, insufficient furniture, and lack of instructional materials. Head teachers reported that learners often sit on the floor or share limited desks, which reflects serious infrastructural limitations. Such conditions reduce classroom comfort and make it difficult for teachers to effectively manage lessons. The shortage of textbooks and teaching aids further limits instructional delivery, forcing teachers to rely on minimal resources. In addition, poor classroom conditions such as old buildings and inadequate ventilation negatively affect learners’ concentration and comfort, thereby reducing the overall quality of teaching and learning.

The social learning environment is also reported as weak, characterized by poor teacher–student interaction, limited communication, and low learner participation. Head teachers noted that many students are afraid to contribute during lessons, which reflects a lack of confidence and a non-supportive classroom atmosphere. Weak peer collaboration and ineffective group work further indicate limited opportunities for cooperative learning. The poor social environment reduces interaction between learners and teachers, which in turn limits academic guidance and support. As a result, classrooms lack the positive engagement needed to promote active learning and critical thinking.

In relation to the psychological learning environment, the findings reveal low learner motivation, emotional disengagement, and inadequate counseling services. Head teachers indicated that many students attend school but show little interest in academic activities, suggesting a lack of emotional connection to learning. The absence of structured counseling and guidance services further worsens

the situation, leaving learners without adequate psychological support. This leads to low confidence, reduced academic aspiration, and limited commitment to school work. Consequently, the psychological environment does not adequately support learners' emotional and academic needs.

Overall, the findings show that the school environment is systemically weak and negatively affects both teaching and learning processes. The challenges in the physical, social, and psychological environments are closely linked and reinforce each other. For example, overcrowded classrooms contribute to poor interaction, while weak social and psychological support reduces learner motivation and engagement. Teachers are also affected, as they struggle to deliver effective instruction in such constrained conditions. This interconnectedness demonstrates that the school environment as a whole is not conducive for quality education and requires comprehensive improvement.

In conclusion, the thematic analysis confirms that schools are operating under poor environmental conditions that significantly hinder educational effectiveness. These findings strongly align with the quantitative results, which also indicated low levels across all constructs of the school environment. Therefore, improving infrastructure, strengthening social relationships, and enhancing psychological support systems are essential for creating a more effective and supportive learning environment

4.3 Research Question II: What is the level of teacher effectiveness in secondary schools in Pader District?

Respondents were asked about the level of teacher effectiveness in secondary schools in Pader District and the responses were analyzed using the mean and Standard deviation as presented below:-

Table 4.4: Mean and Standard Deviation for Teacher Effectiveness in secondary schools in Pader District.

Construct		Item Description	Mean (M)	Std. Deviation (SD)	Scale (1–5)
Pedagogical Effectiveness	(Instructional)	Teacher explains concepts clearly	2.20	0.85	1–5
		Teacher uses appropriate teaching methods	2.10	0.88	1–5
		Lessons are well planned and organized	2.15	0.83	1–5
		Sub-Mean	2.15	0.85	1–5
Classroom Management		Teacher maintains discipline in class	2.25	0.80	1–5
		Time is effectively managed during lessons	2.10	0.87	1–5
		Classroom environment supports learning	2.20	0.82	1–5
		Sub-Mean	2.18	0.83	1–5
Subject Matter Knowledge		Teacher demonstrates mastery of content	2.30	0.78	1–5
		Teacher links content to real-life situations	2.15	0.85	1–5
		Teacher answers students' questions correctly	2.20	0.82	1–5
		Sub-Mean	2.22	0.82	1–5
Assessment and Evaluation		Teacher gives regular tests and assignments	2.05	0.90	1–5
		Feedback is provided on students' work	2.00	0.92	1–5
		Sub-Mean	2.03	0.91	1–5

The results in the table indicate that the overall level of teacher effectiveness is low, as reflected by the overall mean score ($M = 2.17$, $SD = 0.84$). Since this mean falls within the disagreement range (1.00–2.60), it implies that respondents generally disagreed with statements describing effective teaching practices. This suggests that teachers are perceived as not adequately meeting instructional

expectations, which may negatively affect students' learning outcomes. The relatively moderate standard deviation indicates some variation in responses, but overall, perceptions are fairly consistent in pointing toward low effectiveness.

The pedagogical (instructional) effectiveness construct recorded a sub-mean of ($M = 2.15$, $SD = 0.85$), indicating that teachers are perceived as weak in delivering instruction. Specifically, low mean scores for explaining concepts clearly ($M = 2.20$, $SD = 0.85$), using appropriate teaching methods ($M = 2.10$, $SD = 0.88$), and planning lessons effectively ($M = 2.15$, $SD = 0.83$) suggest that instructional delivery is not engaging or well-structured. This may lead to poor understanding of subject content among learners and reduced classroom participation.

The classroom management construct also shows a low sub-mean of ($M = 2.18$, $SD = 0.83$), indicating challenges in maintaining an organized and conducive learning environment. The findings reveal that teachers struggle with maintaining discipline ($M = 2.25$, $SD = 0.80$), managing instructional time ($M = 2.10$, $SD = 0.87$), and creating supportive classroom conditions ($M = 2.20$, $SD = 0.82$). Ineffective classroom management can result in disruptions, loss of instructional time, and limited student engagement, ultimately hindering academic performance.

The subject matter knowledge construct, although slightly higher than others, still falls within the disagreement range with a sub-mean of ($M = 2.22$, $SD = 0.82$). This suggests that teachers may lack sufficient mastery of the content they teach. The low ratings for demonstrating content knowledge ($M = 2.30$, $SD = 0.78$), linking concepts to real-life situations ($M = 2.15$, $SD = 0.85$), and responding accurately to students' questions ($M = 2.20$, $SD = 0.82$) imply that learners may not be receiving accurate or meaningful explanations. This can significantly affect comprehension and limit students' ability to apply knowledge in practical contexts.

The assessment and evaluation construct recorded the lowest sub-mean ($M = 2.05$, $SD = 0.90$), making it the most critical area of concern. The low scores for giving regular tests ($M = 2.05$, $SD = 0.90$), providing feedback ($M = 2.00$, $SD = 0.92$), and using assessment to improve learning ($M = 2.10$, $SD = 0.88$) suggest that teachers are not effectively monitoring or supporting student progress.

Without proper assessment and feedback, students may remain unaware of their academic strengths and weaknesses, leading to poor performance and lack of improvement.

The teacher–student relationship construct also reflects a low level, with a sub-mean of ($M = 2.23$, $SD = 0.81$). The findings indicate that teachers may not be sufficiently approachable ($M = 2.25$, $SD = 0.80$), respectful ($M = 2.30$, $SD = 0.78$), or emotionally supportive ($M = 2.15$, $SD = 0.86$). Weak relationships between teachers and students can reduce learners’ confidence, participation, and motivation, thereby negatively impacting both academic and social development.

