

**INFLUENCE OF CLASSROOM MANAGEMENT STRATEGIES ON THE
PERFORMANCE OF STUDENTS WITH AUTISM SPECTRUM DISORDER. A CASE
STUDY OF HVP GATAGARA/GIKONDO**

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DECLARATION

I, Imanaturikumwe Victor confirm that this research project is my original work and has never been submitted to any university for awarding a degree or other award.

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DECLARATION BY THE SUPERVISOR

This is to certify that the present research project entitled “Influence of Classroom Management Strategies on The Performance of Students with Autism Spectrum Disorder. A Case Study of HVP Gatagara /Gikondo” has been developed under my guidance and here submitted upon my approval.

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DEDICATION

This thesis is dedicated to God,
my cherished spouse NTAKIRUTIMANA Chantal ,
my family members including my parents, siblings, and relatives
and to all my companions and acquaintances.

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ABSTRACT

The research titled " Influence of Classroom Management Strategies on The Performance of Students with Autism Spectrum Disorder. A Case Study of HVP Gatagara /Gikondo " is driven by the underperformance of students with Autism Spectrum Disorder (ASD). This underperformance signifies an insufficient application of modern teaching methodologies, among other factors. To accomplish the general objective, the study (1) identified effective classroom management strategies tailored for students with ASD, (2) assessed the academic performance and behavioral outcomes of students with ASD as influenced by these classroom management strategies and (3) investigated the relationship between classroom management strategies and the academic performance of students with ASD at HVP Gatagara /Gikondo. The research population comprised 29 respondents including 26 teachers, Head Teacher, the Deputy Director of studies and the Resource Room Manager. Data collection involved the utilization of questionnaires, interview guides and direct classroom observation guides. The collected data were analyzed and interpreted using both qualitative and quantitative approaches. The findings of the study reveal that classroom management strategies such as rules implementation, praise and reward systems and delegation of authority and student supervision are implemented. However, observation findings indicate that these strategies are not effectively implemented. Also, the findings evidenced that about classroom management affects behavioral outcomes of students with ASD implemented. Additionally, the findings show that students with ASD do not perform as expected due to the ineffective classroom management strategies, as evidenced by a Pearson Correlation Coefficient (r) of .798**, indicating a strong correlation. The research concludes by emphasizing that effective classroom management strategies should be utilized to improve the academic performance of students with ASD at HVP Gatagara/Gikondo.

Key words: *Classroom Management , Academic Performance, Autism, HVP Gatagara*

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LIST OF ABBREVIATIONS ACRONYMS

ACP	academic performance
ASD	Autism Spectrum Disorder
COP	Corporal punishment
DEA	Delegation of authority
EST	Ecological Systems Theory
et al.,	et alii (and others)
HVP	Home of the Virgin of the Poor
MOEST	Ministry of Education Science and Technology
PAR	Participatory Action Research
PLS	Partial Least Squares
PPM	Pearson Product Moment
SEM	Structural Equation Modeling
SLT	Social Learning Theory
SNE	Special Needs Education
SPSS	Statistical Package for Social Science
SS	Secondary School
VI	verbal instruction

OPERATIONAL KEY TERMS

- Autism spectrum disorder:** A neurodevelopmental condition characterized by challenges in social interaction, communication and behavior.
- Classroom Management:** The strategies, techniques, and practices employed by educators to establish and maintain a conducive and organized learning environment within a classroom setting.
- Classroom management strategies:** The various techniques, methods, and approaches used by educators to create and maintain a positive and productive learning environment in the classroom.

CHAPTER ONE: GENERAL INTRODUCTION

1.0 Introduction

This chapter presents the background to the study, statement of the problem, research objective, research questions and hypotheses, significance of the study, scope of the study and the structure of the study

1.1 Background to the Study

Autism Spectrum Disorder (ASD) is a neuro-developmental condition characterized by challenges in social communication and interaction, alongside restricted and repetitive patterns of behavior and interests (CDC, 2021). Students with ASD often encounter difficulties in traditional classroom settings due to sensory sensitivities, communication barriers, and challenges in adapting to changes in routine. These challenges can significantly impact their academic performance and overall educational experience (Buescher *et al.*, 2014). Teachers from all over the world are using several strategies to deal with normal classroom management problems. Teachers use classroom management strategies to decrease failures in the classroom develop self-control and academic performance of students with ASD (Saima *et al.*, 2023).

Effective class management as an important part of instruction, it plays a pivotal role in creating an inclusive and supportive environment for students with ASD. Tailored interventions, accommodations, and teaching approaches have shown promise in improving academic outcomes and fostering social and behavioral development among these students (Shawer, 2010). Class management helps to minimize students' disruptions during instruction, it ensures that teaching-learning is completed in a conducive learning environment, and it is considered an important part that affects academic performance of students with ASD (Omoteso & Semudara, 2011).

Class management strategies include rules strategy; praise and rewards strategy; group engagement strategy and effective instructional methods; these strategies are aimed at producing conducive learning environment, where students with ASD can learn with ease and perform better academically. All of these strategies can be adopted in the classroom depending on the nature of the problem at hand (George *et al.*, 2017). As far as rules strategy is concerned, the teacher may set rules in the classroom, if a student breaks these rules, he /she may face from the punishments. Therefore, students may know the importance of classroom rules to decrease disorders in class. However, effective praise and rewards are very paramount in encouraging and reinforcing desired behaviors and achievements. Delegating authority allows students with ASD to develop critical skills such as problem-solving, decision-making, time management, which are essential for them to achieve their academic performance (Okon, 2009).

Teachers implement instructional supervision as a valuable technique for effective classroom management. This approach entails actively moving around the classroom to closely observe students, actively engaging them in academic activities. Through a combination of asking questions and employing various verbal and non-verbal teaching methods, instructional supervision aims to ensure that students are fully focused, actively participating, and extracting maximum value from the lesson (George *et al.*, 2017).

On the other hand, student academic performance is the quality and quantity of knowledge, skills, techniques and positive attitudes, behaviors and philosophy that students achieve. This achievement is evaluated by the marks or grades that student attain in tests or examinations done at the end of the topic, term or year or education cycle. Hence, the quality of the grades and the number of students that pass in various grades determine the level of performance (Kaggwa, 2003). Effective class management strategies help in establishing a structured and supportive classroom environment. For students with ASD, who often thrive in predictable settings, a well-managed classroom can reduce anxiety and promote a sense of safety, thereby enhancing their focus and attention on academic tasks (Saima *et al.*, 2023).

Ultimately, when class management strategies are tailored to meet the unique needs of students with ASD, it positively influences their learning outcomes. Increased engagement, reduced stress, and improved social interactions within a well-managed classroom can lead to better academic performance, allowing students with ASD to achieve their educational potential (Wong, 2014).

Class management is daily routines that includes classroom rules for student effort in teaching time and the type of motivation used. Some teachers can manage classrooms that have a constructive effect on the student's achievement, but some methods may impact students' performance negatively. However, little is known concerning how classroom management affects student inferences by teacher class management style. Therefore, it was necessary to study the effect of class management on academic performance of students with ASD.

1.2 Statement of the Problem

Effective classroom management is crucial for creating a conducive environment to instruction and learning. When classroom management is effective, a conducive learning environment is created, promoting the academic success of students with ASD. Teachers can provide tailored support, addressing the unique needs of these students. Positive outcomes may include improved academic performance, increased engagement, enhanced social skills, and a more inclusive and supportive school culture (Leonidah *et al.*, 2022). Conversely, ineffective classroom management can lead to disruptive behaviors, hindering the learning process for students with ASD. The lack of structure and support may result in decreased academic performance, heightened stress levels, and challenges in social integration (Liu & Cao, 2022). Additionally, the overall educational environment may suffer, potentially leading to a decline in the academic reputation of the school and affecting student enrollment.

The number of children accessing education remains remarkably low, and even those enrolled often lack the necessary accommodations in the classroom. Insufficient teachers' trainings and skills further compound the issue, as educators struggle to meet the diverse needs of students with ASD (Leonidah *et al.*, 2022). This lack of support is evident in the limited application of behavioral management strategies, contributing to poor development and academic performance among these students (Saima *et al.*, 2023). The consequence is poorly managed classrooms

marked by disruptive behaviors, disrupting teaching-learning processes and adversely affecting the academic performance of students with ASD (Stone & Rosenbaum, 2018; Leonidah *et al.*, 2022).

In recent years, the prevalence of Autism Spectrum Disorder (ASD) has gained increasing attention in Rwanda, reflecting a broader trend observed in many developing countries. Although specific prevalence data for Rwanda is scarce, a study by Ndayisaba *et al.* (2021) reported that approximately 1 in 160 children in urban areas displayed symptoms consistent with ASD. This emerging awareness highlights the need for more comprehensive diagnostic efforts and the development of reliable data collection methods, particularly in rural areas where healthcare services are less accessible.

The Rwandan education system faces significant challenges in supporting children with ASD. According to REB. (2022), while there are ongoing initiatives to promote inclusive education, resources and trained personnel remain limited. A NCPD (2022) emphasized the urgent need for specialized teacher training, the development of appropriate educational materials, and the creation of inclusive school environments to adequately support children with ASD. These efforts are crucial for ensuring that children with ASD receive the necessary support to succeed in the Rwandan educational landscape.

Despite the increasing prevalence of ASD and the recognized impact of effective classroom management strategies in inclusive educational settings, research shows that such strategies significantly improve behavioral outcomes and engagement for students with ASD. For instance, a study by Simpson, de Boer Smith-Myles and Ganz (2020). (2020) found that structured classroom environments, clear routines, and individualized support positively influence the academic and social performance of students with ASD. Additionally, the UNESCO (2021) emphasizes that inclusive educational practices, when properly implemented, lead to better academic outcomes for students with disabilities, including those with ASD.

However, there exists a gap in understanding the specific influence of these strategies on the academic performance of students with ASD, especially in the context of Rwanda.

Empirical evidence is lacking, and the teachers often lack the necessary training and skills to support these students effectively. This study aims to fill this empirical gap by assessing the effect of class management on the academic performance of students with ASD in Rwanda, with a special focus on HVP Gatagara/Gikondo.

1.3 Research Objectives

This study is directed by the general objective and specific objectives. The following are the objectives of this study.

1.3.1. General objective

The general objective of the study was to assess the influence of class management on academic performance of students with ASD in Rwanda with a special reference to HVP Gatagara/Gikondo

1.3.2. Specific objectives

The specific objectives of the study are:

1. To identify effective classroom management strategies applied for students with ASD at HVP Gatagara/Gikondo
2. To assess the academic performance and behavioral outcomes of students with ASD at HVP Gatagara/Gikondo as influenced by classroom management strategies
3. To investigate the relationship between classroom management strategies and academic performance of students with ASD at HVP Gatagara/Gikondo according to teachers perceptions

1.4 Research Questions

To achieve the above research objectives, the following research questions are formulated to guide this study:

1. What are effective classroom management strategies tailored for students with ASD at HVP Gatagara/Gikondo?
2. How is the academic performance and behavioral outcomes of students with ASD at HVP Gatagara/Gikondo as influenced by classroom management strategies?
3. What is the relationship between classroom management strategies and academic performance of students with ASD at HVP Gatagara/Gikondo according to teachers perfectionists ?

1.5 Significance of the Study

The outcomes derived from this study offer substantial benefits to the researchers and various stakeholders involved. The investigation furnished the researcher with valuable insights into the impact of classroom management on the academic performance of students with autism spectrum disorder (ASD) in Rwanda.

Additionally, it aided the researcher in aligning theoretical research methodologies with practical applications, enhancing their professional competence for future career prospects. This study is conducted as part of the requirements for obtaining a Master's degree in Education from UR.

Furthermore, upon submission to UR main library, this research project becomes the university's property. It will significantly contribute to the body of knowledge within the academic community, including students, lecturers, and interested readers, by supplementing existing literature on the effects of classroom management on the academic performance of students with ASD in Rwanda. The findings and referenced materials will serve as fundamental resources for future researchers in this field.

This study holds considerable significance as it will yield data crucial for numerous individuals and educational stakeholders, including the Ministry of Education, researchers, parents, and others. It will provide insights into how effective classroom management impacts the academic performance of students with ASD in secondary schools.

Moreover, the study's findings will assist teachers in evaluating the effects of their classroom management strategies on students' academic performance. Entities like the Rwanda Education Board (REB) and curriculum planners can leverage these results to integrate classroom

management skills into teacher training, thereby enhancing the academic performance of students with ASD. Teachers and parents will also gain awareness regarding the influence of disruptive behavior on academic achievement, emphasizing the necessity of fostering conducive learning environments for children with ASD.

1.6. Scope of the study

This research project was delimited in terms of space, time, and content. Geographically, the study focused on Kicukiro District in Kigali City, specifically at HVP Gatagara/Gikondo. This particular school was selected because it is the only private institution located in the Gikondo sector, offering a unique perspective on classroom management strategies within this specific context.

In addition, the study covered a period going from 2020 to 2022. This period is chosen because the researcher believes that a range of three years is enough to help the researcher to get up-to-date information on the variables under study. The data of three years are adequate to help the researcher to answer research questions, achieve specific objectives and come up with suitable conclusion.

The study focuses on the effect of class management on academic performance of students with ASD in Rwanda. The independent variable is class management, and the dependent variable is academic performance of students with ASD.

