UNIVERSITY OF CAPE COAST

INFLUENCE OF TEACHERS KNOWLEDGE ON MANAGEMENT OF

PUPILS WITH BEHAVIOURAL PROBLEMS: MODERATING ROLE OF
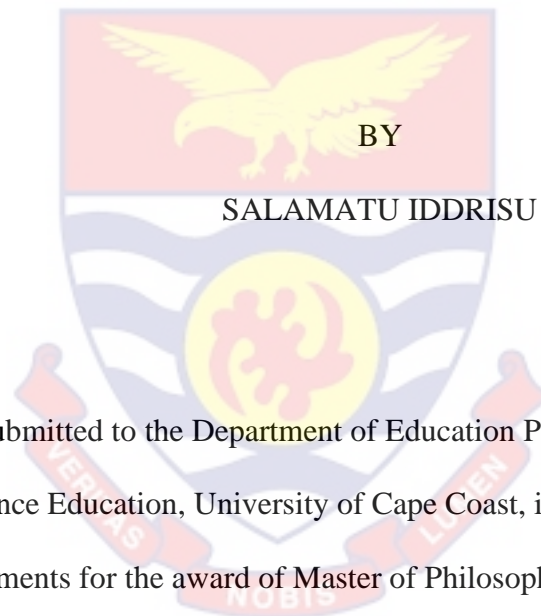
TEACHER PROFESSIONAL DEVELOPMENT.

IDDRISU SALAMATU

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TEACHER PROFESSIONAL DEVELOPMENT.

BY

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of Distance Education, University of Cape Coast, in partial fulfilment of the

requirements for the award of Master of Philosophy degree in Educational

Psychology

JANUARY 2024

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:.. Date:..........................

Name: ………………………………………………………………………..

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature:.. Date:........................

Name: ………………………………………………………………………..

ABSTRACT

Managing behavioural problems in schools, especially in Basic schools is well debated in the academia and in the field of practice. Missing in this debate is the extent to which the management of behavioural problems in the classroom is influenced by teacher professional knowledge and how this influence is moderated by teacher professional development. This study filled this gap. The study employed a descriptive survey design involving 300 participants who were sampled through Stratified and Simple Random Sampling techniques. Primary Data was gathered through the administration of questionnaire named Teacher Knowledge and Behavioural Management Questionnaire (TKBMQ) and analysed using frequencies, percentages, Mean Item Scores, Relative Importance Index and Hays process Model 1. The analysis revealed that bullying, lateness and truancy were the common behavioural problems in Primary Schools in the Tamale Metropolis. The study further revealed that lack of specialised knowledge, problem identifying pupils with behavioural problems, adaptation of curriculum and large class sizes were the major challenges faced by teachers in managing behavioural problems. It was concluded that teacher professional knowledge is very significant especially in situations where teachers have access to professional development avenues to continuously update their knowledge. It was therefore recommended that the Northern Regional Education Directorate should organize seminars and workshops frequently to equip teachers in the Metropolis with specialized knowledge and skills in handling pupils with behavioural problems.

KEYWORDS

Teacher Professional Knowledge

Teacher Professional Development

Behavioural Management

Pedagogical Skills

Moderation

ACKNOWLEDGEMENTS

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To my Family

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CHAPTER ONE

INTRODUCTION

One of the roles of a teacher is to identify behavioural problems at the early stages of the pupils' development and lending beneficial professional assistance to correct and instill good behaviour in the pupils is very critical to teaching and learning, especially, in basic schools. To be successful in this endeavor, the teacher must employ all professional knowledge skills and myriads of behaviour management techniques to address identified behavioural problems.

Furthermore, literature is replete with many behavioural change management techniques. Notable among these techniques include Operant conditioning theory by B.F Skinner, Classical conditioning theory by Ivan Pavlov, Observational learning by Albert Bandura among others.

Despite the existence of several techniques, a considerable challenge still appears to exist amongst the depth of teacher knowledge, management of behavioural problem(s) and the application of the appropriate techniques to achieve the desired behaviour modification goals and objectives.

This research therefore seeks to assess the influence of teacher professional knowledge, teachers' ability to manage and apply the appropriate behaviour modification techniques to correct a peculiar misbehavior and/or undesirable behaviour type(s) and the moderating role of teacher professional development in primary schools in the Tamale Metropolis.

Background to the Study

Globally, the misbehaviour of pupils has been a major concern for both teachers and parents (Onoyase, 2017). Opoku et al. (2022) p. 382 defined

student misbehaviour as any behaviour by pupils which interferes with smooth running of a lesson. Literature indicates that pupils' misbehaviour has far-reaching negative consequences for both teaching and learning outcomes (Opoku et al., 2022; Slaughter et al., 2019; Taimalu & Luik, 2019). Wanjiku (2014) asserted that there is a relationship between problem behaviours and academic deficits which influences each other in a reciprocal manner. It is true that every teacher will encounter one form of pupils' misbehaviour or the other in the course of their line of duty. Carlson et al. (2019) described all sorts of behaviours that impede education as unwanted behaviours. Pupils' behavioural problems has damaging effects ranging from least destructive ones to the most destructive. Such misbehaviours in the class for instance, disrupt the teaching process, the classroom atmosphere affects time management, and consequently prevent both teachers and pupils from realising their goals and objectives. When pupils become disruptive, ignore rules, challenge their teachers' authority unnecessarily or are off-task, fight with one another and create a hostile environment filled with uneasiness and fear, learning either ceases or takes the backseat (Dogbe, Segbefia, & Chireh, 2022; Foust, 2001).

In addition, Cook et al. (2003) remarked that it is hard to teach pupils who display problem behaviour problems and are prone to school failure. Gage et al. (2018) assert that, it is the interpretation of an event that is most significant, rather than an event itself. These attitudes call for classroom management. Classroom management according to Dogbe, Segbefia and Chireh (2022) refers to actions taken to create and maintain a learning environment conducive for a successful teaching and learning. These actions include setting rules and regulations, arranging the physical environment, engaging and maintaining

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pupils' attention in lesson activities. Taimalu and Luik (2019) maintain that to create a classroom environment in which there are consistent and clear rules and expectations, a necessary first step is to have the rules for the classroom posted and clearly visible for all pupils.

Slaughter et al. (2019) further maintained that the attributes an individual use to justify an event outcome will often reflect the attitudes an individual hold. Teachers' beliefs about the causes of student misbehaviour might be affected by their educational background, values, cultural beliefs, as well as what they have observed and experienced in their classrooms (Onoyase, 2017; Opoku et al., 2022). A Rogerian approach underscores the significance of teacher attitudes such as acceptance, empathy and understanding. The focus of the professional teacher, as part of the solution, is to adopt the person-centred approach, where the student as the client is made to take responsibility of his or her own actions (Santos & Castro, 2021). The assertive discipline has today taken the centre stage in managing problematic pupil behaviour by holding pupils responsible for their own action. Wanjiku (2014) posits that, such a proactive approach would help the teacher create a cooperative environment, where pupils learn to make the right choice of behaviour.

The ability to set and maintain positive relationships with pupils, witnessed by understanding, trust and caring, has constantly been shown to foster student engagement and motivation. Schools that attain higher than anticipated student achievement, quality interactions, marked by a unified sense of community and a deeply caring atmosphere, appear to be key factors that differ even from those schools characterized by respectful interactions.

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Chemwolo (2018) assert that, though educators have acquired some training, they still require strategies for interaction and conflict resolution strategies.

Prudent discipline is a necessity for pupils to show respect to other pupils, to be protected against dangers and to feel safe. Prudent discipline guarantees student rights by the constitution and these rights urge pupils to respect one another's range of freedom. Besides, creating a peaceful climate, prudent discipline provides pupils with the opportunity to make use of their own rights and responsibilities, which allows other pupils a conducive, healthy and safe classroom (Kesici, 2008).

Statement of the Problem

The tendency of school pupils' exhibiting inappropriate behaviours appear to be on the ascendency and has become a global problem since it invariably affects teaching and learning in our schools. There is replete of literature with reports from countries all over the world that point to work done on pupils' behavioural problems in schools (Crone et al., 2015; Foust, 2001; Slaughter et al., 2019). For instance, in Kenya, indiscipline has become one of the challenges facing schools (Cavanaugh, 2016; Chemwolo, 2018; Wanjiku, 2014; Wong, 2016). The Kenya National Examination Council [(KNEC, 2020)] in a report on Monitoring Learner Achievement at primary 3 in Kenya, indicated the prevalence of various forms of indiscipline. The report, specifically, mentioned noise making, lateness and truancy constituting 85.9 percent, 82.2 percent and 69.4 percent respectively as the most prevalent indiscipline problems in primary schools in Kenya. Kind and Chan (2019) also underscored the prevailing challenges bothering on indiscipline in South African schools.

In Ghana, news reports have indicated how two pupils from the Rev. Cobbah Yalley Junior High school in the Effia-Kwesimintsim District in the Western Region were arrested for assaulting their teacher (Asiedu-Yirenkyi, 2019). Similarly, a student of Komenda Senior High School was given several strokes of cane by her headmistress for the wrong conduct of leaving school without exeat (Nyarko, 2021). At the tertiary level, it has been reported that Katanga and Unity halls of the Kwame Nkrumah University of Science and Technology (KNUST) clashed during Student Representative Council (SRC) vetting exercise and destroying a lot of school properties in the process (Donkor, 2021).

Pupils' behavioural problems also abound in the Tamale Metropolis, many forms of indiscipline including lateness, noise making have been reported (Alhassan et al., 2022). I have experienced, observed and heard about behaviour problems among primary school pupils in the Tamale Metropolis. Behaviour problems identified include, truancy, lateness to school, excessive absenteeism, stealing, fighting, bullying and the like. For instance, the class six attendance register of Nahdah Islamic Primary School depicts excessive absenteeism of particular number of pupils. Another primary 5 pupil of the Nyohini Presbyterian Primary School reported to school with a pair of scissors and inflicted wounds on the arm of colleague over an argument. Most of these happenings are reoccurring and appear to question teachers' professionalism in handling pupils' misbehaviour.

It must be admitted that most of these cases emanated from the basic level where parents and teachers have not done much in curbing these deviant behaviours. Alhassan (2022) pointed out that, teachers use a lot of cane to

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maintain discipline in schools and to control inappropriate behaviour of pupils in Ghana and Nigeria. However, following the ban on corporal punishment and for that matter the use of cane in our schools (Ampofo et al., 2022), this has worsened the plight of the teacher in maintaining behavioural problems. Furthermore, the mistaken believe by a considerable number of teachers that punishment is suppose be painful, reformatory and deterrent has made physical and emotional abuses a wide spread phenomenon in Ghanaian schools (Asiedu-Yirenkyi, 2019).

In view of the above, the advocacy for the application of non-violent means towards child behavioural management, has been on the ascendancy in recent years. Danvers and Schley (2016) in their research on "Better and discipline for Ghana's Pupils" advocated strongly the need to move away from the application of violent means to instil discipline in pupils. Most of the existing literature mainly identified punishment and other violent means of correcting behavioural problems as ineffective and non-reformatory but did not bring out or assess the knowledge level and professionalism of the teacher (Gunu, 2019).

Purpose of the Study

Despite the plethora of studies examining teacher professionalism about pupil management, investigation into teachers' knowledge on management of pupils with behavioural problems in Public Primary Schools is relatively limited. Studies conducted in different cultures and countries have shown that teachers tend to attribute the cause of pupil's misbehaviours to pupil factors and factors outside of the school environment (Andreou & Rapti, 2010; Mavropoulou & Padeliadu, 2002). Researchers have also begun to establish

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links between teacher professionalism and perceptions of perceived control in interpersonal relationships in the area of misbehaviours (Mavropoulou & Padeliadu, 2002), teacher professional knowledge and referral to special education (Poulou & Norwich, 2000), teacher professional knowledge on misbehaviour and choice of intervention (Andreou & Rapti, 2010). However, there is insufficient studies on teachers' professional knowledge and management of pupils with behavioural problems in the Ghanaian context and among primary school teachers.

Furthermore, it appears there has not been any scientific research on the assessment of teachers' professional knowledge on management of pupils with behavioural problem(s) in primary schools in the Tamale Metropolis. This is the research gap this study seeks to bridge.

Objectives of the Study

The aim of the study was to find out the influence of teacher professional knowledge on management of pupils with behavioural problems: moderating role of teacher professional development. Specifically, the study sought to:

1. To measure the effect of teacher professional Knowledge on management of pupils with behavioural problems in the Tamale Metropolis

2. Determine the common behavioural problems faced by teachers in primary schools in the Tamale Metropolis

3. Determine the extent to which primary school teachers in the Tamale Metropolis receive training in dealing with behavioural problems in pupils

4. Determine the challenges teachers in primary schools in the Tamale metropolis face in dealing with pupils' behavioural problems

5. Assess the methods used by primary school teachers in managing behavioural problems in the Tamale Metropolis

6. Determine the moderating effect of professional development in the relationship between teacher professional knowledge and management of pupils with behavioural problems

Research Questions

The following research questions were formulated to guide the study:

1. How does teacher professional knowledge influence the management of pupils with behavioural problems in the Tamale Metropolis?

2. What are the common behavioural problems faced by teachers in primary schools in the Tamale Metropolis?

3. To what extent do primary school teachers in the Tamale Metropolis receive training in dealing with behavioural problems in pupils?

4. What are the challenges teachers in primary schools in the Tamale metropolis face in dealing with pupils' behavioural problems?

5. What are the methods used by primary school teachers in managing behavioural problems in the Tamale Metropolis?

6. What is the moderating effect of professional development in the relationship between teachers' professional knowledge and management of pupils with behavioural problems?

Significance of the Study

This study is expected to be of immense benefits to all stakeholders in the education fraternity. The outcome of the study could be beneficial to the

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Ministry of Education (MOE) and the Ghana Education Service (GES) in formulating curriculum and policies that will help address issues regarding behavioural problems and the professional management techniques that would be employed in our primary schools. Teachers in the Ghana Education Service (GES) will be abreast with behaviour management methods that can be used to address behavioural problem(s) of pupils. This study shall also be of great reference material for Guidance and Counselling Coordinators to facilitate Guidance and Counselling activities in schools. The study will also be of significant help to future researchers who would like to investigate similar phenomenon. The study will also be beneficial to   researchers, as it can served as empirical evidence to their studies. It will also support future researchers in terms of their study gap both geographically and theoretically.

Delimitations

Every study has both contextual and geographical context. Contextually this study was delimited to the impact of teachers professional knowledge on managing behavioural problems, identifying pupils' behavioural problems that are faced by teachers in primary Schools in the Tamale Metropolis, the level of training received by this teachers in managing these behaviours, the challenges these teachers face, the methods they used in managing pupils with behavioural problems and the moderating role of teacher professional development in managing pupils with behavioural problems. This study was also delimited to behavioural problems which do not require clinical evaluation to identify. This study therefore did not include management of issues involving Conduct Disorder (CD), Opposition Defiant Disorder (ODD) and attention deficit hyperactivity disorder (ADHD) which require clinical diagnosis to identify. The

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geographical context for the study was also delimited to Tamale Metropolis in the Northern Region of Ghana.

Limitations

In this study, several limitations were encountered that influenced the overall quality and depth of the research findings. One notable limitation was the scope being limited solely to primary schools. While this focus allowed for a detailed examination within this specific educational level, it restricted the generalizability of the findings. The behaviours and management approaches observed in primary schools may not necessarily align with those in higher education levels. Consequently, the study's applicability beyond the primary school context is constrained, limiting the broader implications of the findings.

Furthermore, confining the study to the Tamale Metropolis as the sole setting posed another significant limitation. By doing so, the study potentially overlooked diverse behavioural patterns and management strategies prevalent in different geographical areas or types of communities. Student behaviours and corresponding management approaches can vary considerably across regions, and this localized approach may not capture this variability, thus affecting the study's overall comprehensiveness and transferability of results.

The choice of a quantitative methodology, while providing valuable numerical data, also introduced a limitation. Relying exclusively on quantitative methods may have limited the depth of understanding. The intricate nature of behavioural issues necessitates a more comprehensive exploration that qualitative methods could have offered. Utilizing a mixed-methods approach could have enriched the findings by capturing nuanced qualitative insights, providing a more holistic view of student misbehaviour and its management.

Lastly, the timeframe for data collection, spanning only three weeks, impacted the study's overall quality. This limited duration restricted the ability to gather a more extensive and diverse dataset, which could have been achieved with a more extended data collection period. The rushed data collection may have inadvertently led to missed opportunities to gather comprehensive and nuanced information, potentially affecting the accuracy, validity, and reliability of the study's results. Recognizing these constraints is crucial for understanding the scope and implications of the findings, as well as for informing future research endeavours in this domain.

Definition of Terms

1. *Behavioural Problems*: Disruptive actions or challenges related to conduct exhibited by pupils, which can hinder effective teaching and learning.

2. *Teacher Professionalism*: The level of competence, knowledge, skills, and ethical conduct demonstrated by a teacher in fulfilling their responsibilities

3. *Student Misbehaviour*: Behaviour exhibited by pupils that disrupts the smooth flow of a lesson.

4. *Classroom Management*: Actions and strategies taken by teachers to establish and maintain a conducive learning environment, including setting rules, arranging the physical environment, and engaging and maintaining pupils' attention in lesson activities.

5. *Teacher Attitudes:* Beliefs and perspectives of teachers regarding the causes and management of student misbehaviour, influenced by their

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educational background, values, cultural beliefs, and classroom experiences.

6. *Student Engagement:* The extent to which pupils are actively involved and invested in the learning process, often facilitated by positive teacher-student relationships.

7. *Inappropriate Behaviours:* Actions by pupils that go against expected norms and rules within an educational setting, often disrupting the learning process.

8. *Teacher Professional Development*: Continuous training, learning, and growth activities undertaken by teachers to enhance their skills, knowledge, and effectiveness in the classroom.

Organisation of the Study

The study was organised into five (5) chapters. Chapter one presents the background to the study, statement of the problem, research objectives, research questions, significance of the study, delimitations, limitations and organisation of the study. Chapter two touches on review of related literature to the study which included theoretical framework, conceptual framework of the study, empirical review and chapter summary.

Chapter three covers the methodology that was followed in the conduct of the study which included the research design, study area, population, sample and sampling procedure, data collection instruments, data collection procedures, data processing and analysis, and chapter summary. Chapter four presents results and discussions of the study and lastly, chapter five presents the summary, conclusions and recommendations for further studies.