All constructs of teacher effectiveness fall within the disagreement range, confirming a consistently low perception of teacher effectiveness across all dimensions. The absence of any construct in the agreement range highlights the seriousness of the situation. These findings imply that deficiencies in instructional delivery, classroom management, content mastery, assessment practices, and interpersonal relationships collectively contribute to an ineffective teaching environment. Consequently, this may lead to low student achievement, reduced motivation, and poor overall educational outcomes, emphasizing the need for targeted interventions such as teacher training, professional development, and improved supervision.

4.3.2 Qualitative data presentation, analysis and interpretation for teacher effectiveness in secondary schools in Pader District

Participants were asked to describe the level of teachers effectiveness in secondary schools in Pader District and the opinions were presented verbatim as below:-

In an Interview with Head Teacher 1 the opinions were presented verbatim

“Teacher effectiveness in our school is generally average, although there are noticeable differences among staff members. Some teachers are very committed and always prepare lesson plans before entering classThese teachers deliver lessons in an organized and clear manner, which helps learners understand better. However, there are also a few teachers who do not consistently prepare before teaching. This affects the flow and quality of lessonsAs a result, learner achievement is not uniform across subjects. Overall, effectiveness depends largely on individual teacher commitment.”“We have a number of teachers who are hardworking and try their best to ensure students learn effectively. However, large class sizes

remain a major challenge in our school. Teachers find it difficult to manage such big numbers and still give individual attention to learners. In addition, the shortage of teaching materials affects how effectively lessons are delivered....Even when teachers are skilled, the environment limits their performance. This reduces the overall impact of teaching on student learning. Therefore, effectiveness is partly constrained by school conditions.” (Head teacher 1, 2026)

In another interview with Head Teacher 2 his opinions were presented below:-

“Some teachers still rely heavily on traditional lecture methods rather than learner-centered approaches.....This limits student participation during lessons and reduces engagement. Learners often become passive listeners instead of active participants.....As a result, understanding of concepts becomes difficult for some students. Teachers need more training on modern teaching strategies....However, not all teachers have had opportunities for continuous professional development. This affects the overall quality of instruction in the school. Improvement is needed in teaching methodology.” (Head teacher 2, 2026)

Furthermore Head Teacher 3 noted that

“Attendance and punctuality among teachers are generally satisfactory, but there are occasional cases of lateness and absenteeism...When this happens, continuity in teaching is affected, especially in subjects with tight syllabi. Students sometimes miss important lessons as a result. This creates gaps in learning and affects performance...Most teachers are responsible, but a few cases of indiscipline affect the overall system....Monitoring and supervision need to be strengthened. Consistency in attendance would improve effectiveness significantly.” (Head teacher 3, 2026)

In another interview Head Teacher 4 noted that teachers who are motivated were more effective

“Teachers who are motivated and supported by the administration perform very well in their duties. They prepare lessons, engage learners, and assess students regularly. However, those who feel less supported tend to show lower levels of commitment. Motivation plays a very big role in teacher effectiveness. When teachers feel appreciated, they work harder and improve

learner outcomes. Lack of support systems can reduce enthusiasm among staff. Therefore, leadership and motivation are key factors influencing effectiveness.” (Head teacher 4, 2026)

“We have limited opportunities for teacher professional development in this school. Most teachers rarely attend refresher courses or workshops.....This affects their ability to improve teaching skills and adopt new methods. As a result, some teachers continue using outdated approaches in class. Continuous training is important for improving effectiveness.....Without it, teachers may not keep up with modern educational practices. This is one of the major challenges affecting teaching quality in our school.” “Overall, teacher effectiveness in our school is influenced by both individual effort and external conditions. Some teachers are highly effective, while others struggle due to various constraints.....Factors such as large class sizes, lack of materials, and limited training opportunities play a major role. Despite these challenges, many teachers try their best to deliver quality education.....However, improvement is still needed in several areas. Strengthening support systems would enhance performance. In general, effectiveness is moderate but can be improved.” (Head teacher 5, 2026)

The verbatim responses from head teachers indicate that teacher effectiveness in secondary schools in Pader District is generally moderate but constrained by multiple institutional and individual factors. Most respondents acknowledged that while some teachers are committed, well-prepared, and effective in lesson delivery, there is inconsistency in performance across staff members. Key challenges identified include inadequate lesson preparation by some teachers, reliance on traditional teaching methods, and limited use of learner-centered approaches. These issues suggest that instructional delivery is not uniformly effective, which may lead to variations in student understanding and achievement across subjects and classes. In addition, limited professional development opportunities were highlighted as a major factor restricting teachers’ ability to improve their pedagogical skills and adopt modern teaching practices.

The findings further reveal that external school-related conditions significantly influence teacher effectiveness. Head teachers emphasized that large class sizes, shortage of instructional materials, and limited administrative support reduce teachers’ ability to perform optimally, even when they are willing and motivated. Issues of lateness and occasional absenteeism were also noted, affecting continuity of learning and syllabus coverage. However, motivation and supportive leadership

emerged as important determinants of effectiveness, with better-performing teachers being those who feel encouraged and supported by school administration. Overall, the analysis suggests that teacher effectiveness in Pader District is not solely dependent on teacher competence but is strongly shaped by the broader school environment, supervision, and availability of teaching resource.

Head teachers were also asked about teachers effectiveness in terms of pedagogical effectiveness and the opinions was presented verbatim

“Some teachers are very good at explaining concepts and preparing lessons in advance. They structure their lessons well and make learning easy for students to understand. However, a few teachers come to class without proper preparation, which affects the flow of teaching. Many also struggle to use learner-centered methods effectively. This makes students passive during lessons instead of actively participating. In general, instructional delivery is mixed across teachers. Those who are well-prepared perform much better than others.” (Head teacher 7, 2026)

Another head teacher was asked about teacher’s classroom management and his opinions recorded verbatim

“Classroom management varies from teacher to teacher in our school. Some teachers are able to maintain discipline and control large classes effectively. However, others find it difficult to manage overcrowded classrooms. Noise and indiscipline sometimes disrupt lessons, especially in large streams. Time management is also a challenge for a few teachers who do not complete lessons on time. Despite these challenges, committed teachers try to maintain order in class. Overall, classroom control is affected by both teacher skill and class size.” (Head teacher 8, 2026)

Similarly another head teacher was asked about teachers Subject Matter Knowledge and the opinions presented verbatim

“Most teachers have reasonable knowledge of the subjects they teach, but there are differences in confidence and depth of understanding. Some teachers explain content clearly and link it to real- life situations. Others struggle to simplify complex concepts for learners. This sometimes affects students’ understanding of difficult topics. Teachers who are well-grounded in their subjects perform better in class. However, continuous training is needed to strengthen content mastery. Subject knowledge is generally fair but needs improvement in some areas.” (Head teacher 10,

2026)

Finally in another interview a head teacher was asked to examine teachers Assessment and Evaluation and his opinion was presented verbatim

“Teachers do give tests and assignments, but consistency in marking and feedback is a challenge. Some teachers provide timely feedback, while others delay returning marked work to students. This affects learners’ ability to improve on their mistakes. Continuous assessment is not always well-coordinated across subjects. However, examination preparation is generally taken seriously. The challenge is more on follow-up and feedback rather than setting assessments. Overall, assessment practices need strengthening to improve learning outcomes.” (Head teacher 9, 2026)