1.7 Structure of the Study

This research thesis is organized into three chapters. Chapter one is about the general introduction. It contains the background to the study, the problem statement, the research purpose, the research objectives, the research questions, the significance of the study, the scope of the study, and the structure of the study. Chapter two presents the literature review and encompasses the theoretical review, the conceptual review, the empirical review, the research gap, and the conceptual framework of the study. Chapter three entails the research methodology. Chapter four presents' findings and chapter five is about discussion of the findings, conclusion and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.0. Introduction

A literature review is an overview of the previously published works on a specific topic. Literature review is supposed to provide the researcher and the audiences with a general image of the existing knowledge on the topic under study (Bolderston, 2008). It is a comprehensive summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research. This chapter focuses on literature review in relation to the effect of class management on academic performance of students with ASD. Researcher reflects a number of studies, aimed at familiarizing the researcher with the work done by the previous researchers, scholars and authors on the specific topic under study. These may be found in textbooks, journals on Internet literatures and other published documents relevant to the topic under study.

2.1 Conceptual Literature Review

A conceptual literature review is an analytical exploration of existing literature that focuses on the theoretical concepts, frameworks and models relevant to a particular research topic or area of study (Johnson & Smith, 2019). It involves synthesizing and critically evaluating theories and conceptual frameworks proposed by various authors to develop a comprehensive understanding of the topic. Therefore, in the current study, the conceptual review is going to focus on specific objectives of the study.

2.1.1 Effective Classroom Management Strategies Tailored for Students with ASD

Effective classroom management strategies tailored for students with Autism Spectrum Disorder (ASD) are essential for creating a conducive learning environment that promotes their academic and social development. According to Shaver (2010), educators recognize the importance of implementing proactive strategies to prevent disruptions and support students with ASD in staying engaged and focused during lessons. These strategies often include clear and consistent communication, visual supports such as schedules and visual aids, structured routines, and sensory accommodations to address sensory sensitivities commonly experienced by students with ASD.

Moreover, Omoteso and Semudara (2011) highlight that effective classroom management strategies not only address behavior management but also contribute to fostering self-discipline and autonomy among students with ASD. Teachers who employ positive reinforcement techniques, provide clear expectations and rules, utilize behavior charts or token systems, and implement individualized support plans can effectively support students with ASD in developing self-regulation skills and achieving academic success. Additionally, Sieberer-Nagler (2016) underscores the importance of ongoing professional development and collaboration among educators, parents and support staff to ensure the successful implementation of these strategies and tailor them to meet the unique needs of students with ASD in the classroom. Some effective class management strategies are described in the subsequent subsections.

2.1.1.1 Rules Strategy

The rules strategy in classroom management involves establishing clear and consistent guidelines to govern behavior. These rules outline expected conduct, helping create a structured learning environment. They are communicated explicitly, ensuring students understand behavioral expectations (George *et al.*, 2017). By setting specific rules and consequences, teachers maintain order, foster a positive atmosphere, and promote student accountability, contributing to a conducive learning environment conducive to academic progress and social development (Saima *et al.*, 2023).

The use of rules is one of the techniques for effective classroom management that can be adopted by teachers (Saima *et al.*, 2023). Clear rules on what should be done give the students with ASD concrete direction to compliance. In this approach, teachers try to be consistent in enforcing rules so that it produces the desired results. Punishments are used widely as an effective classroom management technique to curb disruptive behaviors in the classroom (George *et al.*, 2017).

Rules strategy plays a vital and critical role in class management by establishing a structured and conducive learning environment. Rules outline the behavior and conduct expected from students. They set clear boundaries and expectations for appropriate behavior, creating a framework for a positive learning environment. Rules present a structure for discipline. When students with ASD understand what is expected of them, they are more likely to abide by guidelines; this reduces disruptions and supports a focused learning environment.

Setting rules in class is fundamental in reinforcing a positive learning environment, promoting student engagement and commitment, and facilitating effective teaching and learning experiences, hence academic performance (Ebimiere *et al.*, 2020).

Classroom rules and procedures that are clearly defined and posted help students understand what is appropriate and what is not, as well as the consequences for rule violations. Clear classroom rules create a framework that provides choices to students and helps them to teach them to self-manage their classroom behavior (Emmer & Evertson, 2013). Classroom rules are the foundation for a functional and successful classroom in any setting. Rules vary from procedures as they determine what the classroom looks like, what type of behavior is acceptable and encouraged, and help students with ASD to work towards a common goal and achieve their academic performance (Ratcliff, 2001). Ndiana (2009) opined that if teachers give directives on how classroom activities should be done, the classroom will be orderly enough for lessons to be affective, this may have positive impact on students' academic performance. Glasser (2018) stated that students may know the importance of classroom rules to decrease disorder schedules. The teacher may set objectives in the classroom from the start of school and abide by punishments if a student breaks these rules set by the teacher from the first day of school.

2.1.1.2 Praise and Rewards Strategy

Teachers play a pivotal role in fostering positive behaviors in their classrooms through the consistent acknowledgment and encouragement of good behavior. Praising and rewarding students not only serves as a form of appreciation but also acts as a powerful motivator, fostering a desire to continue displaying positive conduct (Soto, 2014).

Employing praise and rewards is an effective strategy used by teachers to incentivize learning and encourage students to achieve desired outcomes. Rewards, whether verbal or written, serve as motivational tools, prompting students to invest more effort in their academic pursuits (Suleiman, 2009). Verbal rewards encompass expressions of approval, appreciation, and recognition, while written rewards include positive comments and marks. Material rewards, such as notebooks or textbooks, are sparingly used and often reserved for specific instances, such as the end of a term, to recognize exceptional student performance.

Studies indicate that praise and reward systems significantly influence students' academic performance by promoting engagement in challenging tasks and increasing their dedication to learning (Burnett, 2001). The implementation of praise and reward systems has yielded positive effects on students' performance, indicating their effectiveness in encouraging desired behaviors and outputs.

The use of praise and rewards by teachers serves as a selective tool to encourage various aspects of student production, driving efficiency in academic tasks (Yahaya, 2022). Acknowledging and rewarding students' efforts not only promotes motivation but also enhances overall performance. Teachers should continue to advocate for and implement such motivational approaches as they contribute to improved student performance and engagement within the classroom.

2.1.1.3 Delegation of Authority Strategy

Delegating authority within the classroom setting is a strategy that involves assigning responsibilities and tasks to students, thereby promoting collaboration and cooperation between students and teachers. George et al. (2017) emphasize that this practice contributes to fostering a positive classroom environment by encouraging active engagement and shared responsibility among students, including those with ASD. Research by Babalola and Ayeni (2009) suggests that students with ASD exhibit enhanced academic performance and reduced disruptive behavior when given roles and responsibilities within the classroom, indicating the effectiveness of delegation of authority strategies in managing classroom dynamics.

Furthermore, delegating authority cultivates a sense of ownership and accountability among students, as noted by Denga (2001). This sense of ownership encourages students to take initiative, contribute positively to class activities, and uphold classroom rules and expectations. Adegoke (2004) supports this notion by highlighting that students, including those with ASD, appreciate and thrive in a learning environment where they are entrusted with responsibilities, leading to increased engagement and a more orderly classroom atmosphere.

Additionally, Ma'rifah and Sinaga (2023) emphasize that delegating roles to students promotes teamwork, communication, and effective learning among peers, which is particularly beneficial for students with ASD who may benefit from structured and collaborative learning experiences. By empowering students, including those with ASD, through delegation of authority strategies,

educators can foster mutual respect, encourage active participation, and create a positive and inclusive classroom atmosphere that supports the diverse needs of all learners.

2.1.1.2 Students' Supervision Strategy

Supervision within an educational setting facilitates an interactive space for teachers and students, enabling educators to discern students' strengths, weaknesses, and talents while providing timely academic support when needed. This proactive approach significantly impacts students' academic achievements (Ndiyo, 2011). Specifically for students with autism spectrum disorder (ASD), classroom supervision plays a pivotal role in fostering an inclusive environment. This involves offering guidance, monitoring, and tailored support to enhance the well-being and academic performance of these students (Abel, 2011).

Student supervision, especially concerning those with ASD, is fundamental in cultivating an inclusive learning atmosphere. It ensures individualized attention, guidance, and a supportive environment, ultimately enhancing academic outcomes (George *et al.*, 2017). Through supervision, teachers model expected behaviors and tasks, closely monitor academic progress, and identify areas for additional assistance, thereby facilitating the development of students with ASD (Safiullah *et al.*, 2023).

Effective student supervision involves personalized strategies that address the unique needs of students with ASD, fostering an inclusive and supportive learning setting conducive to academic success. It entails continuous assessment and guidance to ensure these students make meaningful progress toward their educational objectives (Saima *et al.*, 2023). Supervision, tailored to students' individual needs, stands as a critical element in supporting students with ASD, ensuring their better learning outcomes and academic success within the classroom environment.

2.1.2 Academic Performance of Students with ASD

Academic performance of students with ASD refers to their ability to meet educational standards and achieve learning outcomes within an academic setting (Mehmood *et al.*, 2015). This encompasses various aspects such as comprehension of subject matter, completion of assignments, performance on assessments and overall engagement in learning activities.

The measurement of academic performance in students with ASD involves assessing their progress and achievement in academic tasks and objectives, often using standardized tests, teacher evaluations, classroom observations, and portfolio assessments (Thompson et al., 2019). However, it's crucial to note that academic performance for students with ASD may extend beyond traditional metrics and also include fine and gross motor skills, language development, numeracy development, social skills and sensorial ability.

Academic performance for students with ASD extends beyond traditional metrics and encompasses a wide range of developmental domains. In addition to cognitive abilities and academic achievements, the assessment of academic performance in students with ASD should consider factors such as fine and gross motor skills, language development, numeracy skills, social skills and sensorial abilities (Levy & Perry, 2011). These additional dimensions are crucial in understanding the holistic academic progress of students with ASD and in designing comprehensive interventions that address their diverse needs across various domains of development.

2.1.2.1 Fine and Gross Motor Skills

Fine and gross motor skills play a vital role in the overall development and functioning of individuals, including those with ASD. Fine motor skills involve the coordination and control of small muscles, particularly in the hands and fingers, enabling activities such as writing, drawing, buttoning clothes, and using utensils. Gross motor skills, on the other hand, involve larger muscle groups and are essential for activities such as walking, running, jumping, and balancing. Both types of motor skills are integral for daily living activities and academic tasks.

Research has shown that individuals with ASD often exhibit challenges in fine and gross motor skill development. Studies by Fournier et al. (2010) and MacNeil and Mostofsky (2012) have highlighted deficits in motor coordination, motor planning, and motor execution among individuals with ASD. These challenges can impact various aspects of life, including academic performance, social interactions, and independent living skills. For example, difficulties in fine motor skills may affect handwriting legibility and speed, while deficits in gross motor skills may impact participation in physical activities and coordination tasks.

Effective interventions and strategies targeting fine and gross motor skills are essential for individuals with ASD to improve their functional abilities and overall quality of life. Occupational therapy, sensory integration therapy, and structured physical activity programs are among the interventions commonly used to support motor skill development in individuals with ASD (Pan et al., 2018; Pusponogoro et al., 2020). These interventions focus on improving motor coordination, balance, strength, and motor planning abilities, thereby enhancing the individual's independence, social participation, and academic performance.

2.1.2.2 Language Development

Language development plays a crucial role in shaping the academic performance of individuals with ASD. This development encompasses various aspects such as receptive and expressive language skills, vocabulary building, syntax, semantics, and pragmatic language use. ASD individuals often encounter obstacles in language development, including delayed speech onset, challenges in social communication, and unconventional language patterns (Tager-Flusberg et al., 2005; Volden & Phillips, 2010). These hurdles can hinder their participation in academic tasks, understanding of instructions, and ability to communicate effectively.

Evaluating language development in ASD students involves employing diverse assessment methods like standardized tests, language samples, and observations. These assessments target different language facets like vocabulary comprehension, grammar proficiency, comprehension skills, conversational abilities, and pragmatic language usage (American Speech-Language-Hearing Association, 2021). Identifying their strengths and weaknesses in language development assists in devising personalized interventions to support their academic advancement and communication competence.

Effective interventions for enhancing language development in ASD students encompass speech-language therapy, augmentative and alternative communication (AAC) systems, social communication interventions, and structured language programs. These interventions are designed to boost communication skills, improve language comprehension, impart social communication norms, and cultivate pragmatic language abilities (McDuffie et al., 2015; Kasari et al., 2014).

By addressing language challenges, these interventions contribute to enhanced academic performance, better social interactions, and overall functioning within educational environments.

2.1.2.3 Numeracy Skills

Numeracy skills are foundational in a student's academic journey, encompassing the ability to comprehend, apply, and manipulate numerical concepts. For students with ASD, developing numeracy skills can pose unique challenges due to difficulties in abstract thinking, spatial reasoning, and executive functioning (Jones et al., 2019; Chamberlain et al., 2013). These challenges may manifest in struggles with basic arithmetic, understanding mathematical concepts, problem-solving, and applying mathematical operations. However, effective interventions and tailored teaching strategies can significantly support students with ASD in acquiring and enhancing their numeracy skills.

Assessing numeracy skills in students with ASD involves utilizing various assessment tools, including standardized tests, curriculum-based measures, and observational assessments. These assessments evaluate students' proficiency in fundamental mathematical areas such as number sense, arithmetic operations, mathematical reasoning, and problem-solving (American Psychological Association, 2020). Identifying specific areas of strength and weakness in numeracy skills enables educators to design targeted interventions that address the unique learning needs of students with ASD, fostering their mathematical understanding, confidence, and academic success.

2.1.2.4 Social Skills

Social skills are integral to a student's overall development, encompassing the ability to interact, communicate, collaborate, and navigate social situations effectively. For students with ASD, developing social skills can be challenging due to difficulties in understanding social cues, nonverbal communication, perspective-taking, and social reciprocity (Bellini, 2006; Bauminger-Zviely & Kretzberg, 2012). These challenges may result in social isolation, difficulty forming friendships, and struggles in social interactions both inside and outside the classroom.