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CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter presents a review of related literature to the study on the Influence of teacher professional knowledge on management of pupils with behavioural problems: moderating role of teacher professional development. The review has been organised into three sections. The first section reviews theories that are related to the study. The second section touches on the study's conceptual review and the last sections addresses empirical review of the study and chapter summary.

Theoretical Framework

A theory is a collection of connected concepts, presumptions, and ideas that offer a framework for comprehending and describing the event under investigation (Greenway et al., 2019). Theoretical frameworks offer a basis for thinking about research questions and hypotheses, and they aid in directing research design, data collecting, and analysis. This study used existing theories to help understand the phenomenon of pupils' misbehaviour in the classroom and teachers' ability to manage such behaviour so that it does not affect the quality of learning. In this section, three theories are reviewed. These are Premack's Reinforcement Theory, Operant Conditioning Theory and Social Learning Theory. While Premack' Reinforcement Theory was adopted as the main theory for the work, Operant Conditioning and Social Learning Theories were adopted as supporting theories.

Theory of Positive Reinforcement

David Premack, a psychologist, is credited with coming up with the Theory of Positive Reinforcement popularly known as the Premack Principle in the late 1950s. Premack was fascinated by the concept of reinforcement, which refers to the process of raising the likelihood that a behaviour would occur in the future by a subsequent positive (for example, rewarding) or negative (for example, eliminating an unpleasant stimulus) result (Herrod et al., 2023). According to Premack (1959), individuals have varying preferences for various behaviours, and these preferences can be used to reinforce less favoured behaviours. He asserted that if someone has the option to engage in a highly preferred behaviour (like playing video games) after performing a less preferred behaviour (like doing housework), the highly preferred behaviour can act as a reward for the less preferred behaviour, and the person is more likely to engage in the less preferred behaviour in the future (Premack, 1959). This tenet is a fundamental idea in behaviour modification. The goal of behaviour modification is to alter behaviour by reinforcement, punishment, and other behavioural approaches.

There are various ways to apply Premack's concept to behaviour modification. Premack's concept, for instance, can be used to promote academic engagement behaviour if a person is habitually absent from class. After some time without class absenteeism, they can partake in a favourite pastime (such watching a movie or playing a game). The person is more likely to become academically engaged in the future if they receive a reward that they enjoy doing (Meichenbaum, 1977). Another instance of how Premack's concept is applied in behaviour modification is the management of Attention deficit or

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Hyperactivity Disorder (ADHD). When it comes to less appealing activities like studying or doing their homework, ADHD pupils frequently struggle to focus. Premack's principle can be used by parents or teachers to reward pupils for completing less favoured tasks with more preferred activities. After finishing their homework, a child might, for instance, be given a specified amount of time to play video games. When favoured activities are used as rewards, a child is more likely to complete homework to obtain the reward of playing video games. A child's motivation and concentration levels may be raised with the use of this strategy during less appealing tasks, which will ultimately boost their academic achievement (Patterson et al., 1964).

When it is applied to this study, the researcher discovers a strong relevance of the theory in building strategies for managing pupils' misbehaviour by Primary school teachers in Tamale Metropolis. With the knowledge that they can use preferred activities as a reward for completing less preferred tasks, teachers can use the Premack Principle to control pupils' behaviour in the classroom. Premack's theory can be used by teachers to plan their classes and classroom activities so that participating in a less preferred activity (like finishing a worksheet or paying attention to a lesson) might lead to participation in a more preferred activity (like playing or working in groups, for example). For instance, a teacher might permit pupils to engage in the preferred activity of playing a game for ten minutes after engaging in the less chosen activity of finishing their homework. The teacher applies the Premack principle to promote academic engagement by offering the preferred activity as a reward for finishing the less favoured activity.

The Premack principle can also be applied in the classroom by allowing pupils to choose the activities they want to do. After pupils have finished a less appealing task, such as writing a paragraph, the teacher might, for instance, give them the option to choose between two preferred activities (such as playing or drawing). By raising the possibility that pupils will engage in less favoured activities and offering the chance to engage in preferred activities as a reward, teachers can manage pupils' behaviour in the classroom effectively using this theory.

The Premack principle can additionally be applied to curb disruptive behaviour in the classroom which is the focus of this study. For instance, a teacher might observe a pupil who frequently interrupts other pupils and talks before their turn and give them a less preferred task of say writing a paragraph. When such pupils complete a paragraph, they may be given opportunity to talk in class for few minutes as time goes on, such pupils may prefer to write than interrupt the class during lessons. What all this means is that when a pupil behaves more appropriately, the teacher can use Premack's principle to reward them by allowing them to continue with their preferred activity (such as using the computer or reading a book) uninterrupted for a predetermined amount of time. The teacher increases the possibility that pupils will behave appropriately by rewarding them with the favourite activity.

However, some academics disagree with the theory. Some critical educators contend that the Premack Principle is a type of behaviourism that places more emphasis on control and subordination than on the growth of creativity and critical thinking (Barton, 2021; Danaher, 1974; Robinson & Lewinsohn, 1973). Premack's principle can, in this opinion, cause pupils to

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regard learning as a series of tasks to be accomplished in order to receive rewards rather than as a process of inquiry and discovery. By viewing pupils as passive consumers of knowledge rather than active participants in their education, this might perpetuate a passive and consumerist approach to education. The application of Premak's concept, according to some critical educators (Herrod et al., 2023; Hosie et al., 1974; Makin & Hoyle, 1993), might also be problematic because it makes the assumption that all pupils share the same tastes and interests.

Since pupils come from a variety of backgrounds and have experienced a variety of cultural and social contexts, they have different preferences and interests. As a result, it's possible that not all pupils may benefit from a one-size-fits-all method of encouraging and motivating them. In order to address these shortcomings in this theory, the Operant Conditioning Theory was adopted. The foundation of Premack's Theory is the notion that an activity that is favoured can be used as reinforcement for an activity that is less preferred. A teacher might, for instance, permit a pupil to play a game (the desired activity) after they finish a task (the less liked activity) (Makin & Hoyle, 1993). This can encourage the pupil to work more swiftly and effectively on the assignment. Contrarily, a more comprehensive approach, known as operant conditioning, describes how consequences influence behaviour. With operant conditioning, outcomes either strengthen or weaken behaviour. The three different forms of consequences that might influence behaviour are reward, punishment, and extinction.

Combining Premack's Theory and Operant Conditioning Theory, the researcher used Premack's principle to determine which activities pupils

preferred before using operant conditioning to associate the preferred behaviours with those activities. In the following section, the theory of operant conditioning is thoroughly discussed.

Operant Conditioning Theory

B.F. Skinner, a psychologist, created the theory of operant conditioning (Kirsch et al., 2004). It posits that actions have repercussions, which change behaviour (Skinner, 1953). To put it another way, if a behaviour has a favourable result, it is more likely to be repeated in the future; conversely, if it has a negative result, it is less likely to happen again (Skinner, 1953). Following a behaviour, Skinner identified three categories of consequences: (a) positive reinforcement, which he defined as the addition of a positive stimulus, such as praise or reward, after the behaviour, increasing the likelihood that the behaviour will be repeated; (b) negative reinforcement, which he defined as the elimination of an unpleasant stimulus after a behaviour, such as a task or duty, increasing the likelihood that the behaviour will be repeated; (c) punishment, which he claimed takes place when an unpleasant stimulus is introduced after an action is performed (Grossberg, 1971; Staddon & Cerutti, 2003). He concludes that it is possible to influence behaviour and impart new behaviours by influencing these outcomes. To encourage pupils to participate in class discussions, for instance, a teacher might employ positive reinforcement, but a teacher might also use punishment to stop disruptive behaviour (Grossberg, 1971). All of this indicates that the operant conditioning theory assumes that actions have consequences, and that actions may be manipulated to affect behaviour.

Operant Conditioning Theory further contends that behaviour is influenced by its results. The likelihood that a behaviour will be repeated in the future can be influenced by the consequences that result from it (Grossberg, 1971). The processes of reinforcement and punishment are crucial in determining how behaviour is shaped. By receiving positive or rewarding consequences, reinforcement increases the likelihood that a behaviour will be repeated; by contrast, punishment reduces the likelihood that a behaviour will be repeated by inflicting unpleasant or repulsive consequence. Behaviour is influenced by timing and timing of reinforcement or punishment: How frequently, when and consistently reinforcement or punishment is given can have an impact on how quickly and how long-lastingly a behaviour is taught. And finally, circumstance affects behaviour. Individual characteristics, the environment and social circumstances can all have an impact on how behaviour is taught and maintained (Skinner, 1953).

The theory of operant conditioning has several implications for instruction and learning. It offers a foundation for comprehending how consequences can mould and alter behaviour and can be helpful in creating efficient teaching and learning techniques (Whitney & Barnard, 1966). Positive reinforcement can make desired behaviour more likely to occur: Teachers can employ positive reinforcement, such as compliments or awards, to make desired behaviour more likely to occur again. For instance, if pupil receives praise or a sticker for finishing a task, they are more likely to repeat it in the future. Teachers can also utilize negative reinforcement. Negative reinforcement is a behavioural strategy that involves removing an unpleasant stimulus to increase the likelihood of a desired behaviour recurring. It strengthens behaviour by

eliminating discomfort or aversive conditions when the desired action is performed. . For instance, if a pupil frequently talks a lot in class, the instructor may take away a toy or game while the student is speaking out of turn to lessen the possibility that this behaviour would happen again. Punishment can stop undesirable behaviour. Moore et al. (2002) cautions that punishment can be used to curb undesirable behaviour, but it should only be applied with care and under the right conditions. For instance, the teacher may use time out or detention to stop a pupil from speaking out of turn all the time. How quickly and for how long a behaviour is learnt can depend on the timing and frequency of reinforcement. To maintain a behaviour over time, for instance, intermittent reinforcement (encouraging the behaviour only periodically) may be preferable to continue reinforcement.

Operant conditioning theory was found in this study to be very relevant in understanding the control of student misbehaviour in the classroom. It is critical to comprehend the antecedents—the things that lead to the behaviour—and the outcomes of misbehaviour in order to manage it successfully. This knowledge can be put to use to create plans to stop such behaviour in the future. For instance, if a pupil frequently interrupts other pupils during class discussions, the teacher can determine that the cause is boredom or a lack of interest in the subject, and the effect is attention from other pupils. With this knowledge at hand, the instructor can create a strategy to keep the pupil involved in the conversation and deflect attention from inappropriate behaviour when it does occur. Once more, teachers can encourage desired behaviour and lessen misbehaviour by using positive reinforcement. For instance, if a pupil frequently gets side-tracked when doing individual work, the teacher can give

them more time or a sticker on the worksheet as a reward for staying on goal. As time goes on, the pupil will be increasingly motivated to complete independent work tasks to receive rewards.

To deter unwelcome behaviour, teachers might also use negative reinforcement. Negative reinforcement is a behavioural strategy that involves removing an unpleasant stimulus to increase the likelihood of a desired behaviour recurring. For instance, if a pupil disrupts the class frequently, the teacher may instruct the pupil to sit in a designated location apart from the other pupils. The teacher may kick the pupil out of class for a while if they are being disruptive in their seat. The negative consequences of being kicked out of class can serve as a future deterrence for the pupil. Punishment can be a useful tool in dealing with misbehaviour, albeit it should be applied with prudence. However, punishment must be administered consistently, fairly, and proportionately to the misconduct. For instance, if a pupil frequently treats other pupils disrespectfully, the teacher may give him or her a reflection writing assignment or momentarily detain the pupil to deal with the implications of such behaviour. The theory of operant conditioning offers a framework for comprehending how behaviour may be influenced and altered by consequences and can be a helpful tool for dealing with disruptive pupils in the classroom. The theory has, however, drawn criticism for a variety of reasons. Some scholars claim that it is unethical to utilize behaviourist techniques like reinforcement and punishment to control pupils' behaviour (Catania, 1984; Maru et al., 2021; Wiest, 1967). They contend that these techniques can be dehumanizing and can encourage a preference for submission over critical thought and originality.

There are also worries that these techniques could be employed to penalize nonconformity and enforce conformity (Bennett et al., 2021). Others think the theory disregards the social and cultural influences on behaviour. Critics contend that behaviour is influenced by a variety of social and cultural elements, including language, identity, and power dynamics, rather than being only the result of individual responses to stimuli (Proctor & Niemeyer, 2020; Sahoo et al., 2021). Therefore, it's possible that the complexity of human behaviour in social and cultural contexts is not fully captured by operant conditioning theory. Some academics contend that the theory ignores the internal states and motivations that shape behaviour in favour of placing an undue emphasis on the external rewards and punishments. While operant conditioning theory contends that motivation is solely based on external rewards in the form of good grades, it is possible that a pupil is motivated to study because they have a personal interest in the subject matter (Bemis, 1987; Mills, 1978).

Finally, some researchers assert that operant conditioning theory fails to take into account the intricate cognitive and emotional processes that underlie behaviour because of its narrow focus on observable behaviour (Eysenck, 1965; Greenway et al., 2019). For instance, a pupil may act out in class because of tension or anxiety, but the operant conditioning theory will just pay attention to the observable behaviour without taking into account the emotional state underlying it. Despite these criticisms, the researcher is of the opinion that the theory remains useful and contributes significantly to the understanding of both of teachers' misbehaviour management strategies. Due to this theory's

shortcomings in terms of the social and cultural forces influencing behaviour, the Social Learning Theory was adopted as a supplementary theory.

Social Learning Theory

According to the Social Learning Theory, which is based on psychological research, people pick up new behaviours, attitudes, and values by imitating what they see in others (Bandura & Walters, 1977). Psychologist Albert Bandura created the theory in the 1960s. According to the Social Learning Theory, people can learn from a wide range of sources, including their families, friends, teachers, the media, and other social influences (Bandura & Walters, 1977). The theory places a strong focus on the need of modelling—or seeing and copying other people's behaviour—as a crucial element in the learning process (Rotter, 1982). According to Social Learning Theory, modelling is only one aspect of behaviour modification; punishment and rewards are also significant (Bandura & Walters, 1977; Rotter, 1982). Rewarded behaviour is more likely to be repeated, but punished behaviour is less likely to be repeated. According to this theory's proponents, modelling and observation are the two fundamental ways that behaviour is taught. By observing and copying the behaviour of others, people can pick up new behaviours. This holds true for both good deeds like aiding others and bad deeds like truancy and aggressiveness (Bandura & Walters, 1977; Rotter, 1982).

The Social Learning Theory further contends that rewards and penalties have an impact on learning, just like Premack and Operant Conditioning theories do (Maisto et al., 1999). When a favourable result follows a behaviour, that behaviour is reinforced; when a negative result follows that behaviour, that behaviour is punished. The possibility that the behaviour will be repeated in the

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future may be determined by this. However, this theory goes a step further and contends that learning can also take place without direct reinforcement: Even if people themselves do not receive direct reinforcement or punishment, they can still learn by observing the effects of other people's behaviour. According to the notion, cognitive processes are important in the learning process (Maisto et al., 1999). Beliefs, attitudes, and expectations of people might affect how they behave. For instance, someone might be more likely to engage in a behaviour if they think it would result in favourable consequences.

In the most recent critical literature on education, there has been some discussion and critique of the social learning paradigm. According to some academics, the Social Learning Theory overemphasizes the importance of human initiative and ignores the larger social, cultural, and historical environment in which learning occurs. One objection to Social Learning Theory is that it downplays the influence of social structures and power on human cognition and behaviour. For instance, it might not consider how institutionalized racism, sexism, and other types of oppression can affect the behaviour that is modelled and reinforced, as well as how some groups might be routinely denied opportunities for development (Eriksson et al., 2007; Hart & Kritsonis, 2006).

An additional criticism of Social Learning Theory is that it may be overly deterministic, presuming that people's actions are only the result of their prior experiences and the rewards and punishments they get (Eriksson et al., 2007). This may ignore the possibility for people and groups to actively influence their own learning and growth by opposing or challenging prevailing norms and values. Finally, some scholars contend that Social Learning Theory

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may be overly reductionist, simplifying intricate social and cultural phenomena to personal processes of observation and imitation. This may disregard the significance of broader social and cultural aspects in influencing learning and behaviour as well as the necessity of taking into account several levels of analysis to comprehend learning in all of its forms (Allan, 2017). Despite these criticisms, the researcher thought the theory was helpful in illuminating the social process behind disruptive student behaviour.

Understanding and controlling pupils' disruptive behaviour in the classroom can be facilitated by using the Social Learning Theory as a framework. Pupils can pick up on proper conduct by watching their teachers and fellow pupils. Teachers can inspire pupils to replicate great behaviour by being respectful, considerate, and inquisitive themselves. Teachers can pick up useful techniques for dealing with pupils who exhibit behavioural issues in public primary schools by watching and imitating the behaviour of other seasoned teachers who have dealt with similar kids before.

Conceptual Review

This section reviews the various concepts and variables that are used in the study to provide a contextual understanding of each concept and indicate its relevance in the study

Teacher Professional Knowledge

Teacher professional knowledge (TPK) is the term for the knowledge and skills teachers use to plan, conduct and evaluate effective teaching and learning. It is an important aspect of teacher quality and is closely related to student achievement. TPK encompasses various types of knowledge necessary for effective teaching, including subject knowledge, pedagogical content

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knowledge and general pedagogical knowledge (Osei-Owusu, 2022; Pérez-Montilla & Arnal-Palacián, 2023).

TPK consists of many components that are interrelated and interact with each other. The following section describes four key components of TPK: subject matter knowledge (SMK), pedagogical content knowledge (PCK), general pedagogical knowledge (GPK) and technological pedagogical content knowledge (TPCK).

SMK refers to teachers' in-depth understanding of the content they teach. It includes both content knowledge (SC), which refers to knowledge of the subject matter itself, and knowledge of the structures and processes of the discipline (e.g. problem solving methods, scientific inquiry, and historical analysis). Grossman (1990) proposed the concept of subject matter knowledge for teaching (SMK), which emphasises the importance of teachers having a thorough understanding of the subject matter they teach. A teacher's subject knowledge is essential for effective teaching because it allows him or her to identify misconceptions, explain complex concepts, and answer pupils' questions accurately (Osei-Owusu, 2022; Pérez-Montilla & Arnal-Palacián, 2023).

PCK refers to the specialist knowledge that teachers use to translate subject content into a form that pupils can understand. It includes knowledge of pupils' prior knowledge and misconceptions, understanding of subject content, and knowledge of instructional strategies and materials appropriate for teaching that content. Gudmundsdottir and Shulman (1987) first introduced the concept of pedagogical content knowledge (PCK) as a type of teacher knowledge necessary for effective teaching.