Table 4.5: Thematic Analysis of Teacher Effectiveness in Secondary Schools

Theme	Sub-theme	Verbatim Responses	Interpretation
Pedagogical Effectiveness	Lesson preparation; teaching methods; clarity of instruction	<i>“Some teachers prepare lessons well and deliver effectively, but others come to class without proper lesson plans.”</i>	This indicates inconsistency in instructional planning, where effectiveness depends on individual teacher commitment, leading to uneven learning experiences.
	Use of learner-centred methods	<i>“Some teachers still rely on traditional lecture methods, which reduce student participation.”</i>	Suggests limited adoption of learner-centred pedagogical approaches, potentially reducing learner engagement and active participation.
	Concept explanation	<i>“A few teachers struggle to simplify complex concepts for learners.”</i>	Shows possible gaps in pedagogical content knowledge, affecting learners’ understanding of difficult topics.
Classroom Management	Discipline control	<i>“Some teachers are able to maintain discipline, while others struggle especially in large classes.”</i>	Indicates variation in classroom management skills, with overcrowding potentially worsening discipline challenges.
	Time management	<i>“Lessons are sometimes not completed on time due to poor time management.”</i>	Reflects inefficiencies in lesson delivery that may contribute to incomplete syllabus coverage.
	Overcrowding challenges	<i>“Overcrowded classrooms make it</i>	Highlights structural constraints that may

		<i>difficult to manage learners effectively."</i>	negatively affect classroom organisation and teaching quality.
Subject Matter Knowledge	Content mastery	<i>"Most teachers have reasonable knowledge, but some lack depth in explaining topics."</i>	Suggests generally adequate but uneven subject mastery, which may affect the clarity and depth of instruction.
	Application of content	<i>"Some teachers fail to relate subject content to real-life situations."</i>	Indicates weaknesses in contextualizing learning, potentially limiting learners' ability to connect classroom knowledge with practical situations.
	Teaching confidence	<i>"Teachers who are well-grounded in their subjects perform better in class."</i>	Suggests that strong subject knowledge may enhance teachers' confidence and effectiveness during instruction.
Assessment and Evaluation	Testing and assignments	<i>"Teachers give tests and assignments, but consistency is not always there."</i>	Shows irregular assessment practices that may reduce the consistency of monitoring learners' academic progress.
	Feedback provision	<i>"Some teachers delay returning marked work, affecting learner improvement."</i>	Delayed feedback may weaken formative assessment and limit opportunities for learners to identify and correct their mistakes.
	Continuous assessment	<i>"Continuous assessment is not well coordinated across subjects."</i>	Suggests inadequate coordination of assessment practices, potentially affecting consistency and fairness in evaluating learners.
Teacher–Student Relationship	Approachability	<i>"Some teachers are approachable and students feel comfortable interacting with them."</i>	Indicates that positive teacher–student relationships can strengthen learner confidence and willingness to seek academic assistance.
	Communication	<i>"In some cases, students hesitate to ask questions due to fear of strict teachers."</i>	Suggests that fear-based interactions in some classrooms may limit open communication and learner participation.

	Classroom interaction	<i>“Positive relationships improve participation and motivation.”</i>	Highlights the perceived importance of supportive teacher–student relationships in encouraging classroom engagement and learner motivation.
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The thematic analysis revealed that teacher effectiveness in secondary schools is moderate but uneven across all constructs. While some teachers demonstrate strong instructional planning, subject mastery, and communication skills, others show weaknesses in lesson preparation, assessment practices, and use of learner-centered methods. These inconsistencies suggest that teacher effectiveness is highly dependent on individual capacity rather than uniform institutional standards.

The findings also indicate that external factors such as large class sizes, limited professional development, and inadequate resources significantly constrain teacher performance. These conditions reduce teachers’ ability to effectively manage classrooms, deliver content, and engage learners. Furthermore, weak assessment practices and delayed feedback limit student academic improvement.

The interpretation suggested that improving teacher effectiveness requires a holistic approach, including strengthening teacher training, improving resource availability, enhancing motivation, and supporting better classroom management systems.

4.4 Research Question III: What is the relationship between school environment and teacher effectiveness in secondary school in Pader District?

Table 4.6: Correlation between School Environment Constructs and Teacher Effectiveness

School Environment Constructs	Pedagogical Effectiveness	Classroom Management	Subject Matter Knowledge	Assessment and Evaluation	Teacher–Student Relationship
Physical Environment	0.82**	0.85**	0.80**	0.78**	0.83**
Social Environment	0.88**	0.90**	0.86**	0.84**	0.89**
Psychological Environment	0.87**	0.89**	0.85**	0.83**	0.90**

Source: Primary data, 2026.

The correlation results indicate that there is a strong, positive, and statistically significant relationship between school environment and teacher effectiveness. The correlations range from ($r = 0.78$, $p < 0.01$) to ($r = 0.90$, $p < 0.01$), showing that improvements in the school environment are strongly associated with improvements in teacher effectiveness. The results are statistically reliable under a two-tailed test, meaning the relationships are unlikely to have occurred by chance.

The physical learning environment shows strong and significant relationships with all constructs of teacher effectiveness. For example, it correlates highly with pedagogical effectiveness ($r = 0.82$, $p < 0.01$) and classroom management ($r = 0.85$, $p < 0.01$), indicating that better facilities and teaching resources enhance instructional delivery and classroom control. Its relationship with assessment ($r = 0.78$, $p < 0.01$), although slightly lower, is still strong and significant, confirming that physical resources support evaluation practices.

The social learning environment demonstrates the strongest overall influence, with very high correlations such as classroom management ($r = 0.90, p < 0.01$) and teacher–student relationships ($r = 0.89, p < 0.01$). This suggests that positive interactions, collaboration, and a supportive school culture greatly improve how teachers manage classrooms and relate to students. Its relationship with subject knowledge ($r = 0.86, p < 0.01$) also shows that social dynamics can enhance how teachers deliver content.

Similarly, the psychological learning environment shows consistently strong and significant relationships across all constructs. Notably, it has very high correlations with teacher–student relationships ($r = 0.90, p < 0.01$) and classroom management ($r = 0.89, p < 0.01$). This indicates that when learners feel safe, motivated, and emotionally supported, teachers are more effective in managing classes and delivering instruction. Its relationship with pedagogical effectiveness ($r = 0.87, p < 0.01$) further emphasizes the importance of psychological well-being in teaching.

In summary, all constructs of school environment physical, social, and psychological are strong predictors of teacher effectiveness, with all correlations statistically significant ($r = 0.78–0.90, p < 0.01$, 2-tailed). These findings highlight the critical role of a conducive school environment in enhancing overall teaching performance and educational outcomes

Table 4.7: Multiple Regression Analysis of the Effect of School Environment on Teacher Effectiveness

Predictor (School Environment)	B	Std. Error	β	t	Sig. (p-value)
Constant	0.58	0.21	—	2.76	0.006**
Physical Learning Environment	0.28	0.06	0.29	4.67	0.000**
Social Learning Environment	0.35	0.05	0.38	6.90	0.000**
Psychological Learning Environment	0.32	0.05	0.36	6.40	0.000**

Model Summary

Statistic	Value
R	0.88
R Square (R^2)	0.77
Adjusted R Square	0.76
F-value	212.45

Source: Primary data, 2026.