Assessing social skills in students with ASD involves evaluating their abilities in areas such as social communication, peer interaction, social-emotional understanding, and behavioral

regulation. Assessment tools may include structured observations, social skills checklists, role-playing scenarios, and self-report measures (Bellini & Akullian, 2007; White et al., 2013). Identifying strengths and areas for improvement in social skills is crucial for designing targeted interventions and support strategies that promote social competence and positive social interactions among students with ASD.

Effective interventions for enhancing social skills in students with ASD include social skills training programs, social stories, video modeling, peer-mediated interventions, and social skills groups (Krasny et al., 2003; Reichow et al., 2012). These interventions focus on teaching social rules, improving social communication, fostering peer relationships, and enhancing emotional regulation. By addressing social skills deficits, these interventions aim to increase social engagement, promote inclusion, and improve overall quality of life for students with ASD in social settings.

2.1.2.5 Sensorial Abilities

Sensorial abilities play a significant role in understanding the academic performance of students with ASD. These abilities refer to the sensory processing and integration of information from the environment, including auditory, visual, tactile, olfactory, and gustatory inputs. Individuals with ASD often exhibit differences in sensory processing, such as heightened sensitivity or hypo-responsiveness to sensory stimuli, which can impact their learning experiences and academic performance (Baranek, 2002). For example, a student with ASD who is hypersensitive to auditory input may struggle to concentrate in a noisy classroom environment, affecting their ability to engage in learning activities and comprehend instructional materials effectively (Tomchek & Dunn, 2007).

Assessing sensorial abilities in students with ASD involves using standardized assessments and observations to evaluate their sensory profiles and identify specific sensory processing patterns. These assessments may include measures of sensory modulation, sensory discrimination, sensory-based motor skills, and sensory seeking/avoiding behaviors (Dunn, 1999).

Understanding the sensory profiles of students with ASD is crucial for educators and therapists to create sensory-friendly learning environments and tailor educational interventions that accommodate their sensory needs. For instance, providing sensory breaks, using visual aids,

adjusting lighting and noise levels, and incorporating sensory integration activities can help optimize the learning experience and academic performance of students with ASD (Schaaf et al., 2014).

Furthermore, addressing sensory challenges can have a positive impact on academic outcomes for students with ASD. Research suggests that interventions focused on sensory integration and sensory regulation can lead to improvements in attention, behavior, social interaction, and academic engagement among individuals with ASD (Case-Smith & Bryan, 1999; Schaaf et al., 2015). By recognizing the link between sensorial abilities and academic performance, educators and therapists can implement evidence-based strategies that support sensory processing difficulties and promote academic success for students with ASD

2.1.2.3 Classroom Management Strategies and Academic Performance of Students with ASD

Classroom management strategies play a crucial role in influencing the academic performance of students with Autism Spectrum Disorder (ASD). The rules strategy involves establishing clear and consistent rules and expectations in the classroom, which is particularly beneficial for students with ASD who thrive in structured environments (Reichow & Volkmar, 2010). By clearly outlining rules related to behavior, participation, and academic tasks, educators can provide students with ASD a predictable and organized learning environment, reducing anxiety and improving their focus on academic tasks.

Praise and reward strategies are effective in motivating and reinforcing positive behaviors and academic achievements among students with ASD (Koegel et al., 1999). Using praise, encouragement, and rewards such as tokens, stickers, or privileges for desired behaviors and academic progress can increase students' motivation, engagement, and self-esteem, leading to improved academic performance. These strategies also help in building a positive teacher-student relationship and creating a supportive learning atmosphere.

Delegation of authority strategy involves empowering students with ASD by providing them with opportunities to make choices, express preferences, and take on leadership roles in classroom activities (Hart & Whalon, 2011). Allowing students to have a say in their learning process and responsibilities can boost their sense of autonomy, independence, and self-

confidence, which are essential factors for academic success. Educators can delegate tasks, assign roles, and involve students in decision-making processes, fostering a sense of ownership and engagement in their education.

Supervision strategies for students with ASD focus on providing individualized support, monitoring progress, and addressing challenges promptly (Odom et al., 2003). This involves close supervision, observation, and ongoing assessment of students' academic and behavioral performance to identify areas of strength and areas needing improvement. By supervising students with ASD, educators can offer timely interventions, adaptations, and support strategies tailored to their unique needs, ultimately enhancing their academic outcomes and overall learning experience.

Therefore, effective classroom management strategies, including clear rules, praise and reward systems, delegation of authority, and personalized supervision, can significantly impact the academic performance of students with ASD. These strategies create structured, motivating, and supportive learning environments that cater to the diverse needs of students with ASD, leading to increased engagement, motivation, and success in academic tasks and learning outcomes.

2.2 Theoretical Review

This study is underpinned by a comprehensive theoretical framework that draws on two pivotal theories in the field of education and developmental psychology: Social Learning Theory (SLT) proposed by Albert Bandura and Ecological Systems Theory (EST) introduced by Urie Bronfenbrenner. These theories serve as foundational pillars, offering valuable insights into the learning processes and environmental influences that shape the academic performance of students, particularly those with autism spectrum disorder (ASD), within the specific context HVP Gatagara/Gikondo.

2.2.1 Social Learning Theory (SLT)

The Social Learning Theory (SLT), proposed by Albert Bandura in 1966, is a pivotal concept highlighting how individuals learn through observation, imitation, and modeling in a social context (Bandura, 1977). This theory diverges from traditional behaviorist theories by emphasizing the role of cognitive processes, such as attention, memory, and motivation, in the

learning process (Muro & Jeffrey, 2008). According to its proponents (Bandura), individuals acquire behaviors by observing others and imitating those behaviors, particularly if they perceive positive consequences or rewards associated with the observed behavior.

The theory revolves around three fundamental principles: observation, imitation, and modeling. Observational learning occurs as individuals observe and pay attention to the actions and behaviors of others within their social environment (Bandura, 2006b). Following observation, individuals may imitate or replicate the behavior they witnessed, especially if they perceive it as advantageous or rewarding (Newman & Newman, 2007). Bandura terms this process as modeling, wherein individuals learn and adopt behaviors through observation and subsequent imitation of others.

Social Learning Theory assumes that learning occurs through social interactions and posits that individuals can acquire new behaviors and information by observing others (Bandura, 2006b). Moreover, it suggests that learning through observation and imitation is not restricted by age, implying that individuals can continually learn from influential models throughout their lives (Newman & Newman, 2007).

In the context of studying the impact of class management on the academic performance of students with ASD in Nyarugenge District, Social Learning Theory holds crucial relevance. Understanding how students with ASD learn, especially through observation and modeling of behaviors, can inform effective class management strategies (Muro & Jeffrey, 2008). Implementing positive behavioral models and reinforcement within the classroom environment may influence the learning and performance of students with ASD. Additionally, considering SLT's emphasis on cognitive processes in learning, it underscores the importance of creating an environment conducive to stimulating attention, memory, and motivation for these students, potentially enhancing their academic performance.

2.2.2 Ecological Systems Theory

Ecological Systems Theory (EST), an influential framework proposed by Urie Bronfenbrenner, offers a holistic approach to understanding human development within the context of various environmental systems (Bronfenbrenner, 1979). This theory, explored comprehensively by Crawford (2020), highlights the dynamic interplay between individuals and their environments,

emphasizing the intricate connections among biological, psychological, and social elements in shaping human growth and development. Bronfenbrenner conceptualized human development as a product of reciprocal interactions between an individual and the diverse systems existing within their environment (Bronfenbrenner, 1979). He stressed that these interactions are pivotal in molding an individual's developmental trajectory and highlighted the significance of experiences in facilitating enduring developmental changes (Bronfenbrenner, 1979).

The foundational aspects of EST include five interrelated systems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1979; Crawford, 2020). Each system represents a distinct layer of influence that collectively shapes an individual's growth across their lifespan. The microsystem, the innermost layer, encompasses an individual's immediate environment, comprising interactions with family, peers, school, and other daily settings (Bronfenbrenner, 1979). It is within this system that the most direct and immediate influences on an individual's development occur. The quality of relationships and experiences within the microsystem significantly impacts psychological growth and behavioral changes (Bronfenbrenner, 1986).

Moving outward, the mesosystem emphasizes the interconnectedness between different microsystems (Bronfenbrenner, 1979). It elucidates how the interactions and synergies among various settings, such as school-home dynamics, affect an individual's development. The interplay between these microsystems contributes to a broader understanding of developmental processes (Bronfenbrenner, 1983b). The exosystem encompasses environments that indirectly influence an individual, like a parent's workplace or community organizations, impacting the individual without their direct involvement (Bronfenbrenner, 1979).

This layer demonstrates the complexity of reciprocal relationships between environments and individuals, illustrating how events or situations outside an individual's immediate context can exert influence (Bronfenbrenner, 1979; Bronfenbrenner & Evans, 2000).

Furthermore, the macrosystem comprises broader cultural and societal influences, encompassing societal norms, values, and ideologies that shape interactions within the micro-, meso-, and exosystems (Bronfenbrenner, 1979). It accounts for societal blueprints impacting an individual's development and influences the functioning of other systems (Bronfenbrenner, 1994). The

chronosystem, added later to the theory, integrates the dimension of time and historical context into developmental analyses (Bronfenbrenner, 1979). It considers not only aging and maturation but also societal events and historical periods that influence an individual's experiences and developmental trajectories (Bronfenbrenner, 1994).

This theory is highly relevant to the current study as it provides a holistic framework to understand how individuals, in this case, students with ASD, are influenced by various environmental systems. In the context of the study, the microsystem is crucial as it represents the immediate environment of these students, including the classroom, interactions with teachers, peers, and family. Effective class management practices within this microsystem can significantly impact students' experiences, academic performance, and socio-emotional development. For students with ASD, a well-managed classroom can create a supportive and structured environment, positively influencing their learning outcomes.

Moreover, the mesosystem highlights the interaction between different microsystems. For instance, the collaboration between teachers, special educators, and parents can create a cohesive support network for students with ASD. Effective communication and coordination between these systems could enhance the students' learning experiences both within and outside the classroom. Additionally, the macrosystem and chronosystem are pertinent as they consider cultural influences and historical contexts. Understanding the societal norms, cultural perceptions, and historical factors in Nyarugenge District that shape attitudes towards students with ASD can aid in tailoring effective class management strategies that align with these cultural contexts.

2.3 Empirical Review

Safiullah *et al.* (2023) examined the impact of classroom management on students' academic achievement at the secondary school level in Peshawar. The study population comprised all secondary school teachers in Peshawar. The sample of the study was 240 secondary school teachers, who were randomly selected. Students' achievement scores were obtained from the class IX annual examination results of BISEP. The data was analyzed through the Pearson coefficient of correlation, and regression analysis was used to test the hypothesis. The study found a positive relationship between classroom management and students' achievements. It was

also found that the teaching-learning process and students' achievements had a positive relationship. It was confirmed that classroom rules play a positive role in the achievement level of the students. It was also indicated that rewards and punishments contribute to the student's achievements.

Saima *et al.* (2023) explored the impact of classroom management strategies on students' academic achievement at the elementary level. A Likert scale questionnaire was used to collect data from the teachers on group engagement, monitoring, communication, and academic achievement. The researcher administered the questionnaire personally, and the response rate was one hundred percent. The researcher met the class teachers and got the examination scores for English subjects. By using the lottery method of a sample, thirty-three girls' schools were chosen by taking 100 teachers working under the Federal Directorate of Education Islamabad. Moreover, this research study analyzed the frequency, mean, and standard deviation. The researcher developed an observation checklist to test these strategies in a natural setting. The observation sheet has two main options, yes or no, which were designed to validate the strategies. It was further analyzed with the help of an ANOVA. The findings of the study on the ANOVA test revealed that teachers who use classroom management strategies such as praise and reward, encouraging group engagement, and communication have a greater impact on students' high achievement. Teachers who use these strategies but not more frequently, like physical arrangement, rules, time management, and monitoring, have a lesser impact on the scores of students.

Ma'rifah and Sinaga (2023) assessed the impact of classroom management characteristics on student academic performance (ACP) in Indonesian educational institutions. For this purpose, a quantitative research approach and a cross-sectional research design were used to test this objective. The researchers applied the explanatory research approach. The self-administered survey used in this research was distributed among 500 students using a convenient sampling technique. The Partial Least Squares (PLS)-Structural Equation Modeling (SEM) results indicate that among the five dimensions, verbal instruction (C) has a positive and significant effect on student ACP. Corporal punishment (COP) also has not a significant and positive effect on ACP. Instructional supervision also has a positive and significant effect on ACP. Delegation of

authority (DEA) also has a positive and significant effect on ACP, while the presentation of data also has a positive and significant effect on ACP.

Omoruyi and Aigbedion (2015) investigated the impact of classroom management techniques on students' academic performance in selected junior secondary schools in the Municipal Area Council. To achieve this objective, the primary method of data collection was used, and the Statistical Package for Social Science (SPSS) program mean and simple percentages were used for analysis. The responses from the respondents through questionnaires were presented in tables and analyzed. From the research results, it is noticed that there is a significant difference between classroom management techniques in junior secondary schools in the Municipal Area Council and a positive impact of classroom management techniques on students' academic performance in junior secondary schools in the Municipal Area Council. According to the research findings, there is a strong relationship between classroom management techniques and students' academic performance in junior secondary schools in the Municipal Area Council.

Leonidah *et al.* (2022) investigated the impact of mainstreaming on the educational experiences of autistic learners in primary schools within Nyamache sub-county, Kisii County, Kenya. The study aimed to evaluate the effects of Peer Interaction, Learner's Self-Management, Antecedent Procedures, and Peer-Mediated Interventions on the educational experiences of learners with autism in mainstream schools. Employing a descriptive survey design, the study purposefully selected 11 out of 102 primary schools with autistic learners. The respondents included 11 head teachers and 36 Special Needs Education (SNE) trained teachers, totaling 47 participants.