GPK is the broad knowledge and skills required for effective teaching in a variety of subject areas. They include knowledge of educational psychology, learning theories, assessment, classroom management and learner diversity. Kind and Chan (2019) GPK is essential for effective teaching because it enables teachers to create a positive classroom atmosphere, design instruction that meets the needs of all pupils, and promote student engagement and motivation. Chan and Hume (2019) Teachers with a strong GPK know how to create a positive classroom atmosphere and apply effective classroom management strategies. They understand the importance of setting clear expectations and routines, as well as how to respond calmly and constructively to poor behaviour. Teachers with a strong GPK are able to differentiate instruction to meet the needs of all pupils. By offering pupils challenging and engaging learning tasks, teachers can reduce the boredom and frustration that can lead to bad behaviour (Chan & Hume, 2019).

TPACK refers to the integration of SMK, PCK and technology knowledge. Mishra et al. (2014) introduced the concept of technological pedagogical content knowledge (TPCK), which combines PCK, SMK and technology knowledge. TPACK emphasizes the importance of teachers' ability to use technology in teaching and also recognizes that technology should be integrated with subject content and pedagogy (Nathan et al., 2001; Santos & Castro, 2021). It emphasises the importance of teachers' ability to use technology in teaching and also recognises that technology needs to be integrated with subject content and pedagogy.

Teacher Professional Knowledge and Teacher Training

According to Guraya and Chen (2019) teacher professional knowledge should be the focus of teacher training programmes. Teacher professional knowledge includes an understanding of the subject matter, teaching strategies and learning needs of pupils (Carlson et al., 2019). This knowledge helps teachers design lessons, plan activities and assess student learning. They also include knowledge of classroom management strategies and how to deal with student behaviour problems. Preparatory teachers should be provided with opportunities to develop SMK, PCK, GPK and TPCK through a combination of coursework, field experience and supervised teaching practice (Guraya & Chen, 2019). Teacher education programmes should also emphasise the integration of technology in teaching and provide teachers with opportunities to develop knowledge of technological pedagogical content.

A teacher's professional knowledge and training lays the foundation for his or her ability to deal effectively with inappropriate student behaviour. Teachers who know the subject matter, teaching strategies and classroom management techniques are better equipped to create a safe and supportive learning environment that promotes positive student behaviour. Effective teacher training programmes can help teachers develop the skills needed to effectively manage student misbehaviour and create a positive culture in the classroom (Taimalu & Luik, 2019). A teacher's ability to deal with student misbehaviour is crucial to maintaining a positive learning environment. Effective classroom management techniques help teachers prevent disruptive behaviour and deal with it when it does occur. This requires a combination of skills, including the ability to clearly set expectations, establish positive

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relationships with pupils and respond appropriately to poor behaviour (Loughran, 2019).

Teacher training programmes should provide teachers with the skills and knowledge they need to be effective. This includes training in teaching strategies, subject matter content and classroom management techniques. Effective teacher training programmes will help teachers to develop the competencies needed to manage student misbehaviour effectively. Professional development opportunities should be provided to teachers throughout their careers to support the development of their TPK (Guraya & Chen, 2019). These opportunities should be tailored to the individual needs of teachers and should focus on the development of their SMK, PCK, GPK and TPCK (Han et al., 2021). Professional development should also emphasise the integration of technology in teaching and provide opportunities for teachers to develop their technological pedagogical knowledge (Han et al., 2021).

Role of TPK in Managing Behavioural Problems

Solving behavioural problems is a critical aspect of effective teaching and requires a range of knowledge and skills (Taimalu & Luik, 2019). Teacher Professional Knowledge (TPK) is an important component of effective teaching and includes several types of knowledge needed to solve behavioural problems in the classroom (Barnes et al., 2019). TPK is essential for addressing classroom behaviour problems because it provides teachers with the knowledge and skills needed to create a positive classroom environment, set clear expectations for student behaviour and manage student behaviour effectively (Barnes et al., 2019). Teachers with strong TPK are better equipped to anticipate and address student behaviour problems before they escalate, to use positive reinforcement

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and behaviour management strategies effectively, and to create a classroom culture that promotes positive behaviour and achievement (Carlson et al., 2019).

Positive reinforcement is a classroom management strategy that involves rewarding or praising pupils for demonstrating desirable behaviour (Carlson et al., 2019). This strategy has been shown to be effective in increasing pupils' positive behaviour, improving their academic performance and creating a positive classroom atmosphere. The effective use of positive reinforcement requires the teacher to have a thorough understanding of the principles and skills needed to apply this strategy consistently and correctly (Mensah et al., 2021). With this knowledge and skill, a teacher can create a positive classroom atmosphere that is conducive to student learning and development (Loughran, 2019). A teacher's professional knowledge includes an understanding of child development, learning theories and classroom management strategies. With this knowledge, the teacher can identify the specific behaviours he or she wants to reinforce and develop appropriate rewards or praise to be used as positive reinforcement. The teacher should also have a good understanding of how to communicate with pupils and create a classroom culture that promotes positive behaviour (Kind & Chan, 2019; Loughran, 2019).

Creating a positive classroom environment is very important for dealing with behavioural problems, as it provides the basis for positive interaction between teachers and pupils and between pupils themselves (Mayne, 2019). Teachers with a strong TPK are better equipped to create a positive classroom environment by using positive reinforcement, setting clear expectations for student behaviour and creating a safe and supportive learning environment. Setting clear expectations for student behaviour is important for dealing with

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behavioural problems, as it gives pupils a clear understanding of what is expected of them and what consequences they will face if they behave in a disruptive way.

Teachers with a strong TPK are better equipped to set clear expectations for student behaviour, using clear and precise language, modelling expected behaviour and providing feedback to pupils (Mensah et al., 2021). Effective management of student behaviour is important in addressing behavioural problems because it helps to prevent disruptive behaviour and creates a productive learning environment. Teachers with a strong TPK are better equipped to manage student behaviour effectively by using positive reinforcement, providing corrective feedback and applying appropriate consequences when necessary. Managing behavioural problems is a critical aspect of effective teaching and requires a range of knowledge and skills. TPC is an important component of effective teaching and includes several types of knowledge needed to deal with behavioural problems in the classroom.

Behavioural Problems

This section looks at the various behavioural problems which can be identified without clinical diagnosis. These include lateness, absenteeism, refusal to take instructions, fighting, and general disturbance in the classroom.

Behavioural problems in teaching and learning refer to behaviours that interfere with pupils' learning and the learning of others (Abonyi & Sofo, 2021). Some common examples of behavioural problems in the classroom include disruptive behaviour, failure to follow rules, aggression and inattention. Behavioural problems in teaching and learning are a complex issue that can

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have a significant impact on a student's academic performance and social-emotional development (Opoku et al., 2022).

Being late for class can be a behavioural problem in the teaching and learning process. When a pupil arrives late, he or she can disrupt the dynamics of the class by distracting and interrupting the flow of the lesson. This can affect the teacher's ability to teach effectively and the ability of other pupils to learn (Blair & Coles, 2000). When pupils are late for class, they miss important information and learning opportunities that have already been covered. This can affect their ability to fully understand the material and keep up with the pace of the class (Glazebrook et al., 2003). In another angle, being late for a lesson can be seen as disrespectful to the teacher who prepared the lesson and is responsible for creating a supportive learning environment (Bataineh, 2014). It can send a message to the teacher that the student does not value their time and effort. According to Onoyase (2017) being late for class can create bad habits which can spread to other aspects of life, such as work or social activities. It can lead to a lack of punctuality and respect for other people's time.

There are different views on how to approach this issue. Some academics argue that lateness is a symptom of a deeper problem, such as lack of engagement or motivation in the learning process, and should be addressed through a more holistic approach (Blau, 2002; Foust, 2001; Onoyase, 2017). They argue that teachers should examine the underlying causes of lateness and work to eliminate them, rather than just punish pupils for being late. Others argue that lateness is a behaviour that should be dealt with directly, as it can have a negative impact on the learning environment and cause disrespect to the teacher and other pupils (Foust, 2001). They believe that lateness should be

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treated as a disciplinary issue and that teachers should set clear expectations and consequences for pupils who are consistently late (Chan & Hume, 2019)

Absenteeism is the absence of a pupil from school without a valid reason or the permission of a parent or guardian (Allen et al., 2018). Absenteeism can occur when a pupil misses a lesson, a whole day or several days of school. According to Kearney (2008), absenteeism can be a sign of problems such as academic difficulties, bullying, social anxiety or other problems that can affect a pupil's motivation to attend school. Truancy is a recognised problem in many schools around the world and it can have a negative impact on academic performance and social development. In Ghana, the government has taken various measures to address the problem of truancy, such as the establishment of the School Health Education Programme (SHEP) and the Ghana School Feeding Programme (GSFP), which aims to improve attendance and performance by providing nutrition and health education to pupils. In addition, the Ghana Education Service (GES) has set up an anti-surrender task force that investigates truancy and absenteeism and works with parents and guardians to address the problem (Mensah et al., 2021).

Despite these efforts, truancy remains a problem in many schools in Ghana and elsewhere in the world. Factors such as poverty, lack of parental involvement and pupils' unwillingness to learn can contribute to truancy and absenteeism. It is important that schools, parents and communities work together to identify and address the root causes of truancy and support pupils who have difficulty attending school regularly (Kearney, 2007).

The academic debate in the critical education literature on school truancy revolves around different perspectives on the causes of truancy and the

most effective ways to address them. One perspective argues that absenteeism is primarily caused by individual factors such as lack of motivation or engagement in learning, mental health problems or family problems (Foust, 2001; Glazebrook et al., 2003; Grossman, 1990). From this perspective, interventions should focus on providing individual support and counselling for pupils who are truant. Another perspective argues that truancy is primarily caused by systemic factors, such as oppressive school policies, inadequate resources for disadvantaged pupils and a lack of communication between pupils and the school (Barnes et al., 2019; Guraya & Chen, 2019; Han et al., 2021). From this perspective, interventions should address the root causes of absenteeism by introducing more inclusive and culturally sensitive school policies, providing additional resources to support disadvantaged pupils and building stronger relationships between pupils and their schools.

Some academics also criticise traditional approaches to addressing truancy, such as punitive measures such as suspension or expulsion, arguing that such approaches can further alienate pupils and exacerbate underlying causes of truancy. Instead, they suggest alternative approaches, such as restorative justice practices or community-based interventions involving families and local organisations. Overall, the debate in the critical education literature on school truancy highlights the need to address the wider social, cultural and systemic factors that contribute to truancy and to implement interventions that address these factors in a holistic and inclusive manner (Mayne, 2019; Onoyase, 2017; Opoku et al., 2022).

Refusal to take instructions, or the act of engaging in violent or disorderly behaviour in a public place, can become a behavioural problem

among pupils when it is used as a means of expressing frustration or dissatisfaction with a particular problem or situation (Blair & Coles, 2000; Glazebrook et al., 2003). When pupils resort to refusal to take instructions, they cannot effectively express their frustration or work constructively to solve the problem. Instead, they engage in disruptive behaviour that can be harmful to themselves, to others and to society. Refusal to take instructions can also be a sign of deeper behavioural problems, such as lack of impulse control, poor decision-making skills or disregard for authority (Taimalu & Luik, 2019). These problems can be exacerbated by factors such as peer pressure, substance abuse or mental health problems.

Scholarly debates about student unrest in the critical education literature highlight the complex and often contentious nature of student protests and the challenges that educators and policymakers face in managing and responding to these protests in ways that promote positive change while maintaining order and safety. Some scholars argue that rioting is a legitimate form of protest that can be an effective way for marginalised pupils to express their discontent and demand change (Aboagye & Ouda, 2020; Hirsch et al., 2022; Mutiso et al., 2019). They argue that traditional methods of protest, such as peaceful demonstrations and civil disobedience, have not always resulted in meaningful change and that rioting can be a way for pupils to make the powerful listen to their demands.

Other scholars, however, argue that rioting is a destructive and counterproductive behaviour that undermines the very goals of the pupils involved (Ampofo et al., 2022; Carlson et al., 2019; Dogbe, Segbefia, & Agbogli, 2022). They argue that refusal to take instruction creates an

atmosphere of fear and violence that can harm innocent bystanders and damage property, as well as distract from the substantive issues underlying the protest. However, others take a more nuanced view, arguing that the appropriateness of refusal to take instructions as a form of protest depends on the specific context in which it occurs. They argue that while refusal to take instructions may be justified in some cases, it is not a universal solution and should be used sparingly and strategically (Ade et al., 2023; Gyapong & Subbey, 2021; Ofori et al., 2022).

In any case, it is important for schools and communities to address the root causes of refusal to take instructions among pupils, rather than simply punish behaviour. This can include providing support and resources to help pupils cope with stress and emotional problems, developing positive communication and conflict resolution skills, and creating a safe and inclusive school environment that promotes respect and understanding. schools can work to create a positive culture that values and encourages responsible behaviour and responsibility (Ofori et al., 2022). This can include teaching pupils the importance of following rules and regulations, encouraging them to take responsibility for their actions and providing them with opportunities to contribute positively to society.

Schools can also work with families and community organisations to address the underlying issues that can contribute to student disorder (Hirsch et al., 2022). For example, they can work with mental health professionals to provide counselling services to pupils who may be struggling with emotional or psychological problems. They can also work with law enforcement officials to address issues related to crime and safety in the community. Ultimately,

addressing disorder as a behavioural problem among pupils requires a multi-faceted approach that addresses both the immediate behaviour and the underlying causes. By encouraging positive behaviour and providing support and resources to help pupils cope, schools can create a safe and welcoming environment conducive to academic success and general well-being (Ofori et al., 2022).

Stealing can be considered a behavioural problem at school because it involves breaking the rules and regulations that are expected in the school environment. Stealing may involve taking something that does not belong to you without permission or using someone else's things without their consent (Dogbe, Segbefia, & Chireh, 2022). According to Asiedu-Yirenkyi (2019) stealing at school can be an indicator of underlying problems, such as a lack of self-control, a need for attention or a desire for material possessions. It can also be a symptom of more serious problems in a student's life, such as poverty, trauma or lack of parental control. Schools often have strict rules against stealing and other forms of misconduct, and they may impose disciplinary action on pupils who behave in this way. However, a more comprehensive approach, such as counselling or social support services, may be needed to address the root causes of theft.

In the critical education literature, the debate about student stealing in schools is often framed within broader debates about social justice and equity. Some scholars argue that student theft should be seen as a symptom of systemic inequalities, such as poverty and lack of access to basic resources (Ampofo et al., 2022; Gage et al., 2020; Olivier et al., 2020). One view is that schools should adopt a restorative justice approach to tackling theft, which focuses on repairing

harm and building relationships rather than simply punishing the offender (Ampofo et al., 2022; Dogbe, Segbefia, & Chireh, 2022; Gage et al., 2020). This approach emphasises understanding the root causes of the behaviour and addressing the needs of both the victim and the offender. Another view is that schools should address the structural inequalities that can contribute to theft, for example by providing better access to resources and support services for struggling pupils.

Some scholars argue that a punitive approach to stealing can exacerbate existing inequalities by disproportionately impacting marginalised groups (Clark, 2021; Hershberg & Johnson, 2019; Patel, 2021). However, there are also critics of these approaches who argue that they inadequately address the harm caused by theft and fail to hold pupils accountable for their actions. They argue that schools should prioritise the prevention of theft with clear rules and consequences, and provide pupils with education and support on the importance of respecting others' property (Frøyland et al., 2020; Hershberg & Johnson, 2019).

Fighting is a behavioural problem that can disrupt the learning environment in school and negatively affect pupils' social and emotional development. Noise and chaos can be distracting and prevent teachers from teaching effectively. Fighting can cause fear and anxiety in pupils, which can interfere with their ability to learn. Pupils may be afraid to come to school or have difficulty concentrating because they are afraid of being involved in a fight (Frøyland et al., 2020). Pupils who are afraid of violence or have been involved in fighting may skip school or miss classes, which can lead to poor academic performance. Slaughter et al. (2019) argues that fights can lead to damage to

school property, which can be costly to repair. This can divert resources away from educational programmes and activities, affecting the quality of education. In a similar manner Meier and West (2020) believe that fighting can create discipline problems in the school and teachers and administrators have to spend time and resources to address the problem. This can lead to a reduction in the time and attention they can devote to teaching and learning.

There is an ongoing debate in the critical education literature about the problem of fighting in schools. One view argues that fighting is a symptom of larger social problems such as poverty, racism and inequality and that schools need to address these underlying problems in order to effectively reduce fighting (Betancourt et al., 2013; Vanderbilt & Augustyn, 2010). This view advocates a broader approach to school violence prevention that includes community-based interventions, restorative justice practices and culturally sensitive teaching. Another view sees fighting in schools as a disciplinary problem that needs to be addressed through more punitive measures such as increased policing, surveillance and punishment (Glew et al., 2008; Mukuria, 2002; Skiba, 2000). This view stresses the importance of maintaining order and discipline in schools and may advocate the use of zero tolerance policies, metal detectors and expulsion of pupils involved in fights from school (Glew et al., 2008). A third perspective emphasises the importance of understanding the root causes of fighting in schools and developing prevention strategies that address pupils' basic social and emotional needs. This perspective emphasises the role of social-emotional learning, mental health support and trauma-informed practices in creating a safe and supportive school environment (Arboleda-Flórez & Stuart, 2012; Osher et al., 2015). In any case, fighting disrupts learning activities, so

teachers and school administrators must find ways to deal with fighting among pupils.

Disorderly behaviour in the classroom by pupils may be considered misconduct because it may disrupt the learning process of other pupils and may also be disrespectful to the teacher and other pupils who are trying to learn (Cavanaugh, 2016). When a pupil is disruptive in class, it may distract his or her classmates and prevent them from concentrating on the lesson. This can lead to poor academic performance and a lack of engagement in the classroom. In addition, disruptive behaviour can create an unsafe environment for other pupils and make it difficult for the teacher to control the class (Gage et al., 2018). Goss and Sonnemann (2017) argues that most educational institutions have clear expectations for student behaviour, which are usually set out in a code of conduct or student handbook. When a pupil exhibits disruptive behaviour, he or she tends to violate these expectations, which can lead to disciplinary action such as detention or suspension.