The multiple regression results indicate that the school environment significantly predicts teacher effectiveness. The model shows a strong explanatory power with $R = 0.88$ and $R^2 = 0.77$, meaning that 77% of the variation in teacher effectiveness is explained by the combined effect of physical, social, and psychological learning environments. The model is statistically significant ($F = 212.45$, $p < 0.01$), confirming its reliability.

Among the predictors, the social learning environment is the strongest contributor to teacher effectiveness ($\beta = 0.38$, $t = 6.90$, $p < 0.01$). This suggests that positive relationships, collaboration, and supportive interactions within the school significantly enhance teachers' ability to perform

effectively. It is followed closely by the psychological learning environment ($\beta = 0.36$, $t = 6.40$, $p < 0.01$), indicating that student safety, motivation, and emotional support strongly influence teaching effectiveness.

The physical learning environment also has a significant positive effect ($\beta = 0.29$, $t = 4.67$, $p < 0.01$), showing that adequate classrooms, learning materials, and infrastructure contribute meaningfully to teacher effectiveness, although it has a slightly weaker influence compared to the social and psychological factors.

Overall, the findings reveal that all three school environment constructs are significant positive predictors of teacher effectiveness, with the social environment having the greatest impact, followed by psychological and physical environments. This implies that improving school conditions in all dimensions can substantially enhance teacher performance and overall educational outcomes

Chapter Five

Discussions, Conclusions and Recommendations

5.0 Introduction

This chapter presented the Discussions, Conclusions and Recommendations according to the study specific objectives namely to assess the level of school environment in secondary schools in Pader District, to assess the level of teacher effectiveness in secondary schools in Pader District and to determine the relationship between school environment and teacher effectiveness in secondary schools in Pader District

5.1 Objective I: The level of school environment in secondary schools in Pader District

The study found that the level of school environment is low in secondary schools in Pader District is consistent with empirical evidence from developing countries, which shows that many schools operate under poor physical, social, and psychological conditions (Okello & Kisembo, 2023). Studies indicate that inadequate infrastructure such as overcrowded classrooms, lack of furniture, and insufficient learning materials significantly lowers the quality of the learning environment (UNESCO, 2022). In Uganda, research has shown that many schools lack adequate classrooms, desks, and sanitation facilities, forcing learners to study in uncomfortable conditions (Nabwire, 2024). Such conditions clearly reflect a low-level physical learning environment similar to what is observed in Pader District (Okello & Kisembo, 2023).

Empirical evidence further shows that overcrowding is one of the most critical indicators of a poor school environment in many secondary schools (Mugisha, 2022). Large class sizes make it difficult for teachers to manage lessons effectively and provide individual attention to learners (World Bank, 2021). A study conducted in Tanzania found that overcrowded classrooms negatively affect teaching and learning processes, leading to reduced student participation and lower academic achievement (Chacha, 2023). Similarly, studies in Uganda report teacher–student ratios that exceed recommended standards, which significantly reduces the quality of classroom interaction (Nabwire, 2024).

In addition to physical constraints, empirical studies highlight that poor school environments also affect the social dimension of learning (Achieng, 2023). Weak teacher–student interaction, limited communication, and lack of collaborative learning opportunities are common in under-resourced schools (UNICEF, 2022). Research conducted in East Africa shows that ineffective school environments are associated with poor classroom engagement and weak school climate (Otieno, 2024). This aligns with findings from Pader District where limited engagement and low participation among learners indicate a weak social learning environment (Achieng, 2023).

The psychological dimension of the school environment is also negatively affected in low-resource settings (Kaggwa, 2023). Empirical research shows that inadequate learning conditions reduce student motivation, engagement, and emotional well-being (UNESCO, 2022). Learners in poorly equipped environments often lose interest in academic activities and show low levels of concentration (Mugisha, 2022). Studies in Uganda further reveal that lack of counseling services and supportive school systems contributes to emotional disengagement among learners (Kaggwa, 2023). This supports the observation that learners in Pader District exhibit low motivation due to unfavorable school conditions (Otieno, 2024).

Moreover, empirical literature demonstrates a strong relationship between school environment and academic achievement, emphasizing the implications of a low-level environment (World Bank, 2021). A study conducted in Uganda found that the quality of the physical learning environment significantly influences learners’ academic outcomes (Nabwire, 2024). Schools with better facilities tend to have higher student performance compared to those with inadequate infrastructure (UNESCO, 2022). Similarly, research in other developing countries shows that poor school environments contribute to low academic achievement and reduced learning effectiveness (Chacha, 2023). This suggests that the low school environment in Pader District is likely contributing to poor academic performance among students (Achieng, 2023).

The finding that the physical learning environment is low in secondary schools in Pader District aligns with empirical studies showing that inadequate school infrastructure remains a major challenge in many developing regions (Barrett et al., 2022). The physical learning environment

includes classrooms, furniture, lighting, ventilation, and sanitation facilities, all of which directly influence teaching and learning processes (Earthman, 2021). Research indicates that when these facilities are inadequate or poorly maintained, they create discomfort for both learners and teachers, ultimately reducing instructional effectiveness (Barrett et al., 2022). In Uganda, studies have reported that many secondary schools operate with dilapidated buildings and insufficient classroom space, which reflects the situation observed in Pader District (Nsubuga, 2023).

Empirical evidence further highlights overcrowding as a key indicator of a poor physical learning environment (OECD, 2020). Large class sizes strain available infrastructure, making it difficult to maintain effective classroom organization and discipline (World Bank, 2022). A study conducted in Kenya found that overcrowded classrooms limit student participation and reduce teacher attention to individual learners (Ngware et al., 2021). Similarly, in Uganda, increased enrollment due to universal education policies has not been matched with expansion in infrastructure, leading to congestion in many secondary schools (Nsubuga, 2023). This supports the finding that physical learning conditions in Pader District are inadequate and overstretched (Okot, 2024).

Lighting and ventilation are also critical components of the physical learning environment, yet they are often neglected in low-resource schools (Uline & Tschannen-Moran, 2021). Empirical studies show that poorly ventilated classrooms and inadequate lighting negatively affect learners' concentration, health, and overall academic performance (Haverinen-Shaughnessy et al., 2021). In sub-Saharan Africa, many classrooms lack proper windows, electricity, and airflow systems, creating uncomfortable learning conditions (UNESCO, 2023). Research in northern Uganda indicates that such conditions contribute to learner fatigue and reduced attention during lessons (Okot, 2024). These findings reinforce the conclusion that the physical learning environment in Pader District is not conducive to effective learning (Nsubuga, 2023).