Data collection utilized structured questionnaires and observation schedules, with analysis incorporating both descriptive (frequency, percentages) and inferential statistics (Spearman correlation, chi-square test).

The findings demonstrated the significant role of the identified strategies in enhancing the educational experiences of autistic learners within mainstream schools. Respondents largely concurred on the pivotal role of peer interaction in improving educational experiences for ASD learners. Likewise, learner's self-management, antecedent procedures, and peer-mediated learning were considered important strategies in enhancing educational experiences. The chi-square test and Spearman correlation indicated a strong association between these strategies and the educational experiences of autistic learners in mainstream primary schools.

Conclusively, mainstreaming positively impacts ASD learners, facilitating skill acquisition through peer interaction, thereby effectively enhancing their educational experiences. The study recommends widespread improvements in mainstreaming across schools to accommodate learners facing challenges. Additionally, stakeholders, particularly within the Ministry of Education Science and Technology (MOEST), should take a leading role in recommending strategies to address diverse learning needs within classrooms.

Chalak and Fallah (2019) examined the influence of classroom management on undergraduate students' academic accomplishments, exploring perspectives from both teachers and students. It holds two primary objectives: one scrutinizing classroom management factors from teachers' viewpoints, and the other assessing students' perceptions. The initial objective aimed to discern influential factors in classroom management, strategies employed by teachers, and how these affect students' academic performance. A cohort of thirty-five randomly chosen teachers from Yazd Province's Science and Art University participated by responding to a questionnaire consisting of three sets of six questions each.

The findings highlighted the impact of students' needs, teachers' knowledge, and teachers' skills on classroom management. Teachers emphasized the importance of raising awareness during instructional activities. They considered effective classroom management as pivotal for fostering a successful learning environment and nurturing a friendly teacher-student relationship, thereby enhancing students' academic achievements. The students' responses, gathered using a Five-Likert scale, emphasized the necessity of incorporating modern technologies in classrooms to facilitate learning. Furthermore, students advocated for transparency, strict adherence to rules and regulations, and adherence to scheduled timelines within the classroom setting.

George *et al.* (2017) explored the relationship between Effective Classroom Management and Students' Academic Performance in Secondary schools within Uyo Local Government Area. Four research questions and four null hypotheses were formulated as a guide for the investigation. Employing a survey design, the study targeted a population of 2044 Senior Secondary School One (SS1) students, selecting a sample of 200 students from 5 public secondary schools across 4 clans within the study area. Data collection utilized a researcher-

designed questionnaire, comprising 25 items with a 4-point rating scale, focusing on the study variables.

The reliability of the research instrument was established with a Pearson Product Moment (PPM) Correlation Coefficient of 0.94, affirming its suitability for the study. Following data collection, scoring, and collation, the obtained data underwent chi-square (χ^2) analysis, and all null hypotheses were tested at a 0.05 level of significance. The study's results revealed significant differences among SS1 students in public Secondary Schools in Uyo Local Government Area concerning academic performance based on factors such as verbal instruction, corporal punishment, instructional supervision, and delegation of authority to learners. Consequently, the study concluded that these aspects influenced students' academic performance. It is recommended that teachers enhance their skills in classroom management to positively impact students' academic achievements.

2.4 Research Gap

The current study aims to bridge several critical gaps identified in the existing literature on the impact of classroom management on the academic performance of students with Autism Spectrum Disorder (ASD). One of the primary gaps addressed by this research is the lack of studies within the context of ASD.

The studies reviewed encompass diverse geographical locations, ranging from Pakistan (Safiullah *et al.*, 2023) and Indonesia (Ma'rifah & Sinaga, 2023) to Nigeria (Omoruyi & Aigbedion, 2015) and Kenya (Leonidah 2022). However, there is a gap concerning studies from Rwanda, particularly within HVP/Gatagara. The absence of studies within this specific region warrants a focused investigation into how classroom management impacts students with autism spectrum disorder (ASD) in Rwanda, considering unique contextual factors and challenges present in the area.

Furthermore, while previous research has acknowledged the impact of classroom management strategies on academic achievement, few studies have directly addressed the efficacy of these strategies for students with autism spectrum disorder (ASD). Hence, there is a gap in the literature concerning studies specifically focusing on the impact of classroom management

strategies on the academic performance of students with ASD in both inclusive and specialized educational settings. Moreover, the existing studies covered diverse classroom management strategies such as peer interaction, rewards, verbal instruction, and corporal punishment. However, there's a lack of in-depth exploration into the specific impact of various strategies tailored for ASD students in the Rwandan context. Investigating the effectiveness of specialized strategies like visual aids, sensory-friendly environments, personalized support, and social skill development could contribute to a more comprehensive understanding of effective classroom management for ASD students.

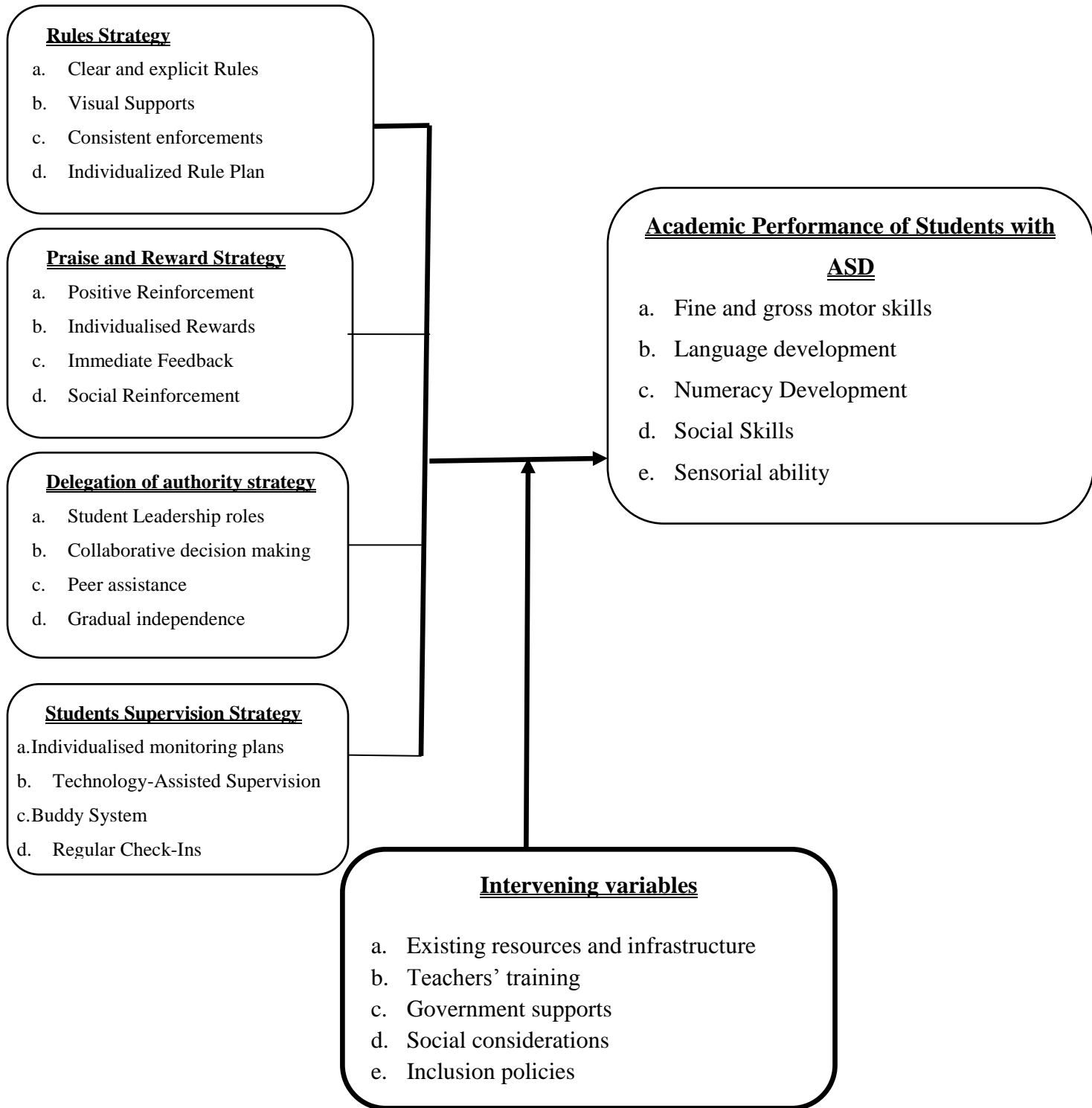
The reviewed studies employed various methods to measure academic performance, including exam scores, surveys, and statistical analyses. A research gap exists in the standardized measurement of academic performance among students with ASD in HVP Gatagara/ Gikondo, necessitating a standardized and tailored approach to assess their achievements and progress effectively. Therefore, this study endeavors to address the aforementioned gaps in the literature by providing context-specific insights into effective classroom management strategies for students with ASD in HVP Gatagara/ Gikondo, Rwanda. Through its focus on tailored strategies and specialized assessment methods, the research aims to offer valuable contributions to the understanding and enhancement of academic outcomes for students with ASD in HVP Gatagara/ Gikondo.

2.5 Conceptual Framework

The following framework presents, in diagrammatical manner, the relationship between independent, dependent and intervening or extraneous variables of the study. The conceptual framework model interlinks independent, dependent and intervening variables as presented below:

Figure 1: Conceptual Framework Model

Classroom Management Strategies



Source: (Researcher (2024))

Figure 2.1 shows the conceptual framework model of the current study in order to understand how class management strategies interact with intervening variables to influence students' academic performance. The independent variables in this framework represent different strategies employed by teachers in managing their classrooms. These strategies, including rules implementation, praise and reward systems, delegation of authority, and students' supervision, are influential factors in shaping the classroom environment and interactions between teachers and students. These strategies aim to foster discipline, motivation, engagement, and effective learning practices among students.

The dependent variables encompass measurable outcomes or indicators reflecting students' academic performance. Fine and gross motor skills, language development, numeracy development, social skills and sensorial ability are pivotal aspects that demonstrate the impact of class management strategies on students' learning outcomes and overall academic success. These variables serve as indicators to evaluate the effectiveness of the strategies implemented in the classroom.

The intervening variables, namely the availability of resources and infrastructures, play a crucial role in influencing the relationship between class management strategies and academic performance. These intervening factors encompass various elements such as teachers' training, government support, social considerations, and inclusion policies. Adequate resources, teacher training programs, governmental policies, and inclusive environments can significantly impact the implementation and effectiveness of class management strategies. For instance, teachers' training on effective classroom management can enhance their ability to employ these strategies, while supportive government policies and inclusive environments can provide the necessary framework for their successful implementation.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0. Introduction

This chapter covers the general research setting and conduct of the study. It deals with research design and methodology, target population, sampling procedures and techniques, data collection tools and procedures and data analysis techniques that are used.

3.1. Research Design

This study employed a Participatory Action Research (PAR) design to systematically explore the influence of classroom management strategies on the academic performance of students with ASD, specifically focusing on the case study of HVP Gatagara/Gikondo. The PAR design was selected for its capacity to engage stakeholders (educators, parents and students) in the research process, fostering collaboration and ensuring that the study's outcomes are both contextually relevant and actionable (Kemmis & McTaggart, 2000).

The research design encompasses a comprehensive strategy integrating various components to effectively address the research problem. It involves a multi-phase approach, including initial needs assessment, collaborative planning, implementation, and evaluation phases. During the needs assessment, data was collected through interviews and focus groups with key stakeholders to identify existing classroom management strategies and the specific challenges faced by students with ASD. The collaborative planning phase involved developing tailored classroom management strategies based on stakeholder input, ensuring that these strategies addressed the identified needs.

In the implementation phase, these strategies were applied within the HVP Gatagara/Gikondo context, with ongoing feedback and adjustments made through iterative cycles of observation and consultation. Data collection methods included classroom observations, surveys and performance assessments to measure the impact of the implemented strategies on student academic performance and engagement. The evaluation phase involved analyzing both quantitative and qualitative data to assess the effectiveness of the strategies and their alignment with the needs of students with ASD. This participatory approach not only provided an in-depth understanding of the local dynamics but also actively involved the school community in refining

and implementing effective classroom management strategies, thereby aligning with the study's goal of enhancing academic performance and fostering positive change.

3.2. Research Methods

The study used both qualitative and quantitative methods. Qualitative research involves the examination of the characteristics of phenomena, encompassing their attributes, diverse expressions, the settings in which they manifest, and the viewpoints from which they can be understood in a real-life context (Patton, 2015).

Creswell (2014) emphasizes that qualitative research typically incorporates data in the form of textual information and words rather than numerical data. For this study, qualitative research, through in-depth interviews and observations, allows for a comprehensive exploration of the intricacies of classroom management strategies and their impact on the performance of students with ASD. By engaging directly with educators, parents, and students, we can uncover nuanced insights, understand perceptions, and capture the contextual nuances of the strategies in use. In-depth interviews have been conducted with teachers, parents, and students to gather rich, detailed narratives regarding their experiences and perspectives on classroom management. Additionally, classroom observations has been employed to provide a firsthand understanding of how these strategies manifest in real-time within the learning environment.

Quantitative research involves the collection and analysis of numerical data to draw statistical inferences about a population or phenomenon (Creswell, 2014). For this study, quantitative methods, such as surveys and academic performance data analysis, enable the collection of numerical data that can be statistically analyzed. This approach allows for a broader understanding of the prevalence and distribution of specific classroom management strategies and their correlation with academic performance among students with ASD. Academic performance data, including grades and assessments, have been collected and analyzed to identify potential patterns and correlations with the application of different strategies.