Some scholars explain that disruptive behaviour is the result of poor classroom management or ineffective teaching practices (Goss & Sonnemann, 2017). From this perspective, teachers who fail to maintain a structured and supportive learning environment may unintentionally encourage disruptive behaviour in their pupils. Some researchers suggest that teacher training and professional development programmes can help address this problem by providing teachers with the skills and strategies needed to manage the classroom effectively. Some scholars also argue that disruptive behaviour is linked to underlying psychological or behavioural problems. For example, pupils who have experienced trauma or suffer from mental health problems may be more

prone to disruptive behaviour in the classroom (Keddie, 2019). Some researchers also suggest that disruptive behaviour may be related to cultural or socio-economic factors, such as poverty or discrimination (Chemwolo, 2018; Guo et al., 2021; Morcillo et al., 2015).

There is also debate about the role school policies and disciplinary practices may play in exacerbating disruptive behaviour. Some researchers argue that punitive approaches to discipline, such as suspension or expulsion, may actually increase the likelihood of future disruptive behaviour by stigmatising and alienating pupils (Hospel et al., 2016; Wong, 2016). Others believe that more restorative approaches to discipline, which address harm and repair relationships, may be more effective in reducing disruptive behaviour in the long term (Osher et al., 2015; Patel, 2021; Taimalu & Luik, 2019).

Identifying Pupils with Behavioural Problems (BP)

This section reviews critical literature on education on the methods and techniques of identifying pupils with behavioural problems.

Hanson et al. (2015) reports that checking a student's academic and disciplinary records can provide insight into behavioural patterns and help identify problems that may require further attention. For example, the school attendance log can be a very important school document that can be used to identify behavioural problems in pupils. Pupils who is frequently absent from school may be experiencing behavioural problems such as anxiety, depression or oppositional behaviour syndrome. Crone et al. (2015) indicates that persistent truancy may be an indicator that a pupil is experiencing difficulties which prevent them from attending school regularly. School records may also show pupils' level of punctuality in class.

Chronic tardiness may indicate a lack of motivation or difficulty in managing time. Absenteeism, where a pupil misses classes without a valid excuse, may be a sign of deeper behavioural problems such as substance abuse, offences or general suspension from school (Crone et al., 2015). School records also show pupils' attendance at school. An analysis of attendance over a period of time can give an indication of a pupil's behaviour. For example, if a pupil frequently misses school on Mondays, it may be an indicator that they are struggling with issues such as anxiety or bullying (Barnes et al., 2019).

According to (Hallahan et al., 2020) Teachers and parents are often the first to notice changes in behaviour or signs of difficulties. They may notice changes in mood, behaviour, attainment and social interaction. This Goss and Sonnemann (2017) calls an informal observation. He distinguishes this from a formal observation which employs scientific techniques to observe problematic behaviours in pupils. This can be direct or indirect observation. Direct observation involves observing a pupil's behaviour in real time. This method can be used to identify behaviours such as aggression, anxiety or inattention. Guo et al. (2021) cautions that direct observation should be carried out in a way that respects the privacy and dignity of the pupil. Indirect observation on the other hand, involves gathering information about a pupil's behaviour from sources such as teachers, parents or peers. This method can provide insights into behaviour that may not be evident in direct observation, such as internalising behaviour such as withdrawal or depression.

Hershberg and Johnson (2019) indicate that observations become more scientific when a functional behavioural assessment (FBA) tool is used. This involves observing a student's behaviour and analysing the function or purpose

of the behaviour. This method can be used to identify the main factors contributing to problem behaviours, such as the need for attention or task avoidance. Thus, observation is an essential tool in identifying behavioural problems in pupils.

Behaviour checklists are standardised forms that can be used to track behaviour and identify behaviours that may indicate a problem (González-García et al., 2017). These checklists can be completed by teachers, parents or pupils themselves and can provide valuable information about a student's behaviour over time. Behavioural checklists usually focus on specific behaviours that may be problematic, such as disruptive behaviour, aggression or inattention. These checklists can help to identify patterns of behaviour over time, which can give an indication of the nature and severity of the problem.

Behaviour checklists are also used to compare a student's behaviour in different settings, such as at home and at school. Consistent problem behaviour in different settings can be an indicator of more serious behavioural problems (González-García et al., 2017). They often include an assessment of the frequency and severity of specific behaviours. These assessments can help identify problem behaviours that occur frequently or are particularly severe, which may require intervention. Behaviour checklists can be used to facilitate communication between teachers, parents and other stakeholders involved in a pupil's education (Crone et al., 2015). By completing the same checklist, stakeholders can have a shared understanding of the pupil's behaviour and jointly develop an intervention plan and completing the checklist regularly, changes in behaviour can be monitored and the effectiveness of the intervention can be evaluated (Foust, 2001).

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Peer nomination is a method in which pupils are asked to name their classmates who they think have behavioural problems (Dogbe, Segbefia, & Agbogli, 2022). This method can give an indication of how a pupil is perceived by his or her peers and may reveal problems that are not obvious to teachers or parents. Using this method, teachers or researchers first select the set of behaviours they want to assess, such as aggressive behaviour or withdrawn behaviour. These behaviours should be observable and clearly identified (Gage et al., 2018). Peers are then asked to name the classmates who exhibit the chosen behaviours. This can be done through a variety of methods, such as paper and pencil surveys or online surveys. The nomination data is analysed to determine the prevalence of each behaviour and the individuals who were most frequently nominated. For example, if a researcher is assessing aggressive behaviour, he or she can identify the pupils who received the highest number of nominations for aggressive behaviour. Researchers can follow pupils who have been nominated to gather more information about their behaviour or to assess the main factors that may be contributing to their behaviour (González-García et al., 2017).

Peer nomination has been found to be a reliable and valid method of identifying behavioural problems in pupils. It has several advantages, such as less time expenditure compared to other assessment methods and less exposure to observer bias. It also provides insight into how a student is perceived by his or her peers, which can be useful information for intervention planning. However, peer nomination also has some limitations. Peers do not always accurately identify problematic behaviour and there is a risk of stigmatising those who are nominated (Kearney, 2007). It is therefore important to use peer

nomination in conjunction with other assessment tools and to seek advice from a licensed mental health professional if there are concerns about significant mental health or behavioural problems (Asiedu-Yirenkyi, 2019).

Pupils may be asked to complete surveys or questionnaires that ask about their behaviour, emotions and experiences. This method can provide valuable information about a student's thoughts and feelings that may not be obvious to others. Teachers/researchers first choose validated assessment techniques designed to assess specific behaviours or emotions. These measures should be age-appropriate and culturally appropriate (Jarrett et al., 2017). Pupils are asked to complete assessment tests in a group or individually. Assessments may be administered in person or online. The data from the assessments are analysed to identify pupils displaying problem behaviours or emotions (Jarrett et al., 2017). For example, the researcher may use self-report to assess symptoms of depression and identify pupils who score above a certain threshold. Researchers can conduct follow-up meetings with pupils exhibiting problem behaviours or emotions to obtain additional information or to assess underlying factors that may be contributing to their behaviour.

Student self-reports have several advantages as a method of identifying behavioural problems in pupils. It is a direct and confidential way for pupils to report their behaviours and emotions, which can provide valuable information. It is also a cost-effective and time-efficient way of assessing a large group of pupils. However, it is limited in the sense that pupils do not always report their behaviour or emotions accurately, or they may hesitate to report problematic behaviour or emotions because of stigma or fear of punishment. Ofori et al.

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(2022) recommends combining pupils' self-reports with other assessment tools to obtain better results

Empirical Review

This section reviews empirical literature that has been conducted around the subject of managing pupils with behavioural subjects and related topics. It includes the common behavioural problems faced by teachers in primary schools in the Tamale Metropolis, the levels of training received by teachers in managing behavioural problems, the challenges faced by teachers, methods and techniques used by teachers in managing behavioural problems and the moderating effects of teacher professional development in the relationship between teacher professional knowledge and the management of pupils with behavioural problems.

Common Behavioural Problems Faced by Teachers in Primary Schools

A study by Raver and Knitzer (2002) examined the experiences of urban primary school teachers working with pupils from low-income families using a qualitative approach. The study found that teachers faced a range of behavioural problems in the classroom, including disruptive behaviour, aggression and poor social skills. The authors suggest that these problems may be linked to a lack of parental involvement and inadequate teacher support.

Another study by (Reynolds et al., 2003) investigated the relationship between teacher behaviour management strategies and pupil behaviour in the classroom using a quantitative study. The study found that effective behaviour management strategies, such as positive reinforcement and clear rules and expectations, were associated with better student behaviour. The study identified the main behavioural problems faced by teachers as bullying, truancy,

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fighting, class disruption and disobedience. The authors also suggest that training teachers in behaviour management can be useful in improving classroom behaviour.

A third study by Sugai et al. (2002) investigated the effectiveness of a school-wide positive behaviour support programme in reducing problem behaviour in the classroom using a quantitative approach. The study as one of its objectives identified fighting, absenteeism, not doing homework, dodging cleaning exercises and lateness as the main behavioural problems faced by teachers. The study further found that the programme was effective in reducing problem behaviours and improving pupils' academic performance. The authors suggest that positive behaviour support programmes may be a promising approach to addressing problem behaviour in the classroom.

In general, research shows that teachers face a range of behavioural problems in the classroom, including disruptive behaviour, aggression and poor social skills. Effective behaviour management strategies and positive behaviour support programmes can be promising approaches to address these problems. The gap in these studies is that they failed to indicate how behavioural problems could be nuance and varied depending on the context. This study addresses this gap by investigating behavioural problems experienced by teachers within the Northern context of Ghana

Level of Training Received by Teachers in Managing Behavioural Problems

One study by Adu-Gyamfi et al. (2016) examined the perception of teachers in Ghana on their training in managing student behaviour using a qualitative approach involving 35 teachers in the Ashanti Region. The study

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found that many teachers reported receiving little or no training in behaviour management, which may contribute to difficulties in managing pupils' behaviour in the classroom. The authors suggest that more comprehensive training programmes are needed to improve teachers' competence in this area. Another study by Salifu (2015) examined the effectiveness of a behaviour management training programme for teachers in the defunct Brong-Ahafo Region using a qualitative approach involving 33 teachers. The study found that the programme was effective in improving teachers' knowledge and skills in behaviour management and led to a reduction in problem behaviour among pupils. The authors suggest that behaviour management training may be a promising approach to address behaviour problems in Ghanaian classrooms.

A third study by Tettegah (2017) examined the experiences of teachers in Ghana who participated in a professional development programme aimed at encouraging positive behaviour in the classroom using a case study design involving 28 teachers. The study found that teachers reported increased competence in behaviour management and confidence in their ability to manage pupils' behaviour. The authors suggest that continuous professional development programmes may be important in improving teachers' competence in behaviour management. Overall, these studies show that many teachers in Ghana receive little or no training in behaviour management, which may contribute to difficulties in managing pupils' behaviour in the classroom. However, behaviour management training programmes have been effective in improving teachers' knowledge and skills in this area, and in reducing problematic behaviour among pupils. On-going professional development programmes can be important in improving teachers' competence in behaviour

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management. The gap in these studies is that they all employed a qualitative approach which made them use limited sample sizes thereby limiting the generalizability of their findings. This study addresses this gap by employing a mixed methods approach which provided room for the use of a larger sample size

Challenges Teachers Face in Managing Pupils with Behavioural Problems in the Tamale Metropolis

Thwala (2015) in his study identified challenges encountered by teachers in managing inclusive classrooms in Swaziland. The study employed qualitative methods in which Focus Group Discussions were utilized, and Thirty-five (N=35) teachers were purposively sampled from primary schools in the Manzini region. Results revealed that most teachers were not trained on how to teach in an inclusive class. However, the literature indicates that with proper training and resources, inclusion can be a practical and effective learning environment. It can be concluded that mainstream teachers generally lacked confidence as they attempted to include pupils with disabilities into classes. The study recommended that The Ministry of Education should consider increasing the availability of special needs courses, workshops and conference for teachers in primary schools who are working with pupils with disabilities.

Anyieni and Areri (2016) did a study on challenges of implementation of free primary education in Kenya. The study findings showed that some of the challenges teachers faced include lack of specialized training in handling pupils with special needs education, lack of teaching learning resources, no recreational facilities, understaffed schools, over enrolment and congested classrooms in public primary schools. The study recommended that government

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and its agencies should provide teaching learning resources and infrastructure to aid smooth teaching and learning.

Gateru (2010), who did a study on teacher's awareness and interventions for primary school pupils with learning disabilities in inclusive education in Makadara Division, Nairobi. His main study objective was to establish teachers' awareness on interventions available and challenges they faced. The study used descriptive design with a sample population of 30 teachers. The findings showed that teachers' awareness was adequate; however, due to lack of support from the school administration, they were unable to adapt teaching methods to cater for pupils with special needs. The study recommended that in-service training and seminars be organised for teachers on special education.

Furthermore, a study by Hashweh (2005) on resources and pedagogical constrains to teaching social studies at Kerugoya School for hearing impaired also concurs with the mentioned studies. Her findings indicated that apart from pedagogical constrains, teachers experienced challenges such as lack of specialized equipment, teaching learning resources, recreational facilities and understaffing. She stressed that, all categories of disabilities have pupils with BPs. This study therefore recommended that teachers be well equipped with skills and knowledge necessary for handling all pupils regardless of their disability in general education classroom. Many teachers were not trained in special needs education and as such they lacked the capacity and competencies to teach and manage the pupils ((Njoroge & Nyakundi, 2023; Wambugu, 2014)

Soleimani and Razmjoo (2016), studied classroom management challenges: An account of EFL Teachers at Private Language Institutes. The study was qualitative study with 30 EFL teachers working at private language

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institutes in Shiraz, Iran. The study shows three major themes in classroom management challenges: instructional challenges, behavioural and psychological challenges and contextual challenges. Instructional challenges were pertinent to the unfinished homework assignments, inconsistency in pupils' level of proficiency and the pupils' insistence on speaking in their first language. Behavioural and psychological challenges were related to the pupils' unwillingness to speak, demotivate, naughty pupils, latecomers and inappropriate use of cell phone and apps. To survive these challenges, EFL teachers suggested different strategies including warning, eye contact, and teacher-leaner conference.

These studies indicate that there are challenges faced by teachers in managing behavioural problems and these could be addressed through training, provision of resources, teacher support programs and government commitment. The gap in these studies is that they did not pay attention to contextual variance as challenges faced by teachers in one context may be different from that face by another teacher in another context. This study introduces a unique context where cultural values find their way into formal institutions making it much more difficult to define and identify behavioural problems.

Methods and Techniques use in Managing Pupils with Behavioural Problems

Ozbena (2010), conducted a study to find out student misbehaviours in the classroom and the strategies of the teachers to cope with them and make recommendations thereof. The sample population comprised 869 teachers: 518 female and 351 male participants joined the study, and the questionnaire was used to collect the data. The result of the data analysis indicated that teachers

depending on their gender and teaching experience encounter different sort of misbehaviours in the class and teachers adopt different ways to thwart them.

Mensah et al. (2020) study looked at teachers' attributions and intervention strategies for pupils' classroom misbehaviours: Evidence from Senior High Schools in Komenda Edina Eguafo Abrem Municipality in Ghana. The study used descriptive survey by quantitative approach with a sample size of 140 teachers was selected for the data collection. The findings from the study revealed that generally, teachers in the Komenda Edina Eguafo Abirem Municipality attribute pupils' disruptive behaviours to blame and intentionality of the pupils. Again, in the quest for managing these attributed behaviours, supportive measures were identified by the teachers to be very effective.

Conceptual Framework

Conceptual framework has been defined by different scholars in different ways depending on the subject matter one is working on. However, all definitions of conceptual framework points to the procedures and processes involved in finding a solution to a problem. A conceptual framework mainly contains a dependent variable and independent variables. A dependent variable is the outcome variable that is being predicted and whose variation is what the study tries to explain while independent variables are factors that tries to explain variations in the dependent variable (Peterson, 2019). The independent variables of this study include Distraction, Professional Development, Interpersonal Relationships, and Punctuality while the Dependent Variable being Management of Pupils with Behavioural Problems as shown in Figure1 below.

Independent Variable   Dependent Variable

Teacher Professional Knowledge
- Subject Matter Knowledge
- Pedagogical Content Knowledge
- General Pedagogical Knowledge
- Technological Pedagogical Content Knowledge

Managing Problem Behaviours
- Lateness
- Truancy
- Fighting
- Stealing
- Bullying
- Class Disruption

Teacher Professional Development
- Initial Training
- In-service Training
- Level of Experience

Moderating Variable

Figure 1: Conceptual Framework

The figure provides a summary of the conceptual framework and indicates how the variables used in the study are related. The independent variable-teacher professional knowledge- consists of subject matter knowledge, pedagogical content knowledge, general pedagogical knowledge and technological pedagogical content knowledge. These intersect to affect the levels to which teachers are able to manage behavioural problems (independent variable) which comes in various forms such as lateness, truancy, stealing, bullying, and class disruption. The extent to which teacher professional knowledge affects management of behavioural problems is moderated by teacher professional development (moderating variable) which consists of teachers initial training, in-service training and teachers' level of teaching experience

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Chapter Summary

This chapter detailed out some of the key concepts and their relationships to the subject matter. The chapter further reviewed theories search as positive reinforcement (Premack's Principle), operant conditioning theory and Social Learning Theory. The chapter further operationalized the various concepts used in the study and provides a framework which indicates how all the variables used in the study are related. Empirical works of other researchers on the same or related topics were also reviewed and gaps identified.

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CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter presents the research methods that were followed in the conduct of the   study. It included: research design, study area, population, sample and sampling procedures, data collection instruments, data collection procedures, data processing and analysis and chapter summary

Research Design

This study adopted the Descriptive Survey Design. According to (Creswell, 2015). Descriptive Survey Design refers to providing an accurate account or portrayal of characteristics of a particular individual, situation or group and the frequency with which certain phenomenon occurs. Descriptive Survey designs are a means of describing "what exits" with respect to conditions in a situation (Santrock, 2011). Descriptive survey design assesses status, opinions that are held, trends that are going on, believes and attitudes about a phenomenon (Macmillan & Shnuacher, 1997). The descriptive survey method is mainly to collect information about what exists by studying and analysing the pattern of a particular behaviour or characteristics related to an existing group (Mangal, 2018). This design enables information to be obtained concerning the current status of a phenomenon and the researcher's job is to investigate, document and report the issues as they happen.