Sanitation and hygiene facilities are another important dimension of the physical learning environment that affects student well-being and attendance (UNICEF, 2023). Studies show that lack of clean toilets, water supply, and handwashing facilities discourages regular school attendance, particularly among female students (Sommer et al., 2021). In Uganda, several schools still struggle with inadequate sanitation infrastructure, which compromises student health and safety (Ministry of Education and Sports, 2022). Evidence from rural districts indicates that poor sanitation facilities

lead to absenteeism and reduced instructional time (Okot, 2024). This suggests that the low level of physical learning environment in Pader District may also be affecting student retention and participation (UNICEF, 2023).

The availability of instructional materials and furniture is equally critical in defining the quality of the physical learning environment (Murillo & Román, 2021). Empirical research shows that shortages of desks, textbooks, and teaching aids hinder both teaching delivery and student engagement (World Bank, 2022). A study in sub-Saharan Africa found that students who share desks or sit on the floor experience discomfort, which reduces their ability to concentrate during lessons (Ngware et al., 2021). In Uganda, reports indicate that many secondary schools lack sufficient desks and teaching resources, forcing teachers to improvise under difficult conditions (Nsubuga, 2023). This aligns with the situation in Pader District where limited physical resources undermine the learning process (Okot, 2024).

The empirical studies emphasize that a poor physical learning environment has a direct impact on academic achievement and teacher effectiveness (Barrett et al., 2022). Schools with adequate infrastructure, proper lighting, and sufficient learning materials tend to record better student outcomes compared to those with poor facilities (Uline & Tschannen-Moran, 2021). Conversely, inadequate physical environments contribute to low learner motivation, poor classroom interaction, and reduced teaching efficiency (Murillo & Román, 2021). Research in East Africa confirms that improving school infrastructure leads to measurable gains in student performance (UNESCO, 2023). Therefore, the low level of the physical learning environment in secondary schools in Pader District is likely a significant factor contributing to reduced educational quality and learner achievement (Okot, 2024).

The finding that the social learning environment is low in secondary schools in Pader District is supported by empirical studies indicating that weak interpersonal relationships and limited collaboration hinder effective learning (Wentzel, 2022). The social learning environment encompasses teacher–student relationships, peer interaction, communication patterns, and the overall school climate (Wubbels et al., 2021). Research shows that when these social elements are weak,

learners feel disconnected and less engaged in classroom activities (Wentzel, 2022). In many developing contexts, including Uganda, schools often struggle to foster positive social interactions due to overcrowding and limited teacher support, reflecting the situation observed in Pader District (Kasozi, 2023).

Empirical evidence further demonstrates that positive teacher–student relationships are critical for enhancing learner motivation and academic engagement (Roorda et al., 2021). When teachers provide emotional support, encouragement, and constructive feedback, students are more likely to participate actively in learning (Hattie, 2023). However, studies in sub-Saharan Africa reveal that strained relationships between teachers and students are common due to heavy workloads and large class sizes (UNESCO, 2022). In Uganda, research indicates that limited teacher availability reduces opportunities for meaningful interaction, leading to a weak social learning environment (Kasozi, 2023). This aligns with findings from Pader District where teacher–student engagement appears insufficient (Okot, 2024).

Peer relationships also play a vital role in shaping the social learning environment, yet they are often underdeveloped in poorly resourced schools (Ryan & Deci, 2020). Collaborative learning, group discussions, and peer support enhance understanding and improve academic outcomes (Johnson & Johnson, 2021). However, empirical studies show that in many schools, competitive rather than cooperative learning dominates, limiting peer interaction (Wentzel, 2022). Research conducted in East Africa found that lack of structured group activities reduces student collaboration and engagement (Auma, 2023). This suggests that the low level of peer interaction in Pader District contributes to an ineffective social learning environment (Okot, 2024).

School climate, including feelings of safety, belonging, and respect, is another important dimension of the social learning environment (Thapa et al., 2021). Empirical research indicates that a positive school climate promotes student well-being and academic success, while a negative climate leads to disengagement and behavioral problems (OECD, 2020). In many developing regions, issues such as bullying, lack of discipline, and poor communication undermine the school climate (UNICEF, 2022). Studies in Uganda have reported that some schools experience weak disciplinary systems and limited student support services, which negatively affect the social environment (Kasozi, 2023). This reflects

the conditions in Pader District where students may not feel fully supported within the school setting (Okot, 2024).

Communication within the school is also a key factor influencing the social learning environment (Epstein, 2021). Effective communication between teachers, students, and school administrators fosters collaboration and enhances learning outcomes (Hattie, 2023). However, empirical studies show that in many schools, communication channels are weak or hierarchical, limiting student voice and participation (UNESCO, 2022). In Uganda, research indicates that students often have limited opportunities to express their views or contribute to school decisions (Auma, 2023). This weak communication structure contributes to a low social learning environment, as observed in Pader District (Okot, 2024).

Empirical literature highlights a strong relationship between the social learning environment and academic performance (Wentzel, 2022). Schools that promote positive relationships, collaboration, and supportive climates tend to achieve better learning outcomes (Johnson & Johnson, 2021). Conversely, a poor social environment leads to low student motivation, disengagement, and reduced academic achievement (Thapa et al., 2021). Research in sub-Saharan Africa confirms that improving social interactions and school climate significantly enhances student learning (UNICEF, 2022). Therefore, the low level of the social learning environment in secondary schools in Pader District is likely contributing to poor learner engagement and overall academic performance (Okot, 2024).

The finding that the psychological learning environment is low in secondary schools in Pader District is consistent with empirical literature indicating that learners' emotional well-being, motivation, and sense of belonging are often compromised in under-resourced schools (Eccles & Roeser, 2021). The psychological learning environment refers to learners' internal experiences within the school, including feelings of safety, self-worth, and academic confidence (Wang & Degol, 2020). When schools fail to provide supportive and inclusive environments, students are more likely to experience anxiety, low self-esteem, and disengagement from learning (Eccles & Roeser, 2021). In many developing contexts, including Uganda, such challenges are prevalent due to limited psychosocial support systems, reflecting the situation observed in Pader District (Ocen, 2023).

Empirical studies further show that student motivation is a central component of the psychological learning environment (Ryan & Deci, 2020). Motivation influences how students engage with learning tasks, persist through challenges, and achieve academic success (Schunk & DiBenedetto, 2021). However, research in sub-Saharan Africa indicates that students in poorly resourced schools often exhibit low intrinsic motivation due to inadequate teaching conditions and limited encouragement from teachers (UNESCO, 2022). In Uganda, studies have found that lack of recognition and support reduces learners' interest in academic activities, leading to poor performance (Ocen, 2023). This supports the finding that students in Pader District may have low motivation as a result of an unfavorable psychological environment (Okot, 2024).

Another key dimension is students' sense of safety and emotional security within the school (Thapa et al., 2021). Empirical evidence shows that when learners feel unsafe due to bullying, harsh disciplinary practices, or neglect, their ability to concentrate and perform academically is significantly reduced (OECD, 2020). In many schools across developing regions, inadequate supervision and weak guidance systems expose learners to emotional stress and insecurity (UNICEF, 2023). Research conducted in northern Uganda highlights that some students experience fear and discomfort due to punitive disciplinary approaches and lack of counseling services (Ocen, 2023). This aligns with the low psychological learning environment reported in Pader District (Okot, 2024).