The utilization of both qualitative and quantitative methods, known as a mixed methods approach, ensures a comprehensive understanding of the research questions. A mixed methods approach involves the integration of both qualitative and quantitative methods in a single research study to offer a more comprehensive understanding of the research question (Creswell & Creswell, 2017). By combining these approaches, researchers can capitalize on the strengths of each method, providing a more robust analysis of the complex relationship between classroom management strategies and academic performance among students with ASD. The findings from both qualitative and quantitative methods were integrated during the analysis phase, allowing for a deeper interpretation of the results.

The complementary nature of these methods contributed to a more comprehensive and nuanced understanding of the complex relationship between classroom management strategies and academic performance among students with ASD.

3.3 Target Population

Mugenda and Mugenda (2003) define the target population as a group of individuals, objects or items from which samples are taken for measurement. Orodho (2008) says that it is the set of elements that the researcher focuses upon and to which the results obtained by testing the sample were generalized. The target population for this study comprises teachers at HVP Gatagara/Gikondo. The total number of teachers in the school is 26 teachers providing education. The study also included key administrative personnel, such as the Head teacher, Director of Studies (DOS), and Resources Room Manager. Their roles in overseeing school operations, resources, and educational planning are relevant to the current study. Therefore, the total population of the current study is 29 people. The table below summarizes the sample target population of the study.

Table 1: Target Population of the Study

Respondents	School	Gender	Number	Total Population
Teachers		Male	11	26
		Female	15	
Resources Room Manager				1
DOS				1
Head Teacher				1
Total				29

Source: Researcher (2024)

3.3 Sampling Procedures

Sampling involves systematically choosing a subset of individuals from a larger population in a way that mirrors the traits of the overall group (Gay, 1987). The purposive sampling has been used because it enabled the researcher to use his own judgment to select people with more knowledge about ADS in classroom teachings.

In this study, a purposive sampling was applied. This is a non-probabilistic sampling technique where researchers intentionally select specific individuals or elements from a population based on predefined criteria or characteristics that are relevant to the research objectives. This sampling method allows researchers to target and include participants who possess specific attributes or experiences that are essential for addressing research questions or hypotheses effectively. Purposive sampling is particularly useful when researchers aim to gather in-depth information from individuals who possess unique perspectives, expertise, or characteristics relevant to the study (Creswell, 2014).

While all teachers were target in this study, the purposive sampling was used to select other key respondents include the Head Teacher, Deputy Head Teachers (DOS) and Resource Room Manager. This approach aimed to understand how specific strategies influence academic outcomes for students with ASD. Input from these stakeholders provided insights into the implementation and effectiveness of these strategies in creating supportive learning environments for students with ASD, aiding in assessing their impact on academic success.

3.4 Sample Size

According to Creswell (2014), sample size refers to the number of participants or elements selected for inclusion in a research study. The determination of an appropriate sample size depends on several factors, including the research design, population size, desired level of precision, and statistical power. In quantitative research, sample size calculations are often based on statistical methods that aim to achieve sufficient representativeness and generalizability of findings while minimizing sampling errors.

The target sample of the current study was 29 respondents including 26 teachers, 1 Resource Room Manager, DOS and Head teacher. However, only 24 teachers were available, making the sample of 27 participants.

3.5. Data collection Instruments

Both primary and secondary data have been used in this investigation. Primary data was collected via the use of a questionnaire and interviews, and secondary data through the use of documentation review. The selection of these instruments is explained in the following sections.

3.5.1 Questionnaire

According to Mugenda and Mugenda (2003), questionnaires are lists of written questions addressed to respondents in order to obtain information on the subject at hand. A survey instrument, known as a questionnaire, possesses the capacity to efficiently gather a substantial volume of information within a relatively concise timeframe (Orodho, 2008). Moreover, it guarantees the maintenance of confidentiality. The survey questionnaires have been distributed among selected students.

These tools have been chosen for this research due to their effectiveness in assessing various aspects such as behavioral patterns, preferences, intentions, attitudes, and opinions of the subjects.

The questionnaire employed in this study was carefully structured and included Likert-style questions designed on a five-point scale. A total of 24 participants engaged in responding to these questionnaires. The utilization of questionnaires serves the purpose of acquiring specific

and pertinent data, thereby enhancing the study's precision and realism in terms of data collection. The questionnaires have been employed strategically to extract pertinent insights from the sample population composed of teachers. Adequate time has been allotted to the participants for completing the survey, facilitated through a user-friendly drag-and-drop interface.

3.5.2 In-Depth Interview Guide

To complement data collected from questionnaire, the researcher used semi-structured interviews. Semi-structured interview involves direct face-to-face interaction, facilitating the exchange of viewpoints (Creswell & Plano-Clark, 2007). Interviews serve as a means for the researcher to engage with respondents in real-time, allowing for clarifications on any uncertainties present in their responses. Within the scope of this study, in the data collection phase, the research conducted interviews with a targeted group comprising the Head Teacher, Resource Room Manager and the Director of Studies.

This approach sought to gather in-depth insights into the perspectives, experiences, and practices of educators who play a pivotal role in implementing classroom management strategies for students with ASD. The inclusion of the Headteacher and Director of Studies in the interview process aims to capture overarching administrative perspectives and strategies, providing a holistic understanding of the school's approach to supporting students with ASD. The information obtained from these interviews contributed valuable qualitative data to the study, enriching the exploration of the influence of classroom management strategies on the academic performance of students with ASD at HVP Gatagara/Gikondo.

3.5.3. Document Review

Document review, as defined by Gay (2015), involves the process of reading, analyzing, and interpreting existing written materials. In the context of this study, documentary reviews have been employed as a method to acquire secondary research data.

This has been achieved by critically examining information available in various sources such as books, journals, reports, school reports and examination results. The purpose of this approach is to complement primary data collected from the field. According to Martens (2015), documentary

review offers a fundamental advantage in thoroughly exploring sources to access supplementary information on specific aspects of the research topic. Furthermore, it aids in determining whether the research problem has been previously investigated. This method enhances the researcher's ability to tap into information that might otherwise remain inaccessible through other methods like questionnaires.

3.6. Validity and reliability of the instruments

In the following sections, the validity and reliability of the research instruments utilized in this study are discussed in detail, highlighting the measures taken to ensure the accuracy and consistency of the data collection process.

3.6.1 Validity

Validity refers to the degree to which a concept, conclusion, or measurement stands on a solid foundation and accurately aligns with the real world. In the context of measurement tools, validity pertains to the extent to which the tool genuinely captures what it purports to measure (Ogince *et al.*, 2007).

To ensure the validity of the research instruments, a two-pronged approach were adopted. First, expert judgment played a pivotal role. It was ensured that the content of the questionnaire items is intricately linked to the study's objectives and is well-suited for their intended purpose. This involves a comprehensive consultation process with experts specialized in the field of special needs education.

Furthermore, the instruments underwent refinement based on feedback from the experts. This iterative process aims to gauge the content's relevance to the study's objectives and to enhance the clarity of information contained within the questionnaires. Consequently, the instruments have been modified and redesigned as needed, bolstering their alignment with the research goals.

3.6.2 Reliability

Reliability is the degree to which an assessment tool produces stable and consistent results (Gay, 2015). To ensure this, the questionnaire underwent a pilot test involving 10% of the targeted

respondents. The procedures applied during the pilot test have subsequently been replicated in the main investigation.

To evaluate the reliability of questionnaires, the researcher administered them to respondents at distinct intervals and assessed the similarity of information provided across these instances. Subsequently, the instrument's reliability was substantiated by computing Cronbach's alpha using a statistical package for social sciences.

Research instruments were reviewed to ensure that the findings aligned with reality. Additionally, the researcher developed questionnaires, which were then submitted to the supervisor to verify their validity and appropriateness. Following the supervisor's approval, the questionnaires were distributed to respondents to collect data. Furthermore, direct classroom observations were conducted during the teaching and learning periods to assess the effective use of learner-centered methods.

3.7. Data analysis

Data analysis involved systematically applying statistical and/or logical tools to describe, display, summarize, and evaluate the collected data. As will be reported following Mugenda and Mugenda's (2003) insights, the data analysis process will encompass locating, organizing, and segmenting the data into manageable components. Additionally, the process will involve synthesizing the data and identifying patterns within the collected information to facilitate comprehensive analysis.

Upon collection, the data underwent editing, coding, and categorization based on similarities. To facilitate quantitative analysis, the data was converted into numerical codes to represent the attributes of the research instruments. The analysis incorporated both descriptive statistics such as frequency distributions, percentages (%), and frequency tables and inferential statistics.

For qualitative data, the content thematic analysis method was employed. This technique, characterized by its flexibility and detailed approach, guided the analysis process. The approach chosen centered on capturing the explicitly expressed perceptions of experiences articulated by the participants. This method aims to uncover the consciously held perceptions that shape participants' behavior. Questions from the questionnaire have been chosen and structured using

a theoretical framework, guiding the coding process with specific inquiries in mind. Sub-themes have been identified through thorough readings of individual transcripts. Following a preliminary thematic map, the transcripts and coded items were reviewed to enhance the validity of the thematic map.

3.8. Ethical Considerations

Orodho (2008) emphasizes the importance of implementing appropriate strategies to encourage future respondents' cooperation while also ensuring the protection of their rights. For this study, a research permit, in the form of a recommendation letter, has been procured from the University of Kigali. Furthermore, the researcher obtained explicit permission from each of the schools that are part of the study. Visits to the designated schools and education offices have been arranged to schedule interviews and administer questionnaires. Throughout the data collection process, the researcher carried research permits and letters of introduction to present to school officials and principals. Striving to uphold privacy, confidentiality, and anonymity, the researcher meticulously adhered to these assurances throughout the research. All participants have been fully informed about the study's objectives and given the option to participate or abstain.

Orodho (2008) also highlighted that individual, including children, learners, and their parents/guardians or teachers, have the right to privacy. Hence, the consent of school heads was sought when involving pupils, and their agreement has been indispensable during data collection.

Mugenda and Mugenda (2003) stress the importance of safeguarding respondents' privacy by maintaining the confidentiality of shared information. Participants have been assured of the confidentiality of their responses, receiving written guarantees to encourage a robust response rate. Personal data furnished by participants have been kept separate from the collected data to prevent any unauthorized exposure. To ensure accuracy, all interviews have been conducted by the researcher, utilizing a predefined set of questions and documenting participants' responses comprehensively.

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 Introduction

This section comprises information obtained through data collection and focuses on providing comprehensive details pertaining to the specific objectives outlined in the current study, namely: to identify effective classroom management strategies tailored for students with ASD at HVP Gatagara/Gikondo, to assess the academic performance and behavioral outcomes of students with ASD as influenced by classroom management strategies and to investigate the relationship between classroom management strategies and academic performance of students with ASD. As a result, this chapter is segmented into two primary sections: the demographic profile of participants and the presentation, analysis, and interpretation of gathered data.

4.2 Demographic Characteristics of Respondents

This investigation provides insights into the demographic composition of the participants, including their gender, age groups, educational qualifications, and teaching experience. The study involved a total of 27 respondents: 24 teachers, 1 Head Teacher, 1 Dean of Studies and 1 Resource Room Manager.

4.2.1 Demographic Characteristics of Respondents by Gender

The researcher distributed questionnaires asking participants to indicate their gender, with the aim of exploring how gender might influence their responses.

Table 2: Respondents' Gender

Gender	Frequency	Percent
Male	7	16.7
Female	20	83.3
Total	27	100.0

Source: (Primary Data, 2024)

Table 4.2 illustrates the gender distribution among students involved in the current research, revealing that 83.3% of the total respondents were female, while the remaining 16.7% were

male. This data highlights the study's commitment to inclusivity, ensuring a diverse representation and consideration of both men's and women's viewpoints and experiences. However, females outnumbered males, which aligns with the targeted population, where there were also more female than male respondents.

4.2.2 Demographic Characteristics of Respondents by Age

The maturity level of respondents is a critical variable, helping the researcher obtain reliable information vital for this study. The age groups of teachers at HVP Gatagara/Gikondo were especially important in assessing their capability and effectiveness in their roles.

Table 3: Characteristics of Respondents by Age

Age	Frequency	Percent
21-35	25	95.8
36-45	2	4.2
Total	27	100.0

Source: (Primary Data, 2024)

Table 3 shows that 95.8% of teacher respondents were aged 31-35, with only 4.2% aged 36-45. This predominance of younger teachers is relevant to the study's objective of assessing the influence of class management on the academic performance of students with ASD. Younger teachers may bring innovative management techniques that could positively impact these students' academic outcomes.

4.2.3 Demographic characteristics of Respondents by Educational Qualification

In this study, teachers were asked to provide demographic details, particularly their educational qualifications. This data was collected to assess the accuracy and reliability of the information they contributed to the research.

Table 4: Respondents Educational Qualification

Qualification	Frequency	Percent
A2	15	54.2
A1	1	4.2
A0	11	41.7
Total	27	100.0

Source: (Primary Data, 2024)

According to Table 4, which outlines the respondents' demographic details by academic qualifications, the findings indicate that a significant majority, 54.2%, had an A2 academic level, which is recognized for teaching in Rwanda's primary and nursery schools. In contrast, only 4.2% of respondents had an A1 academic qualification, while 41.7% had an A0 qualification. This shows that all participants in the study had the necessary qualifications to provide valuable insights into the influence of class management on the academic performance of students with ASD at HVP Gatagara.