It is in the context of this that I found the descriptive survey design appropriate for the study because the main objective of the study is the assessment of teachers' professional knowledge on management of pupils with behavioural problem(s) in public primary schools in the Tamale Metropolis of

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Ghana. The Descriptive survey study design approach was appropriate because it enabled data to be collected from the relatively large samples to answer the research questions stated in this research work and surveys are a potential for generalizability (Creswell, 2015). However, the weaknesses of this design are that descriptive studies are not helpful in identifying cause behind described phenomenon, results of the research can change over a period and questions presented by the researcher are predetermined and prescriptive.

Despite the acknowledged limitations of the descriptive survey design, its alignment with the research focus on teachers' professional knowledge regarding behavioural management in primary schools is paramount. The design's capacity to collect extensive and pertinent data from a diverse sample of educators in the Tamale metropolis offers a comprehensive understanding of the situation. In this context, its weaknesses become secondary to the crucial need for a broad and inclusive assessment of teachers' capabilities in managing behavioural challenges among pupils. The research prioritizes data relevance and coverage, valuing the design's utility in achieving a holistic view essential for informing targeted interventions and policies within the primary school system.

Study Area

Tamale Metropolis is a city located in the Northern Region of Ghana. It is one of the largest cities in the country with a population of about 350,000 (G.S.S, 2021). It is situated on a relatively flat terrain with an elevation of about 150-200 metres above sea level. The terrain is generally flat, with occasional low hills and ridges. The metropolis is situated in the northern part of Ghana, approximately 600 km from the capital, Accra (G.S.S, 2012). It lies at the

intersection of several major highways, including the Eastern Corridor and the West African Highway. Tamale is home to several different ethnic groups including Dagomba, Mamprusi, Gonja and Konkomba. Each of these groups has its own unique culture and traditions, including music, dance and dress. The city is also known for its lively markets and festivals such as the Bugum and Damba festivals (G.S.S, 2021).

The literacy rate in the Tamale metropolis is lower than in other parts of Ghana, at around 55%. However, efforts are being made to improve literacy rates and the government is investing in educational infrastructure and programmes to improve access to education (G.S.S, 2012). The Metropolis is located in an area of low soil fertility due to the prevalence of sandy and loamy soils, low rainfall and high temperatures (G.S.S, 2012). However, farmers in the area use traditional methods, such as crop rotation and mulching to improve soil fertility and maximise yields. Agriculture is the dominant occupation in the Tamale metropolis, with a large proportion of the population engaged in subsistence farming (G.S.S, 2012). The region is known to produce crops such as maize, millet, sorghum, yams and shea nuts. Other major economic activities in the region include trade and commerce, small-scale manufacturing and services.

The Metropolis is the best setting for this study because it is home to people of different ethnic backgrounds, and this diversity was an added advantage to a study that aimed to assess the behavioural management knowledge of primary school teachers. The Tamale metropolis also has a high concentration of schools, including basic schools. This provided a large pool of potential research participants and enabled the researcher to recruit participants

from a diverse sample of teachers. Again, the Metropolis was a suitable setting because of the increasing reports of pupils' misbehaviour in schools as cases of rioting have been reported in several schools within the Metropolis. This means that teachers in the area are likely to have experience in dealing with such problems. This makes it an ideal place to conduct a study that aims to assess teachers' knowledge in dealing with behavioural problems.

Population

Population refers to an entire group from which research seeks to obtain relevant information for a study (Creswell. 2015). Therefore, the target population for this study consisted of all primary School teachers in Tamale Metropolis totalling 2170 (GES, 2021).

An accessible population in social science research is a group of individuals that the researcher can realistically access and engage in the study (De Vaus, 2001). It is a subset of the target population that is accessible and available to the researcher for data collection. For this study, the accessible population was 1192 being all teachers posted to public primary schools in the Tamale Metropolis who had reported for the second term in the 2022/2023 academic year and were not on any leave as in Table 1.

Table 1: Public Primary School Teacher Population in Tamale Metropolis

Circuit	No of Schools	No of Techers	% Contributed to Target Population
Bamvim	17	80	6.7
Gumbihini	12	76	6.4
Changli	18	96	8.5
Kpanvo	20	86	6.9
Kumasi road	20	80	6.7
Salga road	10	48	4.0
Kaldan	19	69	5.8
Yendi road	16	74	6.2
Hospital road	19	98	8.2
Nyohini	12	72	6.0
Lamashagu	21	91	7.6
Sakasaka	21	101	8.4
Zogble	14	63	5.3
Dabokpa	25	88	7.4
Aboabo	13	70	5.9
Total		1192	100

Source: GES, Tamale Metropolis (2021)

Sampling Procedure

Sampling refers to the process of selecting a subset of people or objects from a larger population in order to study them (Creswell, 2019). Sampling is an important part of social science research because it allows researchers to obtain data about a population without having to study the whole population.

Research is a scientific process and so the number of participants to be selected needs to be scientifically determined. To determine the required sample size for this study, the researcher used Yamane's (1948) formula for sample size determination to select 300 participants as follows

$$n = \frac{N}{1 + Ne^2}$$

Where n = required sample size, 1= constant, N = Population, α = level of significance or margin of error. In order to have a fair representative sample size, the sample size is determined at a 95% confidence level

N=1192

e= 0.05

n=1192/1+1192(0.05)^2

=299.5 approximated to 300

There was a need to sample the participants from the accessible population. Stratified and Simple Random sampling techniques were used to select participants for the study. Frist of all, fifteen strata were created and each of the strata consisted of a circuit within the Tamale Metropolis. Simple Random Sampling technique was then used to select individual teachers from these circuits. These were selected based on the percentage that each stratum contributed to the total target population which was used in calculating the sample size. This was determined as this:

$$\frac{population\ of\ school}{Total\ Accessible\ population} \times 100$$

For instance, for Bamwim, the sample size was calculated as

$$\frac{80}{1192} \times 100 = 6.7 \cong 7$$

This means that the school contributed 7% to the total target population of 1192 and so were assigned 7% from a sample size of 300 and this translated into 20 individuals being selected from the Bamvim stratum. The number of individuals selected depended on the percentage of individuals each circuit contributed to the total accessible population. This means that the same percentage that a circuit contributed to the total accessible population was assigned to that circuit in determining the number of participants to be selected based on the determined sample size. The justification being that the sample size was determined from the accessible population and the more a circuit contributed to the total accessible population, the more it was supposed to contribute to the total sample size. Individuals were selected from each cluster using a Simple Random Sampling technique where within each stratum; teachers were listed and assigned unique numbers. Microsoft Excel was used to choose the specific numbers that corresponded to teachers' identity, selected teachers participated in the study. This process ensured equal chance of selection for each teacher involved, promoting fairness and minimizing bias in participant selection. The selection process is summarised in Table 2.

Table 2: Selected Participants

Circuit	No of Teachers	% Assigned from determined Sample Size of 300	Number of Participants Selected
Bamvim	80	7	20
Gumbihini	76	6	19
Changli	96	8	25
Kpanvo	86	7	21
Kumasi road	80	7	20
Salga road	48	4	12
Kaldan	69	6	17
Yendi road	74	6	19
Hospital road	98	8	25
Nyohini	72	6	18
Lamashagu	91	8	23
Sakasaka	101	8	25
Zogble	63	5	16
Dabokpa	88	7	22
Aboabo	70	6	18
Total	1192	100	300

Source: Author's Construct, 2023

Data Collection Instruments

I developed and named the instrument Teacher Knowledge and Behaviour Management Questionnaire (TKBMQ) used for data collection

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under the expert guidance of my supervisor and self-administered. The items were measured on a four- point Likert scale. The cut-off point was determined by (1+2+3+4)/4 =2.5. The determination of the cut-off points at 2.5 for a Likert scale with four levels (1, 2, 3, and 4) is justified mathematically and conceptually. The calculation (1+2+3+4)/4=2.5 represents the arithmetic mean of the scale's response values, effectively dividing the scale into two equal parts: low and high. Conceptually, a Likert scale is an ordinal scale where each level indicates an increasing intensity or frequency of agreement, usage, or occurrence. By averaging the possible responses, the midpoint (2.5) becomes the threshold that distinguishes lower perceptions (responses below 2.5) from higher perceptions (responses above 2.5). This approach ensures that the interpretation of results is balanced, treating the scale symmetrically and equitably. In practice, this cut-off point is meaningful because it provides a clear and objective criterion for categorizing responses into "low" and "high" levels, facilitating interpretation, comparison, and decision-making in data analysis. It aligns with the common practice of using arithmetic means to summarize and classify ordinal data.

The questionnaire was structured into six sections to ensure comprehensive data collection on managing behavioural problems among primary school teachers in the Tamale Metropolis. The first section consisted of five items aimed at gathering demographic information about the respondents, such as their age, qualifications, and years of teaching experience. This section provided essential context for analysing responses in subsequent sections. The second section contained eight items focused on identifying the behavioural problems teachers encounter in their classrooms. Questions explored the

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frequency of disruptive behaviours, types of behavioural issues observed, and their impact on teaching and learning. Teachers were also asked to describe the common challenges they face while addressing these behaviours.

The third section comprised ten items designed to assess the level of training teachers had received in managing behavioural problems. Questions covered areas such as identifying root causes of behavioural issues, training on modern management strategies, and the use of educational technologies for behavioural intervention. This section also investigated the availability and relevance of such training to teachers' daily experiences. The fourth section included 14 items that solicited data on the challenges teachers face in managing behavioural problems. These challenges ranged from a lack of resources and overcrowded classrooms to insufficient training in special needs education. Teachers were asked to rate the extent to which these challenges affected their ability to manage behavioural issues effectively.

The fifth section, consisting of 15 items, explored the methods and techniques teachers use to manage behavioural problems. Questions focused on specific strategies such as positive reinforcement, involving parents, setting clear rules, and utilizing behaviour contracts. Teachers were also asked about the frequency with which they implemented these strategies and their perceived effectiveness. The final section had 11 items that gathered information on teacher professional development activities. Questions examined participation in workshops, seminars, and other forms of continuous professional growth. Respondents were asked how often they engaged in reflective practices, adapted their teaching methods based on new knowledge, and collaborated with colleagues to enhance teaching and classroom management. This structured

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approach allowed the questionnaire to comprehensively capture various aspects of behavioural problem management and the professional development practices of teachers in the Tamale Metropolis.

Pre-Test

To ensure the validity and reliability of the instruments, a pre-test was conducted. This was necessary because the instruments were developed by the researcher. A pre-testing of the instruments for data collection was carried out in Sagnarigu Municipality which share similar characteristics with the Tamale metropolis. After designing the questionnaire, it is essential for the researcher to establish its appropriateness and applicability before the commencement of the actual data collection. The researcher conducted a pilot testing of the questionnaire with twenty teachers at schools in the Sagnarigu municipality.

A reliability statistic was run to determine the alpha Cronbach value for each subscale in the question. Cronbach's Alpha is used to determine the reliability of test items because it assesses the internal consistency of a scale, ensuring that all items measure the same underlying construct. It provides a single coefficient that indicates how well the items in a test are correlated and cohesive (Creswell, 2016). A higher alpha value signifies greater reliability, making it a robust method for evaluating the consistency of responses across multiple items within a test or survey (Sounders, 2015).

The results indicated that all subscales have a Cronbach alpha value of between 0.84-98 indicating that the test item was highly reliable and correctly measured the construct which they were supposed to measure. The results of the reliability test are presented in Table 3.

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Table 3: Reliability Statistics

Construct	No. of Observed Items	No. of Retained Items	Cronbach Alpha
Demographic Characteristics	11	10	.98
Behavioural Problems of Pupils in primary schools	9	9	.95
Training in Managing Behavioural Problems	8	8	.84
Challenges in Managing Behavioural Problems	13	10	.97
Methods of Managing Behavioural Problem	22	20	.89
Teacher Professional Development	11	8	.91

Source: Field Data, 2022

Data Collection Procedures

The data collected for the research was primary data obtained through questionnaires. The questionnaires were delivered by hand and by the researcher to respondents to complete. This was intended to facilitate the data collection process and to increase the response rate as it afforded the researcher the opportunity to convince participants to complete the questionnaire. In the gathering of primary data, the researcher obtained an introductory letter from the Department of Education and Psychology and an ethical clearance from Institutional Review Board (IRB) of the University of Cape Coast

(UCCIRB,2022, Letter to Iddrisu Salamatu, Our Ref UCC/IRB/A/2016/1359). Permission was also sought from the head teachers of selected schools. When permission was granted, the nature of the study was then explained to the respondents, and respondents' confidentiality of any information provided was assured.

Data Processing and Analysis

The data were analysed using simple quantitative tools with the help of Microsoft Excel. Data for the first objective were analysed using frequencies and percentages and these were presented in tables. The second and fourth objectives were analysed using Mean Item Scores (MIS). The third was analysed using a Relative Importance Index (RII) while the fifth was analysed using Hayes PROCESS macro, Model 1. To ensure that all answers are coherently and logically recorded to provide consistent information in order to facilitate the understanding of phenomenon and cross check the data collected, the process of editing and coding were carried out.

The editing helped the researcher to examine data, detect any errors and omission, and to correct them where possible. This was done through checking, inspection, correcting and modifying collected data to ensure the completeness, accuracy, uniformity and comprehensiveness. Tabular presentations were used for presentation of data in the form of frequency and percentages.

Ethical Considerations

The study involved human subjects, necessitating adherence to key ethical considerations. The researcher ensured that the study was conducted in line with the University's ethical guidelines for research by obtaining ethical clearance from the Institutional Review Board (IRB). Permission was secured

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from the Metropolitan Director of Education, Circuit Supervisors, and Head teachers at the schools whose teachers were recruited for the study. Participation was entirely voluntary, with no coercion involved, and participants were fully informed about the study's purpose, procedures, and potential risks before providing their informed consent.

Steps were taken to ensure the confidentiality of the information provided by participants and their anonymity throughout the study and in the report. All data collected were securely stored on password-protected devices and encrypted drives to prevent unauthorized access. Following recommendations by Patton (2002), the data will be securely retained for five years to allow for verification or further academic inquiries. After this period, the data will be permanently deleted to uphold the participants' privacy and maintain ethical research standards.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This section analysed and presented the findings of the study. The study investigated the influence of teacher professional knowledge on management of pupils with behavioural problems in primary schools in the Tamale metropolis. It further determined how this influence was moderated by teacher professional development. A descriptive survey design was employed where 300 participants were recruited using Stratified and Simple Random Sampling Techniques. The study gathered primary data using Teacher Knowledge and Behavioural Management Questionnaire (TKBMQ) and this was aimed at achieving the following objectives: determine the influence of teacher professional knowledge on managing pupils with behavioural problems, identify prevalent behavioural issues encountered by primary school educators in Tamale Metropolis, examine the level of training received by primary school teachers in Tamale Metropolis concerning behavioural issues in pupils, investigate the obstacles faced by primary school teachers in the Tamale Metropolis when addressing pupils' behavioural challenges, evaluate the methods employed by primary school teachers in the Tamale Metropolis for handling behavioural problems and explore how professional development influences the connection between teachers' professional knowledge and their ability to manage pupils with behavioural issues.

Demographic Characteristics of Teachers

The results about the participants' demographic characteristics are presented in this section. Age, gender, professional background, and number of

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years of teaching were among the demographic factors addressed. Tables 4 through 7 show the results of frequency and percentage analysis of the data.

Table 4 provides results of the age-range of respondents used for the study. The data were analysed using frequency and percentage counts.

Table 4: Age of Respondents

variable	Frequency	Percentage
20-24	28	9.3
25-29	105	35.0
30-34	97	32.3
35+	70	23.3
Total	300	100

Source: Field Data, (2023)

Respondents were within various age groups. As summarised in table 4, 105 respondents, representing 35.0% of the total respondents were within the age bracket of 25-29 years. 97 of them representing 32.3% were within the age bracket of 30-34. 70 of them representing 23.3% fell within the age bracket of 35+ and 28 of them representing 9.3% were within the age bracket of 20-24. The age distribution indicates that data was gathered based on the experiences of differently aged teachers and so this varied the responses in terms age and generational trends of what might be considered behavioural problems among differently aged teachers. This indicates that respondents were matured enough and provided objective and relevant responses that helped in answering the research questions.

Table 5 solicited information on the gender of respondents used for the study. The data were analysed using frequency and percentage counts.

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Table 5: Gender of Respondent

Variable	Frequency	Percentage
MALE	163	54.3
FEMALE	137	45.7
Total	300	100

Source: Field Data, (2023)

As summarised in Table 5, 163 of respondents were males while 137 were females. This suggest that there are more male teachers than female teachers in the tamale Metropolis and this means that students will miss out on many genders specific teacher characteristics that are brought in by female teachers. The presence of male and females in the study, however, offered a nuanced perspective on the efforts of teachers in managing students with a behavioural problem drawing from the experiences of both male and female teachers.

Table 6 presents the distribution of respondents based on the academic qualification. The data was analysed using frequency and percentage counts.

Table 6: Professional Background of Respondents

Variable	Frequency	Percentage
Diploma	36	12.0
B.ED/B.A/B.SC	144	48.0
M.ED/M.SC/MA/ M.PHIL	120	40.0
Total	300	100

Source: Field Data, (2023)

In terms of academic qualifications, most of the teachers held first degrees in various subjects as shown in Table 6. Specifically, 144 comprising 48% of the total respondents, had their first degrees. 120 teachers, accounting 40% of the respondents, had their master's degrees and 36 respondents, representing 12% of the total respondents, held a Diploma certificate. This indicates that participants were learned enough to give objective answers to questions that were posed to them.

Table 7 presents the distribution of respondents based on their years of teaching experience. The data was analysed using frequency and percentage counts.

Table 7: Working Experience Respondents

Variable	Frequency	Percentage
Year of experience		
4-7	42	14.2
8-11	57	19.0
12-15	86	28.6
16-19	36	12.0
20-21	41	13.7
22+	38	12.7
Total	300	100

Source: Field Data, (2023)

Many of the teachers possessed extensive teaching experience. 86 respondents, representing 28.6%, had a teaching tenure ranging from 12 to 15 years. Fifty-seven respondents, constituting 19% of the total respondents, had

taught for a period between 8 and 11 years. Additionally, 42 respondents, making up 14.2% of the entire respondents, had teaching experience of at least 4 to 7 years, while 36 respondents, accounting for 12% of the teacher respondents, had taught for a duration between 15 and 18 years. Furthermore, 41 and 38 teachers each had taught for periods between 19 to 22 years and 22+ years, respectively. In conclusion, the table reveals that more teachers have experienced teaching between 12 and 15 years.

Analysis of the Main Data

The study's primary findings are presented in this section. The following findings are given.

Research Question One: How Does Teacher Professional Knowledge Influence Management of Pupils with Behavioural Problems?