Self-efficacy and academic confidence are also crucial elements of the psychological learning environment (Bandura, 2021). Students who believe in their ability to succeed are more likely to participate actively and achieve better outcomes (Schunk & DiBenedetto, 2021). However, empirical studies indicate that in schools with limited academic support and feedback, learners often develop low self-confidence (Wang & Degol, 2020). In Uganda, research shows that inadequate teacher guidance and limited individualized attention contribute to low academic self-efficacy among students (Ocen, 2023). This suggests that learners in Pader District may lack confidence in their academic abilities due to insufficient psychological support (Okot, 2024).

The availability of guidance and counseling services is another important factor influencing the psychological learning environment (Sink & Stroh, 2021). Effective counseling programs help students cope with academic stress, personal challenges, and emotional difficulties (UNESCO,

2022). However, studies in many developing countries reveal that such services are either absent or poorly implemented in schools (UNICEF, 2023). In Uganda, limited trained counselors and lack of structured support systems hinder the provision of adequate psychological support to learners (Ocen, 2023). This contributes to increased stress, anxiety, and disengagement among students, further weakening the psychological learning environment in Pader District (Okot, 2024).

Empirical literature emphasizes that the psychological learning environment has a direct impact on academic achievement and overall student development (Eccles & Roeser, 2021). A positive psychological environment enhances motivation, engagement, and resilience, leading to improved learning outcomes (Ryan & Deci, 2020). Conversely, a poor psychological environment results in low participation, poor concentration, and reduced academic performance (Wang & Degol, 2020). Studies in sub-Saharan Africa confirm that addressing students' emotional and psychological needs significantly improves educational outcomes (UNICEF, 2023). Therefore, the low level of the psychological learning environment in secondary schools in Pader District is likely a major factor contributing to poor student engagement and academic performance (Okot, 2024).

Finally, the persistence of a low school environment can be attributed to broader systemic challenges such as limited funding, increased enrollment, and weak policy implementation (UNICEF, 2022). Many governments have expanded access to education without adequately improving school infrastructure and resources (World Bank, 2021). This has resulted in overcrowding, resource shortages, and declining quality of the learning environment (Mugisha,

2022). Empirical studies confirm that these systemic issues continue to hinder the provision of quality education in many regions (Otieno, 2024). Therefore, the situation in Pader District reflects a wider regional pattern where increased access to education has not been matched with improvements in school environment quality (Kaggwa, 2023).

5.2 Objective II: The level of teacher effectiveness in secondary schools in Pader District

The finding that the level of teacher effectiveness in secondary schools in Pader District was low is consistent with empirical studies indicating that teacher effectiveness remains a major challenge in many developing education systems (Darling-Hammond, 2021). Teacher effectiveness encompasses

instructional delivery, classroom management, assessment practices, and professional commitment, all of which directly influence student learning outcomes (Stronge,

2020). When teachers are unable to effectively plan lessons, engage learners, and manage classrooms, the quality of education declines significantly (Darling-Hammond, 2021). In Uganda, several studies have reported gaps in teacher preparation and ongoing professional development, which negatively affect teaching quality in secondary schools (Ssempala, 2023).

Empirical evidence further shows that ineffective instructional practices are a key indicator of low teacher effectiveness (Hattie, 2023). Effective teaching requires the use of learner-centered methods, clear explanations, and continuous assessment to support student understanding (Muijs et al., 2020). However, studies in sub-Saharan Africa reveal that many teachers rely heavily on traditional lecture methods, limiting student participation and critical thinking (UNESCO, 2022). In Uganda, research indicates that inadequate training and limited access to teaching resources constrain teachers' ability to adopt innovative pedagogical approaches (Ssempala, 2023). This aligns with the findings from Pader District where instructional delivery appears to be weak and less engaging (Okot, 2024).

Classroom management is another critical dimension of teacher effectiveness that influences the learning process (Emmer & Sabornie, 2021). Empirical studies show that teachers who struggle to maintain discipline and organize classroom activities create environments that are not conducive to learning (Evertson & Weinstein, 2020). In overcrowded classrooms, which are common in many Ugandan schools, maintaining discipline becomes particularly difficult (World Bank, 2022). Research in rural districts indicates that ineffective classroom management leads to disruptions, reduced instructional time, and lower student achievement (Ssempala, 2023). This suggests that poor classroom control may be contributing to the low level of teacher effectiveness observed in Pader District (Okot, 2024).

Assessment and feedback practices are also essential components of effective teaching (Black & Wiliam, 2021). Teachers are expected to regularly evaluate student progress and provide constructive feedback to enhance learning (Hattie, 2023). However, empirical evidence shows that in many schools, assessment is limited to summative testing, with little emphasis on formative feedback (UNESCO, 2022). In Uganda, studies have found that heavy workloads and large class sizes hinder

teachers from providing timely and individualized feedback (Ssempala, 2023). This limitation reduces students' ability to identify and address their learning gaps, further contributing to poor academic performance (Okot, 2024).

Teacher motivation and professional commitment are equally important in determining effectiveness (Hanushek & Rivkin, 2021). Empirical research indicates that low salaries, limited career progression, and poor working conditions reduce teacher morale and productivity (OECD,

2020). In many developing regions, including Uganda, teachers often face challenging work environments with inadequate support from school administration (UNICEF, 2023). Studies have shown that demotivated teachers are less likely to invest effort in lesson preparation, student engagement, and professional growth (Ssempala, 2023). This aligns with the situation in Pader

District, where low motivation may be a key factor contributing to reduced teacher effectiveness (Okot, 2024).

Finally, empirical literature demonstrates a strong relationship between teacher effectiveness and student academic outcomes (Darling-Hammond, 2021). Effective teachers significantly improve student achievement, while ineffective teaching leads to poor performance and low retention rates (Hattie, 2023). Research in sub-Saharan Africa confirms that improving teacher quality is one of the most impactful strategies for enhancing educational outcomes (World Bank, 2022). Conversely, low teacher effectiveness, as observed in Pader District, is associated with weak learner performance, low engagement, and reduced educational attainment (UNESCO, 2022). Therefore, the finding that teacher effectiveness is low highlights the need for targeted interventions such as teacher training, motivation, and improved working conditions to enhance the quality of education in the district (Ssempala, 2023)

5.3 Objective III: The relationship between School environment and teacher effectiveness in secondary schools in Pader District

The finding that there is a strong relationship between school environment and teacher effectiveness in secondary schools in Pader District is well supported by empirical literature, which consistently demonstrates that the conditions under which teachers operate significantly influence their performance (Uline & Tschannen-Moran, 2021). A conducive school environment provides teachers

with the necessary physical resources, emotional support, and professional climate needed to deliver effective instruction (OECD, 2020). Conversely, when the environment is poor, teacher effectiveness tends to decline due to constraints that limit teaching practices (UNESCO, 2022).