4.2.4 Demographic Characteristics of Respondents by Year of Experience

The varied teaching experience among the respondents was an essential element of this study. It served a pivotal role by enabling the researcher to collect perspectives from a range of participants, assisting in evaluating how class management influences the academic performance of students with ASD in Rwanda, particularly at HVP Gatagara.

Table 5: Respondents by Year of Experience

Age	Frequency	Percent
Less than 3 years	12	41.7
4-6 years	9	33.3
7 years and above	6	25.0
Total	24	100.0

Source: (Primary Data, 2024)

Table 5 reveals a diverse range of teaching experience among the respondents. Approximately 32.1% had less than 3 years of teaching experience, 33.3% had between 4 and 6 years, and 25.0% had 7 years or more. This variation in experience levels suggests a mix of fresh perspectives, nuanced approaches, and considerable expertise among the participants. Understanding this diversity can provide valuable insights into how different levels of teaching experience may influence class management and academic performance for students with ASD at HVP Gatagara.

4.3 Presentation of Findings

This section is mainly dedicated to presenting the categorized findings of the study, which align with three specific research objectives: to identify effective classroom management strategies tailored for students with ASD at HVP, to assess the academic performance and behavioral outcomes of students with ASD as influenced by classroom management strategies and to investigate the relationship between classroom management strategies and academic performance of students with ASD at HVP Gatagara.

4.3.1 Effective Classroom Management Strategies Tailored for Students with ASD at HVP Gatagara / Gikondo

The first objective of this research was to identify effective classroom management strategies for students with ASD. To achieve this, the researcher used observations, questionnaires, and interviews to gather data from teachers, the head teacher, the DOS, and the Resource Room Manager. The findings are divided into three distinct categories. The first category includes teachers' effective classroom management strategies for students with ASD. The second category covers the perspectives of key informants on these strategies. The third category presents observations related to effective classroom management strategies for students with ASD.

4.3.1.1 Teachers Views on Effective Classroom Management Strategies for Students with ASD at HVP Gatagara/Gikondo

The researcher gathered numerical data on teachers' perspectives regarding effective classroom management strategies for students with ASD. The table below displays the results, highlighting the teachers' viewpoints.

Table 6: Teachers Views on Effective Classroom Management Strategies for Students with ASD at HVP Gatagara/Gikondo

Statements	SD		D		N		A		SA		Mean	Std
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
The classrooms of HVP Gatagara/Gikondo have clear and consistent rules that are communicated effectively to students with ASD.	1	4.2	3	12.5	3	12.5	6	25.0	11	45.3	3.9	1.2
Teachers implements effective praise and reward systems to motivate and reinforce positive behavior among students with ASD at HVP Gatagara/Gikondo.	1	4.2	3	12.5	0	0.0	5	20.8	15	62.5	4.2	1.2
Teachers and support staff at HVP Gatagara/Gikondo effectively delegate responsibilities and authority to ensure smooth classroom management for students with ASD.	0	0.0	3	12.5	0	0.0	11	45.8	10	41.7	4.1	0.9
Adequate supervision is provided to students with ASD to ensure their safety and well-being during classroom activities at HVP Gatagara/Gikondo.	1	4.2	2	8.3	0	0.0	4	16.7	17	70.8	4.4	1.1

Source: Primary Data 2023

The results presented in Table 6 reveal the teachers' responses regarding effective classroom management strategies for students with ASD at HVP Gatagara/Gikondo. According to the table, a majority of respondents, 17 teachers (70.3%), agreed that the classrooms have clear and consistent rules effectively communicated to students with ASD, yielding a mean of 3.9 and a standard deviation of 1.2.

Additionally, 20 respondents (83.3%) agreed that teachers implement effective praise and reward systems to motivate and reinforce positive behavior among students with ASD, with a mean of 4.2 and a standard deviation of 1.2.

Furthermore, the findings indicate that 22 teachers (87.5%) agreed that teachers and support staff effectively delegate responsibilities and authority to ensure smooth classroom management for students with ASD, showing a mean of 4.1 and a standard deviation of 0.9. Moreover, 22 teachers (87.5%) agreed that adequate supervision is provided to students with ASD to ensure their safety and well-being during classroom activities, with a mean of 4.4 and a standard deviation of 1.1.

Overall, these findings highlight that HVP Gatagara/Gikondo employs several effective classroom management strategies, including clear communication of rules, use of praise and rewards, delegation of responsibilities, and adequate supervision. Collectively, these strategies demonstrate a comprehensive and effective approach to classroom management.

4.3.1.2 Key Informants Views on Effective Classroom Management Strategies for Students with ASD at HVP Gatagara/Gikondo

In this research, the views of key informants were sought on effective classroom management strategies for students with ASD. The key informants included the Head Teacher, DOS, and Resource Room Manager. During interactions with these key informants, the primary research question posed was: "What are the effective classroom management strategies tailored for students with ASD at HVP Gatagara/Gikondo?". The following are some answers provided by them.

One of the interviewees said:

“Effective classroom management strategies for students with ASD at HVP Gatagara/Gikondo include collaborating with parents to support

students, offering incentives, involving students in decision-making, and creating structured routines with clear expectations. We ensure that all students understand the daily schedule and classroom rules through visual aids and consistent communication. This approach helps reduce anxiety and fosters a sense of stability and predictability, which is crucial for students with ASD (Primary Data, 2023).” (Primary Data: 2024)

According to this respondent, effective classroom management strategies tailored for students with ASD involve collaboration with parents, offering incentives, involving students in decision-making, and establishing structured routines with clear expectations. These strategies help reduce anxiety and create a stable, predictable environment essential for students with ASD.

In addition, another respondent provided the following answer:

“From my perspective, effective classroom management strategies for students with ASD at HVP Gatagara/Gikondo in Kicukiro District include incorporating individualized support plans. Each student with ASD has unique needs, and we tailor our strategies to address these, which includes personalized learning objectives, sensory breaks and specific behavioral interventions. Collaboration with teachers and support staff is key to successfully implementing these individualized plans.” (Primary Data: 2024).

Finally, another respondent said:

“Classroom management strategies tailored for students with ASD at HVP Gatagara/Gikondo include praising them for any achievements, reinforcing good behavior, assigning small responsibilities, and conducting regular check-ins. These approaches help build their confidence, encourage positive behavior, and ensure continuous support and engagement.” (Primary Data: 2024).

Data from key informants indicate that effective classroom management strategies for students with ASD include collaboration with parents, offering incentives, involving students in decision-making and establishing structured routines with clear expectations. Additionally, individualized support plans tailored to each student's unique needs, such as sensory breaks and specific

behavioral interventions, are crucial. Acknowledging achievements, reinforcing good behavior, assigning small responsibilities and maintaining regular check-ins are also essential. Together, these strategies reduce anxiety, create stability, and enhance the educational experience for students with ASD.

4.3.1.2 Findings from Observation about Effective Classroom Management Strategies for Students with ASD at HVP Gatagara/Gikondo

The findings from the observation guide indicate several challenges in implementing effective classroom management strategies tailored for students with ASD. A significant number of classrooms lack clear and consistent rules communicated through visual aids, which are crucial for helping students with ASD understand and follow routines. Inconsistencies in the use of praise and reward systems further highlight the need for a more uniform approach to reinforce positive behavior among these students.

Delegation of responsibilities and adequate supervision are also inconsistent across classrooms. While some classrooms effectively assign small tasks to students and provide adequate supervision, others do not, leading to potential safety concerns and missed opportunities for students to develop independence. The lack of clear delegation and supervision highlights a gap in ensuring smooth classroom management.

Another major challenge is the variation in teachers' concern for the emotional well-being of students with ASD. Some teachers are attentive and regularly check in with students, offering emotional support, while others are less attentive to these needs. This inconsistency can impact the students' emotional stability and overall classroom experience, making it difficult for them to feel secure and supported.

Finally, the use of individualized teaching strategies and tailored language support is not uniformly applied. While some classrooms demonstrate effective differentiation and individualized support, others rely on generalized teaching methods that may not meet the unique needs of students with ASD. This inconsistency in teaching approaches can hinder the academic progress of students, emphasizing the need for more consistent implementation of tailored strategies to ensure all students receive the support they need to succeed.

4.3.2 The Academic Performance of Students with ASD at HVP Gatagara/Gikondo

The second objective of this research aimed to assess the academic performance and behavioral outcomes of students with ASD as influenced by classroom management strategies.

To acquire essential information, the research employed a dual approach. Initially, teachers were engaged through the distribution of questionnaires. Following this, the researcher conducted interviews with the Head Teacher, DOS and Resource Room Manager to gather information on the academic performance of students with ASD, I have taken time to observe the classroom activities as well as checking individual learners progress files.

4.3.2.1 Teachers' Views on the Academic Performance of Students with ASD at HVP Gatagara/Gikondo

During the data collection phase of this study, quantitative data was collected regarding teachers' perspectives on the academic performance of students with ASD. The results of this data collection are presented in the following table.

Table 7: Teachers' Views on the Academic Performance of Students with ASD at HVP Gatagara/Gikondo

Statements	SD		D		N		A		SA		Mean	Std
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
Our students demonstrate good control over fine motor skills, such as writing, drawing and using small objects.	1	4.2	3	12.5	1	4.2	11	45.8	8	33.3	3.9	1.1
Our students effectively communicate thoughts and ideas using verbal language.	2	8.3	4	16.7	4	16.7	6	25.0	8	33.3	3.5	1.3
Our students show progress in mathematical skills, including counting, basic operations, and problem-solving.	0	0.0	7	29.2	8	33.3	4	16.7	5	20.8	3.9	1.1
Our students interact well with peers and adults, demonstrates empathy and	0	0.0	3	12.5	6	25.0	5	20.8	10	41.7	3.2	1.1

understands social cues.

The student effectively processes sensory information and demonstrates appropriate reactions to sensory stimuli.	0	0.0	2	8.3	3	12.5	8	33.3	11	45.8	4.1	0.9
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Source: Primary data, 2023

The data indicates that the majority of respondents, totaling 19 individuals (79.1%), agreed that students with ASD exhibit good control over fine motor skills, such as writing, drawing, and using small objects. This consensus was reflected in a mean score of 3.9 and a standard deviation of 1.1. Additionally, only 14 respondents (58.3%) agreed that students with ASD effectively communicate their thoughts and ideas using verbal language, with a mean score of 3.5 and a standard deviation of 1.3. Similarly, the findings reveal that only 15 teachers (62.5%) agreed that students with ASD show progress in mathematical skills, including counting, basic operations, and problem-solving, with a mean score of 3.2 and a standard deviation of 1.1. Furthermore, only 10 teachers (37.5%) agreed that students with ASD effectively process sensory information and demonstrate appropriate reactions to sensory stimuli, with a mean score of 4.1 and a standard deviation of 0.1.

The data indicates a mixed picture regarding the academic performance of students with ASD, Rwanda. While a majority of respondents agreed that these students exhibit good control over fine motor skills, such as writing and using small objects, suggesting a positive aspect of their abilities, other areas such as verbal communication, mathematical skills, and sensory processing show more varied perceptions. The lower agreement levels in these areas, particularly in communication and mathematical skills, alongside standard deviations that suggest some dispersion in opinions, imply that academic performance in these domains may not be consistently at a good level among students with ASD at the school. These findings highlight the importance of targeted interventions and support tailored to address specific academic challenges faced by students with ASD.

4.3.2.2 Key Informers' Views about the Level of Academic Performance of Students with ASD at HVP Gatagara/Gikondo

The researcher conducted interviews with the Head Teacher, DOS and Resource Room Manager to gather information on the academic performance of students with ASD.

To obtain the necessary information, the discussions focused on the key question: “How are the academic performance and behavioral outcomes of students with ASD influenced by classroom management strategies?”

The respondents unanimously reported that the academic performance of students with ASD is not at a high level. This consensus highlights the ongoing challenges faced by students with ASD.

Some of the responses provided by the interviewees emphasized and highlighted this issue. One of them said:

Our students with ASD are doing well in academics, like counting and reading, and with activities that involve bigger movements. But, we also see some struggles, especially in making friends and with some smaller movements. Even though many students are doing great in schoolwork, we know some need extra help to get better at making friends and improving their smaller movements. We're working on giving them the support they need to do even better in these areas.”
(Primary Data: 2024).

According to this respondent, the academic performance of students with ASD, as evidenced by a significant number of students proficient in counting, reading and other gross motor skills. However, challenges are observed, particularly in social skills and certain motor skills areas.

Another respondent highlighted:

“Most of our students are doing really well in things like moving their hands and bodies, speaking and understanding languages and doing math. But a few students struggle because they have different needs. Even though some find it harder, we're working hard to help them do better and feel good about their learning.” (Primary Data: 2024)

According to this respondent, students with ASD show strong performance across various domains such as fine and gross motor skills, languages and mathematics. However, a small number of students face challenges due to their unique characteristics or needs.

Furthermore, another key informant provided the following answer:

“The academic performance of students with ASD at our school is quite satisfactory. While there's room for improvement, many students are making good progress in their studies. We are continuously working to support them further and enhance their learning experiences to ensure even better academic performance.” (Primary Data: 2024).

Data from interview guides evidences that there is a mixed picture regarding the academic performance of students with ASD at HVP Gatagara/Gikondo, Rwanda. While some respondents noted positive aspects such as proficiency in academics and gross motor skills, others acknowledged challenges, particularly in social skills and certain fine motor skills areas. This indicates the need for ongoing support and interventions tailored to the unique needs of students with ASD to ensure improved academic outcomes and enhanced overall learning experiences at the school.

4.3.2.2 Findings from Observation about the Level of Academic Performance of Students with ASD at HVP Gatagara/Gikondo

The observations on academic performance among students with ASD reveal a mixed picture. While many students show proficiency in certain areas such as fine motor skills, listening, and basic numeracy, there are noticeable challenges in social skills, higher-level math concepts, and certain aspects of language development.