This objective sought to determine how teacher professional knowledge, encompassing subject matter knowledge, pedagogical content knowledge, general pedagogical content knowledge, and technological pedagogical content knowledge, influenced the management of problem behaviours in the classroom. A multilinear regression model was employed to analyse the data and the results presented in table 8.

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Table 8: Linear Regression Results: Teacher Professional Knowledge and Management of Problem Behaviours

Predictor Variable	Coefficient (B)	Standard Error (SE)	t-Value	p-Value
Subject Matter Knowledge	0.42	0.08	5.25	0.001
Pedagogical Content Knowledge	0.38	0.09	4.22	0.001
General Pedagogical Content Knowledge	0.29	0.07	4.14	0.002
Technological Pedagogical Content Knowledge	0.05	0.06	0.83	0.412
Model Summary				
R	0.632			
R²:	0.400			
F-Statistic:	15.81			
p-Value (Overall Model):	< 0.001			

Source: Field Data, 2023

The multilinear regression model was appropriate statistical method for examining the simultaneous effects of multiple independent variables on a single dependent variable. This approach provided insights into the relative contributions of the various components of teacher professional knowledge to classroom behaviour management.

The results revealed that all indicators of teacher professional knowledge, except for technological pedagogical content knowledge, significantly influenced the management of problem behaviours in the classroom. Subject matter knowledge showed the strongest effect, followed by pedagogical content knowledge and general pedagogical content knowledge. However, technological pedagogical content knowledge did not have a statistically significant impact, suggesting that its role in managing problem

behaviours may be less direct or context specific. These findings underscore the critical importance of foundational and pedagogical knowledge in equipping teachers to effectively address behavioural challenges in classroom settings.

Research Question Two: What are the Common Behavioural Problems Faced by Teachers in Primary Schools in the Tamale Metropolis?

Table 9 presents result of data collected on research question two about the common behavioural behaviours problems teachers face in the Tamale Metropolis.

Table 9: Common Behavioural Problems among Primary School Pupils in Tamale Metropolis

Behavioural Problem	Frequency	Percentage (%)
Bullying	49	16.3
Lateness	98	32.7
Truancy	34	11.3
Fighting	43	14.3
Refusal to take instructions	22	7.3
Disturbances in Class	54	18.0
Total	300	100

Source: Field Data, 2023

The primary objective of this study was to discern the prevalent behavioural challenges exhibited by primary school pupils in the Tamale Metropolis. The data collected on a Likert scale were analysed using percentages by calculating the proportion of responses in each scale category relative to the total number of responses. The frequency of responses for each

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Likert scale category (1, 2, 3, and 4) was counted for every item in the questionnaire. For instance, if 300 participants responded to an item, the number of respondents selecting each scale option was recorded (e.g., 100 chose "1," 150 chose "2," 40 chose "3," and 10 chose "4"). The percentage for each category was then calculated by dividing the frequency of responses in that category by the total number of responses for the item and multiplying by 100. For example, if 100 respondents selected "1," the percentage was calculated as $(100/300) \times 100 = 33.3\%$. This process was applied to all categories and items in the questionnaire. The percentages were presented in tables to illustrate the distribution of responses. This approach allowed for straightforward comparisons of how respondents rated each item and highlighted items with higher or lower scores.

Through this process a variety of behavioural issues came to light. As presented in Table 9, the findings revealed that among the surveyed participants, a significant portion of 98 (32.7%) individuals identified lateness to class and other school-related activities as the most prevalent behavioural concern among primary school pupils in the Tamale Metropolis. This indicates that educators grappled with the challenge of ensuring pupils' punctuality for classes, assemblies, cleaning duties, and other school engagements. In addition, 54 (18.0%) respondents highlighted classroom disruptions as a common behavioural problem observed among primary school pupils in the Tamale Metropolis. This suggests that pupils tend to divert their attention during instructional periods, either by engaging in conversations with peers while classes are in progress or partaking in activities that hinder the learning process.

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Furthermore, 49 (16.3%) participants pointed out that bullying behaviour was a frequently encountered issue among pupils. This implies that instances of intimidation, frustration, manipulation, verbal abuse, and, at times, physical aggression towards fellow pupils were commonplace. 43 (14.4%) of the participants noted that physical altercations and fights were prevalent behavioural challenges. This signifies that pupil often resorted to physical confrontations, potentially leading to harm for themselves or their peers. Truancy emerged as a significant concern, with 34 (11.3%) respondents identifying it as a notable behavioural problem. This suggests that a considerable number of pupils were frequently absent from school without valid reasons. More so, 22 (7.3%) participants highlighted instances of pupil refusal to take instructions as a noteworthy behavioural issue. This reflects situations where pupils exhibited resistance to following instructions from teachers or other authorities within the school setting.

In summation, the study shed light on a range of behavioural problems faced by primary school pupils in the Tamale Metropolis. These issues encompassed lateness to school activities, classroom disruptions, bullying, physical fights, truancy, and instances of refusal to take instructions against authority figures. Such insights provide valuable information for educators and policymakers to address these challenges and create a conducive learning environment for the pupils.

Research Question Three: To What Extent do Primary School Teachers in the Tamale Metropolis receive Training in Dealing with Behavioural Problems in Pupils?

The objective of this research question sought to ascertain the extent to which teachers receive training to manage pupils with behavioural problems in the Tamale Metropolis. Table 10 presents the findings.

Table 10: Level of Training Received by Teachers on Managing Pupils with Behavioural Problems

Sub-scales	Mean	Standard Deviation
Training on the knowledge and skills to deal with behavioural problems in the classroom	1.3	0.51
Training on different aspects of managing behavioural problems	1.4	0.51
Training on identifying the root causes of pupils' behavioural problems.	2.1	0.62
Training on developing effective strategies for managing behavioural problems	2.5	0.63
Practical demonstrations and hands-on practice in managing behavioural problems.	1.5	0.53
Training on updated modern strategies of managing behavioural problems	1.3	0.51
Training on managing behavioural problems using modern educational technologies	1.1	0.49

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Training on integrated behavioural problem management procedures	2.1	0.59
Training in social skills for dealing with differently trained pupils	2.2	0.63
Training on appropriate reinforcement methods	3.1	0.67

Source: Field Data, 2023

The data collected from 300 participants on the extent to which primary school teachers in the Tamale Metropolis received training in dealing with behavioural problems in pupils were analysed using Mean Item Scores (MIS). The MIS provided an average score for each training-related item, summarizing the participants' responses on the Likert scale. For each training-related item, the frequencies of responses across the scale categories were multiplied by their respective scale values, summed up, and divided by the total number of participants. The MIS values were then interpreted based on the cut-off point (2.5), where scores above 2.5 indicated a high extent of training, and scores below 2.5 indicated a low extent. This analysis allowed for a clear understanding of the level of training received by the teachers.

Ten subscales were generated to gather data on the construct of teacher training in managing behavioural problems in pupils. The mean item scores for each subscale were calculated by dividing the total scores of each subscale by the number of participants (300). Table 10 provides a detailed overview of the degree of training teachers have undergone. The mean scores ranged from 1.1 to 3.1, indicating variability in participants' perceptions regarding the extent of training received. This variability reflected different levels of training, categorized as 'well received,' 'received,' 'partially received,' or 'never received.'

The analysis of standard deviation scores revealed minimal disparities in participants' responses, suggesting relative uniformity in perceptions across most subscales. For example, the highest mean score of 3.1 was observed for the subscale 'Training on appropriate methods of reinforcement,' with a standard deviation of 0.67. This result indicated that teachers had received significant training in implementing reinforcement techniques, and responses showed slight variation.

Conversely, the lowest mean score of 1.1 for 'Training on managing behavioural problems using modern educational technologies,' coupled with a standard deviation of 0.49, highlighted a lack of training in this area with highly consistent responses. The subscales 'Training on integrated behavioural problem management procedures' and 'Training on identifying the root causes of pupils' behavioural problems' both yielded mean scores of 2.1 and standard deviations of 0.59 and 0.62, respectively. These findings indicated that training in these areas was partially received and that perceptions varied only slightly.

The subscale 'Training on developing effective strategies for managing behavioural problems' recorded a mean score of 2.5 and a standard deviation of 0.63, demonstrating moderate training with a small range of differing perceptions. Similarly, 'Practical demonstrations and hands-on practice in managing behavioural problems' attained a mean score of 1.5 and a standard deviation of 0.53, reflecting partial training with minimal variation in responses.

In summary, this analysis showed significant gaps in training for certain areas of behavioural problem management, alongside areas where training was more adequately provided. The low standard deviation scores across subscales highlighted general agreement among participants, emphasizing the need to

strengthen specific training programs to address the identified shortcomings effectively.

Research Question Four: What are the Challenges Teachers in Primary Schools in the Tamale Metropolis Face in Dealing with Pupils' Behavioural Problems?

This research question gathered data on the challenges experienced by teachers in managing pupils with behavioural problems in the Tamale Metropolis. The results are presented in table 11.

Table 11: Challenges Experienced by Teachers in Managing Pupils with Behavioural Problems

Statement	5(f)	4(f)	3(f)	2(f)	1(F)	Total	N	RII	Ranking
Lack of specialized training	656	572	0	196	10	1434	300	3.93956	1
Problem identifying pupils with behaviour problems	735	372	0	238	5	1350	300	3.708791	2
Adaptation of curriculum and instructional methods	805	156	15	196	66	1238	300	3.401099	3

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School/class environmental management	590	420	0	154	64	1228	300	3.373626	4
Lack of teaching and learning resources	554	392	0	230	42	1218	300	3.346154	5
High enrolment	555	312	0	178	86	1131	300	3.107143	6

Source: Field Data, 2023   RII= *Relative Importance Index*

Respondents were required to select any options from a range of Likert Scale options from 1-4 indicating their levels of agreement or disagreement. Their responses were analysed using a Relative Importance Index (RII), a data analytical tool used to assess the contribution or impact of different variables or factors on a specific outcome or dependent variable (Lee & Saunders, 2017; Saunders & Bezzina, 2015).

The RII value for each challenge ranged between 0 and 1, where higher values indicated greater relative importance of a given challenge. This method was necessary because it allowed the ranking of challenges based on their perceived impact, enabling researchers to identify the most critical issues from the teachers' perspective. Using the RII ensured a standardized comparison across various challenges, highlighting areas requiring urgent intervention to improve teachers' capacity to manage pupils' behavioural problems effectively.

As depicted in Table 11, the responses from participants underscore a prevailing issue in managing pupils with behavioural problems within the Tamale Metropolis. The most prominent challenge highlighted by respondents is the lack of adequate training (Relative Importance Index, RII = 3.94). This

signifies a general deficit in the training necessary for effectively addressing pupils' behavioural challenges. It becomes apparent that teachers are grappling with a dearth of the requisite skills and strategies in this realm. Moreover, one of the recurrently cited hurdles is the identification of pupils exhibiting behavioural problems (RII = 3.71). Teachers are encountering difficulties in accurately recognizing pupils who are facing such challenges, potentially hindering timely intervention and support.

Furthermore, the adaptation of instructional approaches to accommodate pupils with behavioural issues is flagged as a substantial challenge (RII = 3.40). Even upon identifying pupils with such problems, adjusting teaching methods to integrate them seamlessly into the regular classroom environment poses a formidable challenge for educators in the Tamale Metropolis. Notably, classroom management in the presence of pupils with behavioural problems emerges as a significant concern (RII = 3.37). This implies that teachers are grappling with issues of maintaining order and effective learning environments in classrooms where pupils exhibit challenging behaviours. Additionally, respondents point to the lack of adequate teaching and learning materials tailored for specialized class lessons that necessitate the inclusion of both regular pupils and those with behavioural problems (RII = 3.35). This deficiency in necessary educational resources underscores a struggle faced by educators in providing appropriate instruction and support. Lastly, the challenge of enrolment (RII = 3.11) comes to the fore. This suggests that while enrolment rates are high, classrooms are accommodating an increased number of pupils, including those with behavioural problems. Consequently, managing these

larger class sizes, particularly in the context of pupils facing behavioural challenges, presents an intricate challenge for educators.

In essence, the insights gleaned from the participants' responses highlight a spectrum of challenges faced by teachers in the Tamale Metropolis when dealing with pupils exhibiting behavioural problems. These challenges range from inadequate training, difficulty in identification, and the intricacies of adapting teaching methods to managing classroom dynamics and resource limitations. Addressing these challenges would require comprehensive strategies to enhance teacher training, facilitate student identification, and offer appropriate instructional support to ensure the optimal educational experience for all pupils.

Research Question Five: What are the Methods used by Primary School Teachers in Managing Behavioural Problems Tamale Metropolis?

The fifth objective of this study aimed to evaluate the array of methods employed by teachers to effectively address pupils with behavioural issues. Table 12 presents the analyses of results.

Table 12: Method used by Teachers to Manage Pupils Behavioural Problems

Sub-scales	Mean	Std. Deviation
I set clear class/ school rules, routines and standards	2.7	1.3
I use positive reinforcement techniques such as praise, rewards, and recognition to encourage desired behaviors in pupils	1.5	0.5

I train them in social skills	2.4	1.0
I change their sitting position	2.8	1.0
I ask questions to draw their attention back to classroom	3.1	1.5
I foster a sense of community and support among pupils through peer mentoring or buddy systems.	1.6	0.6
I develop personalized behavior plans for pupils with specific behavioral challenges, outlining strategies to address their unique needs.	2.1	0.6
I arrange the classroom layout to minimize distractions and create a conducive learning environment	1.6	0.5
I use behavior contracts to establish agreements with pupils, outlining expectations and consequences for specific behaviors	2.2	0.6
I readjust instructional method	3.1	0.7

Source: Field Data, 2023

Data pertaining to this objective were collected using a Likert Scale ranging from 1 to 4, where 4 represented "All the time," 3 denoted "sometimes," 2 indicated "Occasionally," and 1 signified "Never used at all." The analysis of data pertinent to this objective was conducted through Mean Item Scores (MIS). The summarized outcomes of this analysis are presented in Table 12. The MIS were computed by dividing the aggregate scores of each item by the total number of participants.

As presented in table 12, the mean scores ranged from 1.5 to 3.1, reflecting varying degrees of teacher engagement with techniques for managing behavioural issues among pupils. The item "I use positive reinforcement techniques such as praise, rewards, and recognition to encourage desired behaviours in pupils" recorded the lowest mean score of 1.5 with a standard deviation of 0.5. This low score, coupled with minimal deviation, indicates that this technique was rarely used by most teachers, with limited variation in responses.

Conversely, the items "I ask questions to draw their attention back to the classroom" and "I readjust instructional methods" each garnered the highest mean score of 3.1. The standard deviations for these items were 1.5 and 0.7, respectively, signifying frequent use of these strategies, although the higher standard deviation for the former suggests more variation in its application among respondents. Similarly, the items "I set clear class/school rules, routines, and standards" and "I change their sitting position" achieved mean scores of 2.7 and 2.8, respectively, with standard deviations of 1.3 and 1.0. These findings suggest that these techniques were frequently employed, though with some variability in their adoption.

For items like "I train them in social skills" and "I develop personalized behaviour plans for pupils with specific behavioural challenges," mean scores were 2.4 and 2.1, with standard deviations of 1.0 and 0.6, respectively. These scores indicate occasional use, with moderate consistency across respondents. In contrast, the techniques "I foster a sense of community and support among pupils through peer mentoring or buddy systems" and "I arrange the classroom layout to minimize distractions and create a conducive learning environment"

recorded lower mean scores of 1.6 each, with standard deviations of 0.6 and 0.5. This suggests these techniques were rarely applied, with minimal variation among teachers.

Finally, the use of behaviour contracts to outline expectations and consequences for specific behaviours attained a mean score of 2.2 with a standard deviation of 0.6, suggesting occasional use with slight variation among respondents. The absence of mean scores reaching the maximum scale of 4 underscores a general lack of extensive application of these techniques, highlighting significant gaps in behavioural management practices in primary schools within the Tamale Metropolis. These findings suggest the need for targeted professional development to enhance the consistent and effective use of a broader range of techniques for managing behavioural challenges.

Research Question Six: What is the Moderation Effect of Professional Development in the Relationship between Teacher Professional knowledge and Management of Pupil's Behavioural Problems?

The table 13 provides the results of the moderating effects of teacher professional development in the relationship between teacher professional knowledge and managing behaviour problems.

Table 13: Moderating Effects of Teacher Professional Development in the Relationship Between Teacher Professional Knowledge and Managing Behaviour Problems

Variable	Coef	Stand. Err	T	P> t
TPK	.020	.029	10.643	.000
MMPBP	.303	.027	22.073	.000
ITT	.586	.038	5.827	.000
F=0.00				
R^2=0.907				

Source: Field Data, 2023

(TPK=Teacher professional Knowledge, MMPBP= Methods of Managing Pupils Behavioural Problems, IIT= Interaction Term)

To answer this question, the researcher investigated the moderation effect of teacher professional development, acting as the moderator variable, on the relationship between teacher professional knowledge (independent variable) and behavioural management (dependent variable) using the Hayes' PROCESS macro (Model 1).

The computed coefficients as shown in Table 13 revealed a statistically significant interaction between teacher professional knowledge and teacher professional development ($\beta = 0.57$, p=0.00 < .05), indicating a notable moderation effect. The interpretation of this interaction effect indicates that the relationship between teacher professional knowledge and behavioural management is contingent upon the varying levels of teacher professional development. This moderation effect offers valuable insights into how teacher professional development influences the relationship between teacher professional knowledge and effective behavioural management in educational settings.

Discussion of Findings

This section discusses the findings that were made in the analysis and related them to existing literature and the theories that were adopted to provide an analytical framework for the study

Teacher Pedagogical Content Knowledge and Management of Problem Behaviours

The regression analysis yielded an R-value of 0.632, indicating a moderate to strong relationship between teacher professional knowledge and the

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management of problem behaviours in the classroom. The R² value of 0.400 suggests that approximately 40% of the variance in classroom behaviour management can be explained by the predictors. The F-statistic of 15.81 (p < 0.001) confirms that the overall model is statistically significant, meaning the predictors collectively contribute to explaining variations in behaviour management.

The results revealed that all indicators of teacher professional knowledge, except for technological pedagogical content knowledge (TPCK), significantly influenced the management of problem behaviours in the classroom. Subject matter knowledge showed the strongest effect, followed by pedagogical content knowledge and general pedagogical content knowledge. However, TPCK did not have a statistically significant impact, suggesting that its role in managing problem behaviours may be less direct or context specific.