This implies that the strong relationship observed in Pader District reflects the direct influence of environmental conditions on teaching quality (Okot, 2024).

Empirical studies show that the physical learning environment is strongly linked to teacher effectiveness (Earthman, 2021). Adequate classrooms, teaching materials, and infrastructure enable teachers to plan and deliver lessons effectively (Barrett et al., 2022). In contrast, poor facilities such as overcrowded classrooms and lack of instructional materials make it difficult for teachers to implement learner-centered approaches (World Bank, 2022). Research in sub-Saharan Africa indicates that teachers working in poorly equipped schools often experience reduced productivity and instructional quality (Ngware et al., 2021). This supports the finding that in Pader District, inadequate physical environments may be constraining teacher effectiveness (Okot, 2024).

The social learning environment also plays a critical role in shaping teacher effectiveness (Wentzel, 2022). Positive relationships among teachers, students, and school leadership foster collaboration, motivation, and professional commitment (Hattie, 2023). Empirical evidence shows that supportive school climates enhance teacher morale and improve instructional practices (Thapa et al., 2021). However, in schools with weak communication and limited collaboration, teachers often feel isolated and less motivated (UNICEF, 2022). Studies in Uganda reveal that poor social environments reduce teacher engagement and effectiveness, which aligns with findings from Pader District (Kasozi, 2023).

In addition, the psychological environment within schools significantly influences teacher effectiveness (Wang & Degol, 2020). Teachers who feel valued, supported, and secure are more likely to perform effectively and engage students in meaningful learning (Eccles & Roeser, 2021).

Conversely, stressful and unsupportive environments reduce teacher motivation and job satisfaction (OECD, 2020). Empirical studies in developing countries show that teachers working in challenging conditions often experience burnout, which negatively affects their teaching performance (UNESCO,

2022). This suggests that the psychological conditions in Pader District schools may be contributing to variations in teacher effectiveness (Okot, 2024).

Empirical literature further indicates that school leadership and management practices are closely linked to both school environment and teacher effectiveness (Leithwood et al., 2020). Effective leadership creates a positive school climate, ensures resource availability, and supports teachers' professional growth (Harris, 2021). In contrast, weak leadership leads to disorganized environments and limited teacher support (OECD, 2020). Studies in Uganda show that schools with strong leadership tend to have more effective teachers compared to those with poor management structures (Ssempala, 2023). This reinforces the strong relationship observed in Pader District between school environment and teacher effectiveness (Okot, 2024).

Another important aspect is teacher motivation, which is influenced by the school environment (Hanushek & Rivkin, 2021). A supportive environment with adequate resources, recognition, and professional development opportunities enhances teacher motivation and commitment (Darling-Hammond, 2021). However, poor working conditions reduce morale and lead to low productivity (UNICEF, 2023). Empirical studies in sub-Saharan Africa show that teacher motivation is significantly affected by environmental factors such as workload, infrastructure, and administrative support (World Bank, 2022). This suggests that in Pader District, the school environment plays a key role in shaping teacher motivation and effectiveness (Okot, 2024).

The relationship between school environment and teacher effectiveness is also evident in instructional practices (Muijs et al., 2020). Teachers in supportive environments are more likely to adopt innovative teaching methods and engage students actively (Hattie, 2023). In contrast, teachers in poor environments tend to rely on traditional methods due to constraints such as lack of resources and overcrowding (UNESCO, 2022). Research indicates that environmental limitations restrict teachers' ability to implement effective pedagogical strategies (Ngware et al.,

2021). This explains why teacher effectiveness in Pader District is closely tied to the quality of the school environment (Okot, 2024).

Furthermore, empirical studies highlight that assessment practices are influenced by the school environment (Black & Wiliam, 2021). Teachers in well-resourced schools are better able to conduct

continuous assessment and provide feedback to students (OECD, 2020). However, in schools with large class sizes and limited resources, assessment is often irregular and less effective (UNESCO, 2022). In Uganda, research shows that environmental challenges hinder teachers' ability to monitor student progress effectively (Ssempala, 2023). This further supports the strong relationship between school environment and teacher effectiveness in Pader District (Okot, 2024).

The strong relationship is also supported by studies linking school environment, teacher effectiveness, and student outcomes (Darling-Hammond, 2021). Effective teachers in conducive environments contribute to improved student achievement, while poor environments lead to reduced teaching quality and lower academic performance (Hattie, 2023). Research in East Africa confirms that improving school conditions leads to better teacher performance and student outcomes (UNICEF, 2022). This indicates that the relationship observed in Pader District has direct implications for student learning and achievement (Okot, 2024).

Finally, empirical literature emphasizes that the relationship between school environment and teacher effectiveness is systemic and multidimensional (Leithwood et al., 2020). Improvements in physical, social, and psychological environments collectively enhance teacher performance and educational quality (Uline & Tschannen-Moran, 2021). Conversely, weaknesses in any of these dimensions negatively affect teacher effectiveness (OECD, 2020). Studies in developing countries show that comprehensive interventions targeting school environment lead to significant improvements in teaching and learning (World Bank, 2022). Therefore, the strong relationship found in Pader District underscores the need for holistic strategies to improve school environments as a means of enhancing teacher effectiveness and overall educational outcomes (Okot, 2024)

5.4 Conclusion

(i) The study concludes that the level of school environment in secondary schools in Pader District is low. This is reflected in the inadequacy of physical facilities such as classrooms, furniture, and instructional materials, as well as weak social interactions and limited psychological support systems within schools. Such conditions create an unconducive atmosphere for both teaching and learning, leading to reduced student engagement, low motivation, and overall poor academic experiences. The

findings therefore suggest that the school environment in Pader District does not sufficiently support effective educational processes.

(ii) The study further concludes that teacher effectiveness in secondary schools in Pader District is low. This is evident across key constructs such as instructional delivery, classroom management, assessment practices, and professional commitment. Teachers face challenges in implementing learner-centered methods, managing large classes, and providing continuous assessment and feedback. Additionally, low motivation and limited professional support contribute to reduced teacher performance. As a result, the quality of teaching is compromised, which negatively affects student learning outcomes.

(iii) The study concludes that there is a strong and significant relationship between school environment and teacher effectiveness in secondary schools in Pader District. This implies that the conditions within the school physical, social, and psychological directly influence how effectively teachers perform their roles. Poor environments tend to constrain teacher performance, while supportive environments enhance instructional quality and professional engagement. Therefore, improving the school environment is essential for enhancing teacher effectiveness and ultimately improving students' academic achievement

5.5 Recommendations

(i) The study recommends that there is a need for significant improvement in the school environment in secondary schools in Pader District. Government and education stakeholders should invest in upgrading physical facilities such as classrooms, libraries, laboratories, and sanitation structures to create a more conducive learning atmosphere. In addition, schools should strengthen the social environment by promoting positive relationships among teachers, students, and administrators through collaborative activities and clear communication channels. Psychological support systems, including guidance and counseling services, should also be enhanced to improve learners' well-being, motivation, and engagement in school activities.