In terms of social skills, interaction with peers and collaborative work show varying levels of success, indicating the need for targeted interventions to improve socialization and teamwork abilities. Additionally, the understanding of abstract math concepts and complex language skills requires further support and tailored instruction to ensure comprehensive academic development.

The findings suggest that while there are strengths in specific academic areas, overall academic performance among students with ASD is not uniformly higher. This highlights the importance of individualized education plans, specialized interventions, and ongoing support from educators

to address the diverse learning needs of students with ASD and promote overall academic success.

4.3.3 The Relationship between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

The third objective of this study focused on exploring the connection between classroom management strategies and the academic performance of students with ASD. To achieve this goal, the researcher undertook several steps. Initially, data were collected from teachers through questionnaires and meticulously refined for accuracy. Subsequently, the research delved into analyzing the correlation between the independent and dependent variables. Thirdly, valuable insights were gathered from key informants through interviews. Finally, the researcher conducted field observations to gain a firsthand understanding of the actual situation in practice.

4.3.3.1 Teachers' Views on the Relationship between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

During the data collection phase of this study, quantitative data was gathered to examine the relationship between classroom management strategies and the academic performance of students with ASD. The outcomes and findings derived from this data collection process are presented in the following table.

Table 8: Teachers' Views on the Relationship between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

Statements	SA		A		N		D		SD		Mean	Std
	Fre q	%	Fre q	%	Fre q	%	Fre q	%	Fre q	%		
How much do you agree that effective implementation of classroom rules strategy contributes to the academic performance of students with ASD in terms of their fine and gross motor skills at HVP Gatagara/Gikondo?	0	0.0	3	12.5	4	16.7	9	37.5	8	33.3	3.9	1.0
To what extent do you agree that praise and reward systems in the classroom impact the language development of students with ASD at HVP Gatagara/Gikondo?	0	0.0	5	20.5	0	0.0	11	45.8	11	45.8	4.0	1.1
How much do you agree that the delegation of authority within the classroom affects the numeracy development of students with ASD at HVP Gatagara/Gikondo?	8	33.3	1	4.2	5	20.8	5	20.8	11	45.8	3.9	1.2
How much do you agree that students' supervision significantly contributes to the social skills development of students with ASD and consequently influences their academic performance?	0	0.0	0	0.0	4	16.7	8	33.3	12	50.0	4.3	0.7
How much do you agree that effective classroom management strategies impact the sensorial ability of students with ASD and their overall academic performance at HVP Gatagara/Gikondo?	0	0.0	8	33.3	3	12.5	8	33.3	11	45.8	4.1	0.9

Source: (Primary Data, 2024)

The results from the table indicate that a majority of respondents, comprising 17 individuals (70.8%), agree that effectively implementing classroom rules contributes to the academic performance of students with ASD, specifically in terms of their fine and gross motor skills, with a mean score of 3.9 and a standard deviation of 1.0. Moreover, 22 respondents (91.6%) agree that praise and reward systems in the classroom impact the language development of students with ASD, with a mean score of 4.0 and a standard deviation of 1.1.

Additionally, 16 teachers (66.6%) agree, with a mean score of 3.9 and a standard deviation of 1.2, that delegating authority within the classroom affects the numeracy development of students with ASD. Similarly, 20 respondents (83.3%) agree that student supervision significantly contributes to the social skills development of students with ASD and consequently influences their academic performance, with a mean score of 4.3 and a standard deviation of 0.7. Finally, 19 teachers (79.1%) agree, with a mean score of 4.1 and a standard deviation of 0.9, that effective classroom management strategies impact the sensorial ability of students with ASD and their overall academic performance.

These findings collectively highlight various effective classroom management strategies and their potential influence on the academic performance of students with ASD at HVP Gatagara/Gikondo.

4.3.3.2 Correlation between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

The following table indicates the relationship between classroom management strategies and their potential influence on the academic performance of students with ASD

Table 9: Correlation between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

		Classroom Management Strategies	Academic Performance of Students with ASD
Classroom Management Strategies	Pearson Correlation	1	.798
	Sig. (2-tailed)		.000
	N	24	24
Academic Performance of Students with ASD	Pearson Correlation	.798**	1
	Sig. (2-tailed)	.000	
	N	24	24

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

Source: (Primary Data, 2024)

The findings outlined in the above table reveal a significant link between classroom management strategies and the academic performance of students with ASD. This significance is evidenced by a p-value of .000, which is below the chosen significance level of .01. Moreover, the Pearson correlation coefficient (r) is .798**, indicating a strong correlation. This underscores a strong connection between classroom management strategies and the academic performance of students with ASD. Consequently, the presence of effective classroom management strategies positively impacts the academic performance of students with ASD.

4.3.3.4 Key Informants' Views on the Relationship between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

The researcher diligently ensured the inclusion of perspectives from the Head Teacher, Head DOS, and Resource Room Manager regarding the relationship between classroom management strategies and the academic performance of students with ASD.

The focus of these interactions centered on a key question: "What is the relationship between classroom management strategies and the academic performance of students with ASD at HVP Gatagara/Gikondo ?" Subsequently, the respondents provided the following findings:

“Effective classroom management strategies play a crucial role in the academic performance of students with ASD at HVP Gatagara/Gikondo. Structured routines and clear expectations help reduce anxiety and create a stable learning environment. This allows students to focus better on their studies and improve their academic skills, particularly in reading and mathematics.” (Primary Data: 2024).

Another respondent provided the following answer:

“Our classroom management strategies, such as positive reinforcement and individualized support plans, have significantly impacted the academic performance of students with ASD. By recognizing and rewarding positive behaviors, we encourage students to engage more actively in their learning. This approach has led to noticeable improvements in language development and social skills.” (Primary Data: 2024).

The last respondent said:

"There is a strong relationship between classroom management strategies and the academic performance of our students with ASD. Providing consistent supervision and tailored interventions has helped many students enhance their fine and gross motor skills. Additionally, the use of visual aids and clear communication has supported their overall academic growth, particularly in areas requiring sensory integration." (Primary Data: 2024).

Findings from interviews revealed that there is a strong relationship between classroom management strategies and the academic performance of students with ASD. Effective strategies, such as structured routines and clear expectations, help reduce anxiety and create a stable learning environment, thereby enhancing focus and improving academic skills, particularly in reading and mathematics.

Additionally, the use of positive reinforcement and individualized support plans encourages active engagement and has led to significant improvements in language development and social skills. Consistent supervision and tailored interventions have further supported students in enhancing their fine and gross motor skills and overall academic growth, especially in areas requiring sensory integration.

4.3.3.4 Findings from Observation about the Relationship between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

The observations across eight classrooms at HVP Gatagara/Gikondo reveal that the effective implementation of tailored classroom management strategies has a significant positive impact on the academic performance of students with ASD. In each classroom, the use of structured routines, clear expectations and positive reinforcement helps to reduce anxiety and create a stable learning environment. This stability allows students to focus better and perform well in key academic areas such as reading, mathematics, and motor skills development.

Moreover, the individualized support plans and consistent supervision provided by teachers and support staff further enhance students' academic outcomes. The use of visual aids and clear communication strategies helps improve comprehension and engagement in classroom activities, leading to better overall academic performance. The emphasis on positive reinforcement and tailored interventions not only boosts students' academic skills but also their social skills, making them more confident and motivated learners.

Overall, the findings indicate that effective classroom management strategies are crucial for the academic success of students with ASD. These strategies help in creating an inclusive and supportive learning environment that addresses the unique needs of each student, thereby significantly improving their academic and social outcomes.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter presents the research findings, followed by conclusions and recommendations.

5.2 Discussion of the Findings

The research findings were thoroughly analyzed in accordance with the predefined objectives of the study. These objectives included: (1) identifying effective classroom management strategies tailored for students with ASD (2) assessing the academic performance and behavioral outcomes of students with ASD as influenced by these classroom management strategies, and (3) investigating the relationship between classroom management strategies and the academic performance of students with ASD at HVP Gatagara/Gikondo.

5.2.1 Effective Classroom Management Strategies Tailored for Students with ASD at HVP Gatagara/Gikondo

This first objective sought to identify effective classroom management strategies tailored for students with ASD. The findings indicate that a majority of respondents (70.3%) agreed that the classrooms have clear and consistent rules that are effectively communicated to students with ASD. This structured approach helps reduce anxiety and creates a stable learning environment, which is crucial for students with ASD. Additionally, the use of visual aids and consistent communication were highlighted as essential tools for ensuring that all students understand the daily schedule and classroom rules, fostering a sense of predictability and stability.

Furthermore, the data reveals that 83.3% of respondents agreed that praise and reward systems are effectively implemented to motivate and reinforce positive behavior among students with ASD. Positive reinforcement was found to encourage students to engage more actively in their learning, leading to noticeable improvements in language development and social skills. This aligns with the responses from key informants, who emphasized the importance of recognizing and rewarding positive behaviors, as well as involving students in decision-making and offering incentives to promote engagement and motivation.

Lastly, the findings from the observation guide highlight several challenges in implementing these strategies consistently across all classrooms. While some classrooms effectively assign

small tasks to students and provide adequate supervision, others do not, leading to potential safety concerns and missed opportunities for students to develop independence. Inconsistencies were also noted in the use of individualized teaching strategies and tailored language support, which are crucial for meeting the unique needs of students with ASD. These gaps underscore the need for a more uniform approach to classroom management to ensure all students receive the necessary support to thrive academically and behaviorally.

Therefore, the findings of this study indicate that effective classroom management strategies tailored for students with ASD include clear and consistent rules that are effectively communicated to students with ASD, the use of visual aids, consistent communication, praise and reward systems, and positive reinforcement. These findings are consistent with Sieberer-Nagler (2016:159), who conducted research on classroom management strategies and found that clear communication of rules, the use of visual supports, and positive reinforcement significantly contribute to the academic and behavioral success of students with ASD. Sieberer-Nagler's study emphasizes the importance of structured routines and consistent positive feedback in creating a supportive and effective learning environment for students with special needs.

5.2.2 The Academic Performance of Students with ASD at HVP Gatagara/Gikondo

The second objective of this research aimed to examine the academic performance of students with ASD. On this, the findings indicate that the academic performance of students with ASD at HVP Gatagara/Gikondo presents a varied picture. While a majority of the teachers agreed that students with ASD exhibit good control over fine motor skills, such as writing and using small objects, other areas like verbal communication and mathematical skills show more mixed responses. Specifically, only 58.3% of the respondents felt that students effectively communicate their thoughts and ideas using verbal language, and 62.5% agreed that students show progress in mathematical skills. These responses suggest that while there are notable strengths in some areas, significant challenges persist in others.

In addition, the perspectives of key informants such as the Head Teacher, DOS and Resource Room Manager further underline the mixed academic performance of students with ASD. These informants acknowledged that while many students are proficient in academics and gross motor skills, there are notable challenges, especially in social skills and fine motor tasks. For instance, while students excel in counting and reading, making friends and certain motor skills remain

areas where additional support is necessary. This highlights the dual nature of academic performance, where strengths in some areas coexist with weaknesses in others, necessitating a tailored and supportive approach to education for these students.

Observations conducted during the research also revealed similar trends. Students with ASD at demonstrate proficiency in fine motor skills, listening and basic numeracy, yet face challenges in social interactions, higher-level math concepts, and certain aspects of language development. These findings emphasize the need for individualized education plans and specialized interventions to address the diverse learning needs of students with ASD. While strengths are evident in specific academic areas, the overall academic performance is not uniformly high, indicating that ongoing support and tailored instruction are crucial for ensuring comprehensive academic development and success for students with disabilities in the selected primary schools in Nyamagabe District.

The findings of the current study indicate that the academic performance of students with ASD at HVP Gatagara/Gikondo is not at a higher level. This observation aligns with the research by Leonidah et al. (2022:5), which suggests that students with ASD often face challenges that hinder their academic progress. These challenges include insufficient teacher training and skills specific to handling students with ASD, a lack of support manifested in the limited application of behavioral management strategies, poorly managed classrooms, disruptive behaviors, and disruptions in the teaching-learning processes. These factors collectively contribute to a less-than-optimal academic environment for students with ASD, impacting their educational outcomes and highlighting the need for targeted interventions and comprehensive support systems to enhance their academic performance and overall educational experience.

5.2.3 The Relationship between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo

The third objective of this study focused on exploring the relationship between classroom management strategies and the academic performance of students with ASD at HVP Gatagara/Gikondo. Findings of the current study reveal a significant correlation between effective classroom management strategies and improved academic performance among students

with ASD. The quantitative data collected from teachers through questionnaires demonstrates a consensus among respondents regarding the positive impact of various strategies on different aspects of academic development. For instance, the majority of teachers agree that implementing clear classroom rules contributes to the enhancement of fine and gross motor skills, while praise and reward systems positively influence language development. Similarly, the delegation of authority within the classroom, student supervision, and effective sensory management are acknowledged as essential elements that foster academic growth. These findings underscore the importance of tailored classroom management strategies in supporting the diverse needs of students with ASD and optimizing their academic outcomes.

Moreover, the correlation analysis further strengthens the relationship between classroom management strategies and academic performance. The significant correlation coefficient ($r = .798$) indicates a strong association between the two variables, emphasizing that the presence of effective management practices directly impacts the academic achievements of students with ASD. This statistical evidence complements the qualitative insights gathered from key informants, including the Head Teacher, DOS, and Resource Room Manager, who unanimously acknowledge the critical role of structured routines, clear expectations, positive reinforcement, and individualized support plans in promoting a conducive learning environment. Their views highlight the practical application of these strategies and their tangible benefits in enhancing students' focus, engagement, and overall academic skills, particularly in reading, mathematics, and motor skills development.