These findings underscore the critical importance of foundational and pedagogical knowledge in equipping teachers to effectively address behavioural challenges in classroom settings. The lack of significance for TPCK may indicate that while technology integration is valuable for instructional purposes, it does not directly contribute to managing student behaviour.

The results revealed that subject matter knowledge had the strongest influence on managing problem behaviours in the classroom. This means that teachers with deep content knowledge are better equipped to design engaging lessons that hold students' attention and foster a productive learning environment. This aligns with the Theory of Positive Reinforcement (Premack, 1959), which suggests that engaging and well-structured lessons act as positive reinforcers, encouraging desired student behaviours. Additionally, Operant

Conditioning Theory (Skinner, 1957) explains that teachers with expertise can shape student behaviour by reinforcing appropriate actions during lessons. Empirical studies by Paramita et al. (2020) and Qobilovna (2023) support the idea that strong subject knowledge enhances classroom management by reducing behavioural disruptions.

Pedagogical content knowledge also significantly influenced behaviour management. Teachers who effectively tailor their teaching strategies to specific topics engage students better, reducing behavioural challenges. This finding aligns with the Operant Conditioning Theory, which suggests that teachers can influence behaviour by using teaching strategies as reinforcements to encourage participation and reduce disruptions. Additionally, Social Learning Theory (Bandura, 1977) highlights that students are more likely to imitate positive behaviours demonstrated by teachers who are effective in their instructional methods. Empirical research by Huang and Lajoie (2021) highlights the importance of pedagogical content knowledge in fostering engaging and disciplined classrooms.

General pedagogical content knowledge positively influenced behaviour management. Teachers with strong general pedagogical skills can create structured and supportive classroom environments, which help minimize disruptions. This finding aligns with Social Learning Theory, which emphasizes the role of observational learning, where students emulate the positive behaviours demonstrated by their teachers. Additionally, the Theory of Positive Reinforcement supports the idea that structured and supportive environments act as reinforcers for good behaviour. Empirical studies by Golafroz Ramezani

et al. (2013) and Andreou and Rapti (2010) highlight that proactive classroom management techniques are essential for reducing behavioural issues.

Technological pedagogical content knowledge (TPACK), however, did not significantly influence behaviour management. While technology can enhance teaching, it may not directly address behavioural challenges unless integrated effectively. This finding aligns with the Operant Conditioning Theory, which suggests that technological tools must be strategically used as reinforcements to shape desired behaviours. Furthermore, Social Learning Theory implies that students may not necessarily model appropriate behaviours from technology alone unless guided by the teacher. Empirical studies by Celik (2023) and Hämäläinen et al. (2021) emphasize that TPACK requires thoughtful integration to impact classroom management meaningfully. These findings stress the importance of equipping teachers with the necessary skills and resources to address behavioural challenges effectively.

Behavioural Problems of Primary School Pupils in the Tamale Metropolis

The findings from the study offer significant insights into the various behavioural problems exhibited by primary school pupils in the Tamale Metropolis. The identified issues, which encompass lateness to school activities, classroom disruptions, bullying, physical fights, truancy, and instances of refusal to take instructions against authority figures, shed light on the complex dynamics within the educational landscape of the region. Lateness to school activities can disrupt the learning process and impact classroom dynamics, potentially leading to reduced academic engagement. Classroom disruptions pose challenges for both pupils and teachers, hindering effective teaching and learning. Instances of bullying and physical fights create an environment of fear

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and insecurity, affecting pupils' emotional well-being and potentially deterring their enthusiasm for attending school. Truancy, a recurring problem in many educational contexts, can result in missed learning opportunities and hinder academic progress. Refusal to take instructions from authority figures reflects issues related to discipline and respect, indicating a breakdown in the pupil-teacher relationship.

The findings concerning the range of behavioural problems encountered by primary school teachers in the Tamale Metropolis are strongly in line with the prevailing literature that addresses similar challenges in diverse educational contexts. These findings reflect well-established patterns of behaviour that have been extensively documented in research worldwide. For instance, the identification of lateness and truancy among pupils is consistent with existing literature that underscores the detrimental effects of irregular attendance on academic performance and student engagement. Studies conducted by Klopfer et al. (2019) and Markelz et al. (2018) demonstrated how absenteeism can lead to missed learning opportunities, hinder academic progress, and contribute to disengagement from school activities. This alignment highlights the universal nature of the issues surrounding student attendance and their implications for educational outcomes.

Furthermore, the observation of classroom disruptions resonates with several research highlighting the impact of disruptive behaviours on the learning environment. Disruptions can range from talking out of turn to more overt behaviours that disrupt teaching and distract other pupils. The literature consistently emphasizes the need for effective classroom management strategies to address disruptive behaviours and create an environment conducive to

learning (Klopfer et al., 2019; Markelz et al., 2018; Oliver & Reschly, 2007). The experiences in the Tamale Metropolis reflect broader trends in educational research regarding the challenges educators face in maintaining an optimal classroom atmosphere. This study, however, adds a new dimension by investigating the extent to which teachers are trained to manage these behaviours within the specific context of Tamale Metropolis.

The recognition of bullying and physical fights aligns with extensive literature that addresses the psychological and physical consequences of such behaviours. Research across countries consistently shows that bullying and physical altercations can lead to increased stress, anxiety, and a negative school climate (Oliver & Reschly, 2010; Staff et al., 2021; Stevenson et al., 2020). In-depth studies on bullying have highlighted the long-term effects on victims and the importance of implementing anti-bullying programs to promote a safe and inclusive school environment. The findings from the Tamale Metropolis underscore the universal need for proactive measures to prevent and address bullying behaviours. It also nuances the debate of this by contextualising the study within the specific context of Tamale where culture and tradition uniquely influence the nature of educational policies and programs

Similarly, the identification of refusal to take instructions against authority figures as a behavioural challenge aligns with research that examines student-teacher relationships and their influence on classroom dynamics. This aspect of the findings reflects broader discussions on student engagement, discipline, and the importance of fostering positive interactions between educators and pupils (Markelz et al., 2018; Staff et al., 2021). The literature emphasizes that creating a respectful and supportive teacher-student

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relationship is fundamental to maintaining a positive learning atmosphere and managing behavioural issues effectively (Markelz et al., 2018; Staff et al., 2021; Stevenson et al., 2020). In the specific context of Tamale, this finding hinges on the key cultural requirement which demands absolute respect for constituted authority. What this means is that refusal to take instructions by pupils to teachers and school administrators is taken more seriously in the context of Tamale Metropolis compared to other jurisdictions and such instances may have dire consequences on student-teacher relationships.

In essence, the alignment between the findings from the Tamale Metropolis and existing literature on behavioural problems among pupils reinforces the universality of these challenges. By acknowledging and addressing these issues through evidence-based strategies, educators, administrators, and policymakers in the Tamale Metropolis can draw insights from global research to develop contextually relevant interventions that contribute to a positive and enriching educational experience for primary school pupils.

Levels of Training Received by Teachers to Manage Pupils with Behavioural Problems

The study's findings reveal that teachers reported to have been trained on the appropriate methods of reinforcement in the classroom as a technique of managing pupils with behavioural problems but were partially trained in handling pupils with varying educational backgrounds. The study also highlights areas where training appears to be lacking such as training on the knowledge and skills to deal with behavioural problems in the classroom and training on updated modern strategies of managing behavioural problems.

These findings highlight both strengths and areas needing improvement in the training of teachers for managing pupils' behavioural problems in the Tamale Metropolis. While certain aspects have been well-addressed, there are gaps in training that call for targeted interventions to ensure educators are adequately equipped to handle the diverse behavioural challenges that arise within the classroom.

This aligns with existing literature that emphasizes the importance of classroom and behaviour management in teacher training. Numerous researchers have highlighted the need for effective training programs that not only teach teachers what skills to use but also consider how to best teach these practices within the context of a teacher preparation program .Behavioural teacher training has been found to be the most effective non pharmacological classroom intervention for addressing behaviour problems among pupils (Staff et al., 2021; Stevenson et al., 2020). These training programs teach teachers to change a child's behaviour using stimulus control techniques, which can reduce teacher burden and increase levels of teacher self-efficacy(Staff et al., 2021)

The discovery that teachers reported being trained in "appropriate methods of reinforcement" is consistent with established research advocating for the use of positive reinforcement strategies in classroom management. For example, existing literature highlights the effectiveness of techniques like praise, rewards, and incentives in promoting desired behaviours among pupils (Klopfer et al., 2019; Markelz et al., 2018; Oliver & Reschly, 2007; Staff et al., 2021; Stevenson et al., 2020). Teachers who receive training in these methods are better equipped to create a positive classroom environment that encourages positive conduct.

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The finding that teachers were only partially trained in handling pupils with varying educational backgrounds resonates with broader discussions on the challenges of diverse classrooms. Existing literature recognizes the need for teachers to possess culturally responsive pedagogical skills to address the diverse needs and backgrounds of pupils (Markelz et al., 2018; Oliver & Reschly, 2007). For instance, educators in multicultural settings might encounter pupils with different language proficiencies or learning styles. Comprehensive training can empower teachers to adapt their instructional approaches to accommodate these differences effectively.

Moreover, the identified gaps in training, such as "knowledge and skills to deal with behavioural problems in the classroom" and "updated modern strategies of managing behavioural problems," align with existing literature that highlights discrepancies in the quality and coverage of teacher preparation programs (Klopfer et al., 2019; Staff et al., 2021; Stevenson et al., 2020). This echo concerns raised by educational researchers about the need to continuously update teacher training curricula to align with evolving educational landscapes and emerging behaviour management strategies. For instance, modern strategies might include the integration of technology or innovative approaches to behaviour intervention that reflect contemporary educational practices. The study's findings also echo a common theme in educational research: the need for ongoing professional development (Klopfer et al., 2019; Markelz et al., 2018; Oliver & Reschly, 2007). The recognition that certain aspects of behaviour management training have been well-addressed while others require targeted interventions aligns with the literature advocating for continuous training and support for teachers. For instance, workshops, seminars, and

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mentoring programs are recommended avenues for teachers to enhance their skills and address specific areas of deficiency.

In summary, the study's findings align with existing literature by emphasizing the significance of comprehensive and on-going teacher training in managing pupils' behavioural problems. The areas of training identified in the study, the strengths, and the gaps underscore the need for educators to have a diverse skill set that enables them to effectively address the complex behavioural challenges that can arise within the classroom. By aligning training programs with best practices and evolving educational contexts, educators can be better prepared to foster a positive and inclusive learning environment for all pupils.

Challenges Faced by Teachers in Managing Pupils with Behavioural Problems

The study's finding reveals that teachers in the Tamale Metropolis face a diverse range of challenges when dealing with pupils exhibiting behavioural problems is in line with existing literature that acknowledges the complexities of managing classroom dynamics and fostering a conducive learning environment. These challenges encompass various aspects, reflecting the multifaceted nature of behaviour management within educational settings.

Firstly, the study's identification of inadequate training resonates with the broader discourse on the need for comprehensive teacher preparation. Existing literature frequently highlights the importance of equipping educators with a diverse toolkit of strategies to address behavioural issues effectively (Oliver & Reschly, 2007, 2010; Staff et al., 2021). Inadequate training can hinder teachers' ability to understand the underlying causes of behavioural

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problems and implement appropriate interventions. For example, without proper training, teachers might struggle to differentiate between behavioural issues rooted in personal challenges and those resulting from external factors.

The finding that teachers encounter challenges in identifying pupils with behavioural problems reflects a common concern in educational research. Identifying behavioural issues is a nuanced task that requires a deep understanding of pupils' individual needs and behaviours. Existing literature emphasizes the need for teachers to possess strong observation skills and the ability to discern between normative behaviour and potential underlying problems (Klopfer et al., 2019; Oliver & Reschly, 2010; Staff et al., 2021). For instance, a teacher might need to differentiate between a student's occasional disruptive behaviour due to curiosity and a consistent pattern of disruptive behaviour stemming from behavioural challenges.

Furthermore, the study's recognition of challenges related to adapting teaching methods aligns with the broader understanding that each student's learning style and behavioural profile is unique. Existing literature highlights the importance of differentiation in instruction to accommodate diverse student needs (Klopfer et al., 2019; Oliver & Reschly, 2010; Staff et al., 2021; Stevenson et al., 2020). Teachers may need to adjust their pedagogical strategies to engage pupils with behavioural problems effectively. For example, a teacher might employ alternative teaching materials or individualized approaches to help a student who struggles with attention-related challenges.

The challenges of managing classroom dynamics and resource limitations resonate with a longstanding discussion in education. The presence of pupils with behavioural issues can disrupt the overall classroom environment,

making it essential for teachers to implement effective classroom management strategies. Limited resources, both material and human, can further complicate the teacher's ability to address behavioural problems adequately. Existing literature suggests that collaborative efforts, involving administrators, parents, and external support services, can help alleviate these challenges and create a more supportive learning environment (Oliver & Reschly, 2010; Staff et al., 2021; Stevenson et al., 2020).

In conclusion, the study's findings shed light on the array of challenges faced by teachers in the Tamale Metropolis when dealing with pupils exhibiting behavioural problems. These challenges encompass aspects of training, identification, instructional adaptation, classroom management, and resource constraints. Aligning with existing literature, these findings underscore the need for comprehensive strategies that enhance teacher training, facilitate accurate student identification, and provide appropriate instructional support. By addressing these challenges holistically, educators can better equip themselves to create an inclusive and effective learning environment that caters to the diverse needs of all pupils.

Methods used in Managing Pupils with Behavioural Problems

The study's findings unveiled a spectrum of techniques employed by teachers in managing pupils with behavioural problems. These techniques encompassed positive reinforcement, the establishment of clear rules, changes in seating arrangements, as well as the utilization of questioning to regain student attention and the adjustment of instructional approaches. Additionally, the study identified techniques such as fostering community support and developing personalized behaviour plans.

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These findings underscore teachers' efforts to address behavioural challenges through diverse strategies, aiming to create a conducive learning environment. However, the study also indicated that these were not applied all the time highlighting the existing limitations in effectively tackling behavioural challenges within primary schools in the Tamale Metropolis. This observation indicates that while teachers employ a range of techniques, no single approach is extensively applied to effectively manage such challenges. This might point to potential gaps in the implementation of strategies or the need for further professional development to enhance teachers' skills in handling diverse behavioural issues. These findings also emphasize the complex nature of behaviour management and the importance of comprehensive support systems and continuous training to equip educators with the tools needed to address behavioural challenges effectively and create a positive learning environment for all pupils.

The findings of the study align with the theory of operant conditioning, particularly in the context of behaviour management techniques employed by teachers. Operant conditioning, a psychological theory developed by B.F. Skinner, emphasizes how behaviour is shaped and modified by the consequences that follow it. The study's identification of various techniques used by teachers, such as positive reinforcement, rule-setting, and adjustment of instructional methods, reflects the principles of operant conditioning. Positive reinforcement, one of the techniques mentioned in the study, is a core concept of operant conditioning (Skinner, 1953). Teachers using positive reinforcement, such as praise, rewards, and recognition, to encourage desired behaviours align with the operant conditioning principle that behaviour is more

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likely to be repeated if it is followed by a positive outcome. The technique of setting clear rules and routines also aligns with operant conditioning, as it provides a structured environment where pupils can associate certain behaviours with specific consequences.

Furthermore, the technique of changing pupils' sitting positions, using questions to regain attention and adjusting instructional methods align with operant conditioning's focus on modifying behaviour through environmental changes and stimuli. These methods aim to prompt desired behaviours through altering the classroom environment or providing cues that lead to specific responses, which is a central idea in operant conditioning.

The findings further resonate with Premack's principle, which is a concept derived from operant conditioning theory. Premack's principle states that a high-probability behaviour can be used to reinforce a low-probability behaviour. In the context of education and behaviour management, this principle suggests that engaging in a preferred or desirable activity can serve as a reward or reinforcement for completing a less preferred or challenging task (Premack, 1959).

The study's identification of various behaviour management methods, including positive reinforcement, aligns with Premack's principle. Positive reinforcement involves providing a rewarding experience to increase the likelihood of a desired behaviour. For instance, the study mentions the use of positive reinforcement techniques like praise, rewards, and recognition to encourage desired behaviours in pupils. This resonates with Premack's principle by offering a high-probability activity (receiving praise or rewards) as

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reinforcement for a low-probability behaviour (engaging in desired classroom behaviour) (Premack, 1959).

Additionally, the study's findings that certain techniques are more frequently employed than others reflect the concept of varying probabilities of behaviours. Premack's principle suggests that a behaviour with a higher probability of occurrence can reinforce a behaviour with a lower probability (Premack, 1959). In the study's context, techniques that are more frequently used might be inherently more preferred or easier to apply, serving as a form of reinforcement for both teachers and pupils when managing behavioural challenges.

Overall, the findings of the study align with operant conditioning and Premack's principle by highlighting how behaviour management techniques, including positive reinforcement, can be applied in educational settings to encourage desired behaviours in pupils. The principle's focus on the relationship between high-probability and low-probability behaviours underscores the strategic use of preferred activities to reinforce less preferred behaviours, contributing to effective behaviour management strategies.

Moderating Role of Teacher Professional Development in the Relationship between Teacher Professional Knowledge and Management of Pupils' Behavioural Problems

The study's finding that teacher professional development effectively moderates the correlation between teacher professional knowledge and the adept management of pupils exhibiting behavioural problems underscores the significant role of on-going training and skill enhancement in educational contexts. This result implies that when teachers receive targeted professional

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development; their ability to effectively manage behavioural challenges among pupils is positively influenced.

Teacher professional development serves as a mechanism to bridge the gap between theoretical knowledge and practical application. In this context, when teachers gain insights and strategies through training programs, workshops, or courses related to behaviour management, they become better equipped to translate their knowledge into actionable techniques that address real-world classroom situations. This aligns with the idea that enhancing teachers' skills and knowledge through training can lead to more proficient management of pupils' behavioural issues (Oliver & Reschly, 2007). Furthermore, the finding aligns with the concept of "praxis," which emphasizes the integration of theory and practice. Teacher professional development provides opportunities for educators to engage in reflective practice, refine their strategies, and adapt their approaches based on evidence and best practices. By doing so, teachers can better navigate the complexities of managing pupils' behavioural problems in diverse and dynamic classroom environments.