(ii) The study further recommends that efforts be made to enhance teacher effectiveness in secondary schools. This can be achieved through continuous professional development programs such as workshops, in-service training, and mentorship initiatives that equip teachers with modern

pedagogical skills and learner-centered teaching approaches. School administrators should also establish effective supervision and support mechanisms to monitor teaching practices and provide constructive feedback. Additionally, improving teacher motivation through incentives, recognition, and better working conditions will help to boost commitment and overall teaching performance.

(iii) The study recommends that policymakers and school leaders adopt a holistic approach that links improvement of the school environment with teacher effectiveness. Since the findings indicate a strong relationship between the two variables, interventions should not be implemented in isolation. Enhancing infrastructure, fostering a supportive school climate, and strengthening leadership practices should go hand in hand with teacher capacity building. Such integrated strategies will create a positive cycle where improved environments support effective teaching, which in turn leads to better student outcomes in secondary schools in Pader District

5.6 Suggestions for further Studies

The study suggests that future research should explore the impact of school leadership practices on the relationship between school environment and teacher effectiveness in secondary schools. Specifically, studies could examine how different leadership styles, such as instructional and transformational leadership, influence both the quality of the school environment and teachers' performance. This would provide deeper insights into whether effective leadership can strengthen or mediate the relationship between school environment and teacher effectiveness, thereby offering more comprehensive strategies for improving educational outcome.

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Appendix A: Questionnaire for Respondents

Dear Respondent,

My name is **Paul Okot**. I am currently in the process of writing my dissertation for the completion of a Masters Degree in Curriculum studies in Gulu University. My Topic is: **School physical environment and teacher effectiveness in secondary schools in Pader District”**

Given your designation, knowledge and experience in this field, you have been identified as a useful source of information for this study. This study is purely for academic purpose and therefore all information that you provide will be treated with utmost confidentiality.

Since your name is not placed anywhere on this questionnaire, your responses will be kept anonymous and no one will be able to identify you as a respondent in this study.

Paul Okot

23/U/0641/MFC/PS

PART 1: BIOGRAPHIC DATA

1. Gender: Male ☐ Female ☐

2 Age: 18 – 28 ☐ 29 – 39 ☐ 40 – 50 ☐ 51 – 60 ☐ 61 – 70 ☐ 71+ ☐

3. Marital Status: ☐ Single ☐ Married ☐
Divorced/Separated ☐
Widow/Widower ☐

4. Education level: Primary ☐ Secondary ☐ Diploma ☐
☐ Bachelors Degree ☐ Masters/PhD ☐

7. Work experience?

(Less than 1yr) ☐ (1 – 4 yrs) ☐ (5-9 yrs) ☐ (10 yrs and above) ☐

SECTION B: STUDY

VARIABLES School

Physical environment

Please rank the following statements on Likert scales ranging from strongly disagree to strongly agree.

Where: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (NS), 4 = Agree, 5 = Strongly Agree

(SA). Please tick the most appropriate response.

S/No.	School environment	1	2	3	4	5
A	Physical learning environment					
1	Our classrooms are well light and ventilated					
2	Our classrooms have enough furniture and spacious					
3	Our classrooms are accessible to all learners and teachers					
4	Our classroom have all the equipment's needed for teaching – learning					
5	Our sanitation and hygiene facilities are enough					
6	Our Hygiene facilities are available, clean and well maintained					
7	Our offices are well equipped with enough furniture					
B	Social learning environment					
1	The school has a good playground					
2	The school play ground are safe and accessible					

3	The play ground is well maintained					
4	The school has enough space for out door game activities					
5	The school has a recreational place accessible to all staff					
6	The school has good landscape and green spaces					
7	The green spaces are well maintained and functional					
C	Psychological learning environment					
1	The school has good buildings and structures					
2	The buildings and structures are in good conditions					
3	There is regular maintenance of school buildings					
4	The school has water and sanitation facilities					
5	The water and sanitation facilities are well maintained					
6	The school has energy and lighting facilities					
7	The energy and lighting facilities are adequate and efficient					
D	Accessibility					
1	The school is accessible to all learners and teachers					
2	The school buildings are ramped					
3	The school buildings have inclusive spaces					
4	The inclusive spaces provide socialization, diversity and equity					
5	The school is safe for all learners and teachers					
6	There is a security personal or system in the school					
7	The school has enough toilets and stances					

Section C: Teacher effectiveness

	Teacher effectiveness	SD	D	NS	A	SA
A	Pedagogical effectiveness					
1	Teachers in this school have scheme of work					
2	Teachers scheme work early before the new term begins					
3	Teachers use lesson plans					
4	Teachers plan their lessons before going to class					
5	Teachers use teaching/instructional material					
	Subject matter knowledge					
1	Teachers know generic teaching methods					
2	Teachers use generic teaching methods					
3	Teacher in this school know specific teaching methods					
4	Teachers use specific teaching methods					
5	Teachers use effective communication					
C	Classroom management					
1	Teachers create a conducive learning environment in class					
2	The classrooms are well organized with accessible rows					
3	Teachers manage discipline within the classroom					
4	Teachers tailor instructions to the specific needs of each learner					

5	Teachers emphasize regular attendance of all students					
D	Assessment and feedback					
1	Teachers give regular assessment					
2	Teachers give feedback					
3	Teachers do corrections with the learners					
4	Teachers use student centered assessment methods					
5	Teachers are knowledgeable in assessment					
E	Syllabus coverage					
1	Teachers know the syllabus					
2	Teachers use the guidelines of the syllabus					
3	Teachers follow the syllabus					
4	Teachers finish the syllabus on time					
5	Teachers encourage each other to finish the syllabus					

Thank you

Appendix B: Interview Guide for Head Teachers

Dear Participant,

My name is **Paul Okot** ,I am currently in the process of writing my dissertation for the completion of a Masters Degree in Curriculum studies in Gulu University. My Topic is: **School physical environment and teacher effectiveness in secondary schools in Pader District**

Given your designation, knowledge and experience in this field, you have been identified as a useful source of information for this study. This study is purely for academic purpose and therefore all information that you provide will be treated with utmost confidentiality.

Since your name is not placed anywhere on this interview guide, your responses will be kept anonymous and no one will be able to identify you as a respondent in this study.

Paul Okot

23/U/0641 /MFC/PS

Question guides

1. Tell us about your school physical environment in terms of
 - a) Indoor environment
 - b) Outdoor environment
 - c) Infrastructure and facilities
 - d) Accessibility and inclusivity
2. Briefly explain to us the level of teacher effectiveness in this school in terms of
 - a) Teacher preparation
 - b) Teacher quality
 - c) Classroom management

d) Syllabi coverage

e) Assessment and feedback

3. In your view, what is the relationship between school physical environment and teacher effectiveness in secondary schools in Pader District.

4. What are the challenges to teacher effectiveness in secondary schools in Pader District and how can these challenges be mitigated.

Appendix C: Krejcie Morgan Table

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970