The observations conducted across classrooms at HVP Gatagara/Gikondo further validate the findings by providing real-time evidence of the positive effects of tailored classroom management strategies.

The observed reduction in anxiety, improved focus, and better academic performance in key subject areas affirm the importance of consistent implementation of these strategies. Additionally, the observations emphasize the role of visual aids, clear communication, and consistent supervision in supporting students' comprehension, engagement, and social interaction within the classroom. Overall, the comprehensive data from questionnaires, correlation analysis, interviews with key informants, and classroom observations collectively highlight the symbiotic relationship between effective classroom management strategies and the academic success of

students with ASD, emphasizing the need for ongoing implementation and refinement of these strategies to optimize student outcomes.

Therefore, the findings of the current study evidence that effective classroom management strategies are crucial for the academic success of students with ASD at HVP Gatagara/Gikondo. According to Reichow and Volkmar (2010:30), implementing structured routines, clear expectations, positive reinforcement, and individualized support plans significantly contribute to creating an inclusive and supportive learning environment for students with ASD. These strategies not only reduce anxiety and enhance focus but also improve academic skills, particularly in areas like reading, mathematics, and motor skills development.

5.3. Conclusion

In summary, this study at HVP Gatagara/Gikondo reveals a comprehensive understanding of effective classroom management strategies tailored for students with ASD. The findings emphasize the importance of structured approaches such as clear and consistent rules, visual aids, and positive reinforcement in creating stable and supportive learning environments, echoing insights from Sieberer-Nagler (2016). Regarding academic performance, while strengths are evident in fine motor skills and basic numeracy, challenges persist in areas like verbal communication and higher-level math concepts, necessitating individualized education plans. The study underscores a significant correlation between tailored management strategies and academic success, supported by quantitative data, correlation analysis, key informant insights, and classroom observations. Overall, the symbiotic relationship between effective classroom management and optimized academic outcomes for students with ASD highlights the ongoing need for targeted interventions and supportive educational environments to ensure holistic development and success.

5.4. Recommendations

On the basis of findings gotten, the current research provided the following recommendations:

- All people involved in education sector in Kicukiro District are recommended to work collaboratively in order to enhance usage of effective classroom management strategies to enhance inclusive education.

- MINEDUC through REB is recommended to avail enough and adequate materials indispensable in teaching students with ASD.
- MINEDUC is also recommended to avail enough trainings for teachers to equip them with inclusive education skills.
- All stakeholders of education sector are recommended to support education of students with disability especial education of students with ASD.

5.5. Suggestion for Further Study

The researcher recommends further studies to be carried out in the following areas:

- i) Comparative Studies to Evaluate the Effectiveness of Classroom Management Strategies for Students with ASD In Different Educational Settings
- ii) Role of Technology in Enhancing Learning for Students with ASD
- iii) Parental Involvement and Its Influence on Academic Performance of students with ASD

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APPENDICES

APPENDIX I: Questionnaire for Teachers

INTRODUCTORY LETTER

Dear respondents,

My name is IMANATURIKUMWE Victor, and I am a student enrolled in the Master of Education in Inclusive Education and Special Needs program at the School of Inclusive Education and Special Needs, College of Education, University of Rwanda. As part of the requirements for my degree, I am conducting a research study on the “**Influence of classroom management strategies on the performance of students with Autism Spectrum Disorder (ASD) in Kicukiro District**”, with a specific case study focusing on HVP Gatagara/Gikondo.

The primary aim of this study is to investigate the effectiveness of various classroom management strategies in enhancing the academic performance of students with ASD. Your expertise and insights as a member of the School of Inclusive Education and Special Needs are invaluable to this research endeavour.

Enclosed with this letter, you will find a questionnaire designed to gather information on different classroom management strategies and their impact on the academic performance of students with ASD. Your participation in completing this questionnaire will contribute significantly to the advancement of knowledge in the field of inclusive education and special needs.

Your responses will be treated with the utmost confidentiality and used solely for research purposes. Your participation is entirely voluntary, and you may choose to withdraw from the study at any time without any adverse consequences.

I kindly request you to take some time to complete the questionnaire thoughtfully and return it to me. Should you have any questions or require further clarification regarding the study, please feel free to contact me at **+250783326269**.

Thank you for considering my request. Your cooperation and support are greatly appreciated.

Yours sincerely,

Victor Imanaturikumwe

Instructions

Please carefully read each question and select the response that best represents your opinion or experience. Use the provided five-point Likert scale to indicate your level of agreement with '1' representing 'Strongly Disagree', '2' representing 'Disagree', '3' representing 'Neutral', '4' representing 'Agree', and '5' representing 'Strongly Agree' or the corresponding options. Your honest and thoughtful responses are valuable in assessing the effectiveness of various strategies in supporting students with ASD in achieving academic success.

I. Section A: Demographic Characteristics of the Respondents

1. Gender

- a. Male []
- b. Female []

2. Age

- a. 21-35 years []
- b. 36-45 years []
- c. 46-55 years []
- d. 56 years and above []

3. Education Qualifications

- a. Primary []
- b. Secondary Level certificate []
- c. Bachelor's degree []
- d. Master's degree []
- e. (v) Others (please specify)

4. Years of Experience

- a. Less than 3 years []
- b. 4 – 6 years []
- c. 7 years and above []

II. Section B: Effective Classroom Management Strategies Tailored for Students with ASD at HVP Gatagara/Gikondo

The following are the perceived classroom management strategies tailored for students with ASD at HVP Gatagara/Gikondo in Kicukiro district. To what extent do you agree or disagree with the statements below? Please tick (√) only one appropriate box.

Cultural practices	Strongly Disagree 5	Disagree 4	Neutral 3	Agree 2	Strongly Agree 1
<p><u>Rules Strategy</u></p> <p>The classrooms of HVP Gatagara/Gikondo have clear and consistent rules that are communicated effectively to students with ASD.</p>					
<p><u>Praise and Reward Systems</u></p> <p>Teachers implements effective praise and reward systems to motivate and reinforce positive behavior among students with ASD at HVP Gatagara/Gikondo</p>					
<p><u>Delegation of Authority</u></p> <p>Teachers and support staff at HVP Gatagara/Gikondo effectively delegate responsibilities and authority to ensure smooth classroom management for students with ASD.</p>					

<p><u>Students' Supervision</u></p> <p>Adequate supervision is provided to students with ASD to ensure their safety and well-being during classroom activities at HVP Gatagara/Gikondo.</p>					
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III. Section C: Academic Performance of Students with ASD at HVP Gatagara/Gikondo in Kicukiro District

The following are statements about academic performance of students with ASD at HVP Gatagara/Gikondo in Kicukiro District. To what extent do you agree or disagree with the statements below? Please tick (✓) only one appropriate box.

Relationships	Strongly Disagree 5	Disagree 4	Neutral 3	Agree 2	Strongly Agree 1
<p><u>Fine and Gross Motor Skills:</u></p> <p>Our students demonstrate good control over fine motor skills, such as writing, drawing and using small objects.</p>					
<p><u>Language Development:</u></p> <p>Our students effectively communicate thoughts and ideas using verbal language.</p>					
<p><u>Numeracy Development</u></p> <p>Our students show progress in mathematical skills, including counting, basic operations, and problem-solving.</p>					

<p><u>Social Skills</u></p> <p>Our students interact well with peers and adults, demonstrates empathy and understands social cues.</p>					
<p><u>Sensorial Ability</u></p> <p>The student effectively processes sensory information and demonstrates appropriate reactions to sensory stimuli.</p>					

IV. The Relationship between Classroom Management Strategies and Academic Performance of Students with ASD HVP Gatagara/Gikondo in Kicukiro District

The following are statements about the relationship between classroom management strategies and academic performance of students with ASD at HVP Gatagara/Gikondo in Kicukiro District. Could you please provide the statements that you would like for agreement or disagreement? Please tick (✓) only one appropriate box.

Cultural practices	Strongly Disagree 5	Disagree 4	Neutral 3	Agree 2	Strongly Agree 1
How much do you agree that effective implementation of classroom rules strategy contributes to the academic performance of students with ASD in terms of their fine and gross motor skills at HVP Gatagara/Gikondo?					
To what extent do you agree that praise and reward systems in the classroom impact the language development of students with ASD at HVP Gatagara/Gikondo?					

How much do you agree that the delegation of authority within the classroom affects the numeracy development of students with ASD at HVP Gatagara/Gikondo?					
How much do you agree that students' supervision significantly contributes to the social skills development of students with ASD and consequently influences their academic performance?					
How much do you agree that effective classroom management strategies impact the sensorial ability of students with ASD and their overall academic performance at HVP Gatagara/Gikondo?					

Thank you for your participation in this survey. Your answers will be kept confidential and used solely for research purposes.

APPENDIX II: Interview Guide for Head Teacher, DOS and Resource Room Manager

Section B. Effective Classroom Management Strategies Tailored for Students with ASD at HVP Gatagara/Gikondo?

1. How do teachers and administrative staff establish and communicate classroom rules to students with ASD at HVP Gatagara/Gikondo?
2. How do teachers and administrative staff use praise and rewards to reinforce positive behaviors in students with ASD at HVP Gatagara/Gikondo?
3. Do teachers and administrative staff involve students with ASD in decision-making processes within the classroom at HVP Gatagara/Gikondo?
4. How do teachers and administrative staff monitor and support the academic progress of students with ASD at HVP Gatagara/Gikondo?

Section C. Academic Performance of Students with ASD at HVP Gatagara/Gikondo

5. How would you describe the overall academic progress of students with ASD in terms of their fine and gross motor skills development at HVP Gatagara/Gikondo?
6. How do teachers assess the academic performance of students with ASD at HVP Gatagara/Gikondo specifically concerning their language development skills, and what trends or patterns have you observed in academic performance of students with ASD in terms their language abilities?
7. How do teachers evaluate the numeracy development of students with ASD at HVP Gatagara/Gikondo and what are some notable trends or observations regarding their academic progress in terms of numerical abilities?
8. How do teachers evaluate social skills of students with ASD at HVP Gatagara/Gikondo and what observations can you share regarding academic performance of students with ASD in terms of social skills at HVP Gatagara/Gikondo?
9. How do teachers assess the academic performance of students with ASD at HVP Gatagara/Gikondo specifically concerning their sensorial ability development skills, and what trends or patterns have you observed in academic performance of students with ASD in terms their sensorial ability?

Section D. The Relationship between Classroom Management Strategies and Academic Performance of Students with ASD at HVP Gatagara/Gikondo in Kicukiro District

10. How would you describe the relationship between classroom management strategies implemented for students with ASD at HVP Gatagara/Gikondo in Kicukiro District and their academic performance?

Thank you for your participation!

APPENDIX III: Observation Guide

1. Effective Classroom Management Strategies Tailored for Students with ASD at HVP Gatagara/Gikondo		
a) The classroom has clear and consistent rules that are communicated effectively to students with ASD.	No	Yes
	Comments	Comments
b) Teachers and administrative staff implement effective praise and reward systems to motivate and reinforce positive behavior among students with ASD.	No	Yes
	Comments	Comments
c) Teachers and support staff effectively delegate responsibilities and authority to ensure smooth classroom management for students with ASD.	No	Yes
	Comments	Comments
d) Adequate supervision is provided to students with ASD to ensure their safety and well-being during classroom activities.	No	Yes
	Comments	Comments
e) The teacher shows concern for the emotions and well-being of students with ASD	No	Yes
	Comments	Comments
f) The teacher demonstrates the ability to teach and explain each topic in a manner that is easily understandable for students ASD	No	Yes
	Comments	Comments

g) The teacher is able to keep the class interesting for students with ASD.	No	Yes
	Comments	Comments
h) The teacher employs individualized strategies in teaching students with Autism Spectrum Disorder (ASD).	No	Yes
	Comments	Comments
i) The teacher provides individualized language support tailored to each student's unique needs and abilities when communicating with students with ASD.	No	Yes
	Comments	Comments

2. Academic Performance of Students with ASD at HVP Gatagara/Gikondo

Areas of Academic Performance	Criteria	Observations/Notes
1. Fine and Gross Motor Skills	a. Hand dexterity	
	b. Finger dexterity	
	c. Body movement	
	d. Hand-eye coordination	
2. Language Development	a. Listening	
	b. Speaking	
	c. Auditory (comprehension)	
	d. Reading	
	e. Writing	

3. Numeracy Development	Counting	
	a. Addition	
	b. Substation	
	c. Division	
	d. Multiplication	
	e. Concrete numbers	
	f. Abstract numbers	
4. Social Skills	a. Interaction with peers	
	b. Working with peers	
	c. Following instructions	
5. Sensorial Ability	a. Hearing ability	
	b. Visual ability	
	c. Regulation Strategies	

3. The Relationship between Classroom Management Strategies and Academic Performance of Students with ASD at HVP Gatagara/Gikondo in Kicukiro District

Effective classroom management strategies tailored to students with ASD are effectively implemented in the classroom

Classroom 1	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	
Classroom 2	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	
Classroom 3	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	

Classroom 4	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	
Classroom 5	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	
Classroom 6	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	
Classroom 7	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	
Classroom 8	No	Yes
	If yes, what are their influence on academic performance of students with ASD?	
	If no, what are their influence on academic performance of students with ASD?	

APPENDIX IV. TURNITIN REPORT

FINAL VERSION OF THESIS IMANATURIKUMWE VICTOR -
INFLUENCE OF CLASSROOM MANAGEMENT STRATEGIES ON
THE PERFORMANCE OF STUDENTS WITH AUTISM SPECTRUM
DISORDER. A CASE STUDY OF HVP GATAGARA GIKONDO.doc

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