This result implies that when teachers receive targeted professional development; their ability to effectively manage behavioural challenges among pupils is positively influenced. Teacher professional development serves as a mechanism to bridge the gap between theoretical knowledge and practical application. In this context, when teachers gain insights and strategies through training programs, workshops, or courses related to behaviour management, they become better equipped to translate their knowledge into actionable techniques that address real-world classroom situations. This aligns with the idea that enhancing teachers' skills and knowledge through training can lead to

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more proficient management of pupils' behavioural issues. Again, the finding aligns with the concept of "praxis," which emphasizes the integration of theory and practice. Teacher professional development provides opportunities for educators to engage in reflective practice, refine their strategies, and adapt their approaches based on evidence and best practices (Staff et al., 2021). By doing so, teachers can better navigate the complexities of managing pupils' behavioural problems in diverse and dynamic classroom environments.

The finding that teacher professional development effectively moderates the correlation between teacher professional knowledge and the adept management of pupils exhibiting behavioural problems aligns with existing literature in the field of education and teacher training. Numerous studies have highlighted the positive impact of professional development on teachers' instructional practices, classroom management skills, and overall effectiveness in addressing diverse student needs (Markelz et al., 2018; Staff et al., 2021; Stevenson et al., 2020).

Existing literature emphasizes that teacher professional development is essential for enhancing instructional strategies and equipping teachers with the tools needed to effectively manage classroom dynamics, including behavioural challenges (Markelz et al., 2018; Oliver & Reschly, 2010; Staff et al., 2021; Stevenson et al., 2020). When teachers receive targeted training related to behaviour management techniques, they become better prepared to apply theoretical knowledge in real-world situations, like the finding in this study. This alignment showcases the broader consensus that professional development is a crucial mechanism for closing the gap between theoretical understanding and practical implementation.

Furthermore, existing research underscores the importance of on-going, context-specific training in order to create lasting positive effects on classroom practices (Staff et al., 2021; Stevenson et al., 2020). This aligns with the study's implication that teacher professional development serves as a moderator between knowledge and effective behavioural management. Such alignment emphasizes the need for tailored training programs that consider the unique challenges and needs of educators, enabling them to navigate the complexities of student behaviour in diverse educational settings.

Chapter Summary

The study revealed that teachers in the Tamale Metropolis encounter a significant number of pupils' behavioural problems. The study identified gaps in the level of training received by teachers on managing pupils' behavioural problems which needs improvement. Also, the study shed light on the array of challenges faced by teachers when dealing with pupils exhibiting behavioural problems. The study highlighted the existing limitations in the methods and techniques used in managing pupils' behavioural problems and its existing limitations in effectively handling of behaviour problems. Teacher professional knowledge serves as a mechanism to bridge the gap between theoretical knowledge and practical application.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview of the Study

The research was to find out the influence of teacher professional knowledge on management of pupil's behavioural problems and the moderating role of teacher professional development. The investigation specifically looked for common behavioural problems faced by teachers, the level of training received teachers in dealing with behavioural problems, challenges teachers face in dealing with pupils' behavioural problems, method and techniques used in dealing with pupils' behavioural problems and the moderating effect of professional development in relationship between teacher professional knowledge and management of pupil's behavioural problems in the Tamale Metropolis.

The study was conducted by adopting the quantitative approach. A descriptive survey design was adopted for the conduct of the study. The sample size for the study was 300. This was obtained using Yamane's formula for sample size determination. Stratified and Simple Random Sampling techniques was used to select teachers from primary Schools situated within the Tamale Metropolis.

Questionnaires were used to gather primary data which were analysed using both descriptive and inferential statistical tools. All ethical considerations prescribed by the Institutional Review Board (IRB, UCC) was followed as expected.

The data was analysed using both descriptive and inferential statistical tools. Specifically, data on demographic characteristics of respondents were

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analysed using frequency and percentage counts. Data on the first objective were analysed using linear regression. Data for the second objective was analysed using frequencies, and percentages and these were presented in tables. The third and five objectives were analysed using Mean Item Scores (MIS). The fourth was analysed using a Relative Importance Index (RII) while the sixth was analysed using a Hayes PROCESS macro, Model 1.

Key Findings

The major findings that developed from the study were as follows:

1. The study found that teacher subject matter competence (Coe=0.42, p=0.001), teacher pedagogical knowledge (Coe=0.38, p=0.001) and teacher general knowledge (Coe=0.29, p=0.002) all influence the management of problem behaviours by teachers

2. The study found that lateness to school recorded a higher score (32.7%) amongst other behavioural problems such as classroom disruptions (18.0%) and bullying (16.3%).

3. The least found behavioural problem was pupils' refusal to take instructions 7.3%, indicating resistance to authority within the school context. These findings provide insights into the diverse behavioural challenges faced by educators in the Tamale Metropolis.

4. The study found varying extent of training received by teachers in the Tamale Metropolis for managing behavioural problems. Distinct mean scores were found for various strategies and this highlight strengths and areas for improvement in training programs, showcasing the need for targeted enhancement in certain aspects of behavioural problem management.

5. The study revealed prevalent challenges in managing pupils with behavioural problems in the Tamale Metropolis. The foremost concern, indicated by the highest Relative Importance Index (RII) of 3.94, is the inadequate training available to effectively address behavioural challenges.

6. The adaptation of instructional methods to accommodate pupils with behavioural challenges also came up as a significant challenge (RII = 3.40), hindering the seamless integration of such pupils into regular classrooms.

7. Classroom management in the presence of behavioural problems also emerged as a substantial concern (RII = 3.37), reflecting difficulties in maintaining conducive learning environments. Additionally, the absence of tailored teaching materials for specialized classes was mentioned (RII = 3.35), impacting effective instruction and support.

8. Teachers showed occasional implementation of positive reinforcement techniques, changing sitting positions, fostering peer support, developing personalized plans, arranging classroom layout, and using behaviour contracts. Conversely, items such as setting clear rules, changing sitting position indicate frequent application in managing behavioural challenges.

9. The analysis of methods and techniques of managing behavioural problems revealed mean scores with a range of 1.5 to 3.1. The absence of higher scores (4) highlights the infrequent extensive use of techniques. This underscores the inadequate management of behavioural challenges in primary schools in the Tamale Metropolis.

10. The study found that teacher professional development moderates the relationship between professional knowledge and managing pupils' behavioural problems effectively. The presence of a positive value in the interaction term suggested a moderating effect, consistent with Dalal and Zickar (2012) model. The significant p-value associated with the interaction term in the Hay's process model affirmed that teacher professional development moderates the correlation between professional knowledge and managing pupils' behavioural problems effectively.

Conclusions

According to the study, all indicators of teacher professional knowledge, except for technological pedagogical content knowledge, significantly influenced the management of problem behaviours in the classroom. This means that professional teachers' knowledge in managing problem behaviours is very crucial in the management process. Therefore, it can be concluded that teachers' professional knowledge has an impact on managing pupils' behavioural problems.

The study revealed prevalent behavioural problems experienced by public primary school teachers in the Tamale Metropolis. In my view, these identified issues underscore the complex dynamics that educators encounter daily, necessitating comprehensive strategies for addressing and mitigating these challenges to create a conducive learning environment.

The results indicated evident gaps in the level of training received by teachers to effectively manage pupils with behavioural problems. It can be concluded that, inadequate training does hinder teachers' ability to understand

the underlying causes of behavioural problems and to implement appropriate interventions.

The study revealed prevalent challenges in managing pupils with behavioural problems in the Tamale Metropolis. The study therefore concludes that, teachers in the Metropolis do encounter difficulties in maintaining order and effective learning environments where pupils exhibit challenging behaviours.

From the results, it was found that comprehensive and context-specific approaches are required to equip educators with the necessary skills and strategies to tackle the wide spectrum of behavioural challenges faced. The study therefore concludes that, teachers do not employ diverse strategies and techniques for managing behavioural problems.

The study revealed a statistically significant interaction between teacher professional knowledge and teacher professional development. It can be concluded that teacher professional development moderates the relationship between professional knowledge and managing students' behavioural problems effectively

Ultimately, this study contributes to the existing literature on behavioural issue management in educational settings and provides valuable insights for educators, policymakers, and researchers alike. By understanding the challenges and strengths highlighted in this study, stakeholders can collaborate to develop targeted interventions that foster a harmonious and conducive learning environment, enabling both teachers and pupils to thrive.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are put forth by the researcher:

1. *Comprehensive Teacher Training Programs*: It is recommended that the Ministry of Education develop and implement comprehensive teacher training programs that address a wide range of behavioural challenges. These programs should focus on equipping teachers with the necessary skills and strategies to effectively manage various behavioural issues, such as lateness, disruptions, bullying, and truancy. Training should cover positive reinforcement techniques, social skills development, and strategies for addressing specific behavioural concerns.

2. *Enhanced Student Identification Techniques*: It is recommended that the Ghana Education Service establish effective systems for identifying pupils with behavioural problems early on. Schools should encourage open communication among teachers, pupils, and parents to detect behavioural issues promptly. This can enable timely interventions and support to prevent behavioural problems from escalating.

3. *Tailored Instructional Support*: It is recommended that the Northern Regional Education Directorate should provide teachers with specialized instructional support to accommodate pupils with behavioural challenges. This includes strategies for adapting teaching methods and classroom dynamics to create an inclusive learning environment. Developing personalized behaviour plans and fostering

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peer mentoring or buddy systems can contribute to more effective classroom management.

4. *Up-to-Date Training Content:* It is recommended that the Ministry of Education should update teacher training content to incorporate modern strategies and techniques for managing behavioural problems. Focus on integrating technology, innovative teaching methods, and evidence-based practices that have proven effective in behavioural issue management. This will empower teachers to stay current and adapt to evolving student behaviours.

5. *Collaboration and Resources:* It is recommended that teachers should foster collaboration among themselves, parents, and community members to collectively address behavioural challenges. Schools should allocate resources for behaviour management tools, counselling services, and learning materials tailored to pupils' diverse needs. Creating a supportive network can enhance the overall educational experience and enable more effective management of behavioural issues.

Suggestions for Further Research

The following suggestions were made for future research:

1. It will be prudent for future researchers to use a qualitative, mixed-methods research strategy to study the same research question.

2. This study should be replicated in private schools in the Tamale Metropolis. This will greatly increase generalizability to other schools and populations.

3.   In a similar vein, it's crucial to determine professional teachers' management of behavioural problems to that of their non-professional counterparts.

4.   It is also advised that future studies use a bigger sample size to corroborate the results of this study.

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APPENDICES

APPENDIX A

QUESTIONNAIRE FOR TEACHERS

Dear Participant, please you are invited to respond to these questionnaires prepared to collect data on my research work entitled *'Influence of teacher professional knowledge on management of pupils with behavioural problems: moderating role of teacher professional development*.' You are assured that any response given will be treated with outmost anonymity and confidentiality. For this reason your name is not required. The research is meant for academic purposes. Thank you.

Section A: Personal Information

1.   Age

    a. 20-24 [ ]   b. 25-29 [ ] c. 30-34 [ ] d. 35- plus [ ]

2.   Sex   a. Male [ ]   b. Female [ ]

3.   Marital status: a. Single [ ] b. Married [ ] c. Divorced [ ]

4.   Educational Background: a. Diploma [ ] b. Degree [ ] c. Masters [ ]

     d. others (specify)……………….

5.   Number of years in this position: a. 1 - 4[ ]   b. 5-8[ ] c. 9 – 12 [ ]   d. 13 + [ ]

Section B: Common Behavioural Problems Faced by Teachers in Primary Schools in the Tamale Metropolis

The following are common behavioural problems faced by teachers in primary schools in the Tamale Metropolis. Please in the best way you can kindly indicate what you think about the following statements such that **1=Almost Always, 2= Frequently, 3= Occasionally and 4=Rarely**

S/N	Statement	1	2	3	4
1	Lateness				
2	Truancy				
3	Bullying				
4	Fighting				
5	Noise making				

6	Disturbance in class				
7	Disrespect to teachers				
8	Refusal to take instructions				

Section C: Level of Training Received by Teachers in Managing Behavioural Problems in Tamale Metropolis

The table shows different trainings giving to teachers during pre-service or in-service training in managing behavioural problems. Please tick the appropriate box on a scale of 1-4. Where **4= well received, 3= received, 2= partially received**, 1 = **never received,**

S/N	Statement	1	2	3	4
1	Training on the knowledge and skills to deal with behavioural problems in the classroom				
2	Training on different aspects of managing behavioural problems.				
3	Training on identifying the root causes of pupils' behavioural problems.				
4	Training on developing effective strategies for behavioural assessment				
5	Practical demonstrations and hands-on practice in managing behavioural problems.				
6	Training on updated modern strategies for crises interventions				
7	Training on managing behavioural problems using modern educational technologies				
8	Training on integrated behavioural problem management procedures				
9	Training in techniques for promoting positive behaviour				
10	Training on appropriate reinforcement methods				

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Section D: Challenges teachers face in managing pupils with behaviour problem

The following are challenges teachers face in managing behaviour problems. Please rate each item accordingly such that **1= strongly disagree, 2= Disagree, 3 = Agree, 4= strongly agree**

S/N	Statement	1	2	3	4
1	Lack of specialized training				
2	Problem identifying pupils with behaviour problems				
3	Adaptation of curriculum and instructional methods on behaviour problems				
4	Lack of conducive classroom environment				
5	Lack of teaching and learning resources				
6	High enrolment				
7	lack of specialized training in handling pupils with special needs education				
8	High workload				
9	Lack of recreational facilities and equipment				
10	Lack of access to school counsellors				
11	Congested classrooms in public primary schools				
12	lack of support from the school administration				
13	Limited time for individualized support				
14	lacked the capacity and competencies to teach pupils with varying learning abilities				

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Section E: Methods used by primary school teachers in managing pupils with behaviour problems

The table shows intervention strategies often used by teachers to manage pupils with behavioural problems in schools. Please tick the appropriate box on a scale of 1-4 as appropriate to you. Where **4-All the time, 3- Sometimes, 2-Ocassionally, 1-Never used at all**

S/N	Statement	1	2	3	4
1.	I ensure that the classroom is well organised e.g. spacing and layout				
2.	I set clear class/ school rules, routines and standards				
3.	I use positive reinforcement techniques such as praise, rewards, and recognition to encourage desired behaviours in pupils.				
4.	I train them in social skills				
5.	I send pupils out for some moments				
6.	I change their sitting position				
7.	I try to involve parents when the behaviour persists				
8.	I involve the counselling coordinator				
9.	I readjust instructional method				
10.	I ask questions to draw their attention back to classroom				
11.	I set clear behavioural expectations and rules for the classroom, and consistently enforce them to establish a structured learning environment				
12.	I foster a sense of community and support among pupils through peer mentoring or buddy systems.				
13.	I develop personalized behaviour plans for pupils with specific behavioural challenges,				

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	outlining strategies to address their unique needs.				
14.	I arrange the classroom layout to minimize distractions and create a conducive learning environment.				
15.	I use behaviour contracts to establish agreements with pupils, outlining expectations and consequences for specific behaviours.				

SECTION F: TEACHER PROFESSIONAL DEVELOPMENT

The table shows practices of teacher professional development activities. Please tick the appropriate box on a scale of 1-4 as appropriate to you. **4-All the time, 3- Sometimes, 2-Ocassionally, 1-Never used at all**

S/N	Teacher Professional Development Activities	1	2	3	4
1.	I participate and attend teacher professional development programs or workshops, seminars and conferences				
2.	I actively engage in discussions, asking questions, sharing ideas, and collaborating with colleagues to tap from their experiences				
3.	I apply newly acquired knowledge, skills, or instructional strategies in my classrooms.				
4.	I adapt my teaching practices based on professional development experiences				
5.	I engage in reflective practices, such as self-assessment, analysing student data, and critically evaluating my teaching methods, to identify areas of improvement and adjust my instructional approaches accordingly.				

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6.	I collaborate and share best practices with fellow teachers, either within the same school or through professional networks, to enhance my teaching effectiveness and gain new insights.				
7.	I Receive and seek feedback from colleagues, instructional coaches, or administrators to assess my teaching performance and identify areas for professional growth.				
8.	I Integrate technology tools and resources into instructional practices to enhance student learning.				
9.	I am committed to continuous professional growth by pursuing further education, attending conferences, reading professional literature, or engaging in online learning opportunities.				
10.	I take up leadership roles within the school or district, such as mentoring new teachers, leading professional learning communities, or participating in curriculum development initiatives.				
11.	I constantly look to learn new ways of monitoring and analysing student educational outcomes				

APPENDIX B

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST

COLLEGE OF DISTANCE EDUCATION

GRADUATE STUDIES UNIT

Tel #:   0332091217

Fax: 042 - 36946

E-mail: code.postgraduate@ucc.edu.gh

University Post Office

Cape Coast

Cape Coast, Ghana

Our Ref: CoDE/G.7/I/V.3/153   **29th September, 2021**

The Chairperson
Institutional Review Board
University of Cape Coast
Cape Coast.

Dear Sir,

A LETTER OF INTRODUCTION: IDDRISU SALAMATU

The bearer of this letter is a student of the College of Distance Education, University of Cape Coast with student registration number ED/EPS/19/0001. She is pursuing a Master of Philosophy degree in Educational Psychology. She is investigating the topic "**Assessment of Teachers' Professional Knowledge on Management of Children with Behavioural Problem(s) in Primary Schools in the Tamale Metropolitan District, Ghana**".

Kindly extend to her any curtesy she may require in relation to her research and postgraduate studies at the University of Cape Coast.

Thank you.

Yours faithfully,

Dr. Felix Kumedzro.

(**Coordinator**)

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APPENDIX C

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309
E-MAIL: irb@ucc.edu.gh
OUR REF: UCC/IRB/A/2016/1359
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096

18TH MAY, 2022

Ms. Salamatu Iddrisu
College of Distance Education
University of Cape Coast

Dear Ms. Iddrisu,

ETHICAL CLEARANCE – ID (UCCIRB/CoDE/2021/10)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research **Assessment of Teachers' Professional Knowledge on Management of Children with Behavioural Problem(s) in Primary Schools in the Tamale Metropolitan District, Ghana.** This approval is valid from 18th May, 2022 to 17th May, 2023. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST

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APPENDIX D

RELIABILITY OUTPUT

Reliability Statistics

Construct	No. of Observed Items	No. of Retained Items	Cronbach Alpha
Demographic Characteristics	11	10	.98
Behavioural Problems of Pupils in primary schools	9	9	.95
Training in Managing Behavioural Problems	8	8	.84
Challenges in Managing Behavioural Problems	13	10	.97
Methods and Techniques of Managing Behavioural Problem	22	20	.89
Teacher Professional Development	11	8	.91

Source: Field Data, 2022