

**EFFECTS OF TEACHERS' ATTITUDINAL BARRIERS ON THE ACADEMIC
PERFORMANCE OF STUDENTS WITH DISABILITIES IN TWO SELECTED
PRIMARY SCHOOLS IN NYAMAGABE DISTRICT**

BY

NSABIMANA Theogene



A Thesis Submitted in Partial Fulfillment of Requirement for the Award of the Master's Degree
in Special Needs Education.

School of Inclusive and Special Needs Education

College of Education

University of Rwanda

June, 2024

© 2023

NSABIMANA THEOGENE

All rights Reserved

DECLARATION

I, Theogene NSABIMANA, a student at University of Rwanda – College of Education hereby declare that this research project entitled Exploration of Teachers’ Attitudinal Barriers on the Academic Performance of Students with Disabilities in Two Selected Primary Schools in Nyamagabe District is my own work and has not been presented for a degree in any other university.

NSABIMANA THEOGENE Reg:221027174

Supervisor:

Dr. HABINSHUTI GONZAGUE

DEDICATION

This work is dedicated

To almighty God

To my wife Agnes Umutoni

To my daughter Impano Bria Maybelline

To my parents, brothers and sisters

This work is dedicated

ACKNOWLEDGEMENT

Firstly, I express deep gratitude to the divine force that has safeguarded and guided me through life's miracles. I extend sincere appreciation to the Rwandan government for sponsoring my educational journey. Special acknowledgments are directed to the University of Rwanda – College of Education, particularly the School of Inclusive and Special Needs Education, for imparting invaluable knowledge and skills.

My heartfelt appreciation goes to my supervisor, whose guidance has been pivotal in fueling my academic inspiration. Without their support, the successful completion of this work would not have been possible. I am truly grateful and acknowledge their unwavering assistance throughout.

I also wish to extend thanks to those who assisted in data collection, gathering information, and providing materials essential for completing this work. This includes the learners, teachers, and administrative staff at EP Mbuga and GS Uwinkomo, whose cooperation and support have been instrumental in this endeavor.

ABSTRACT

The study titled "Effects of Teachers' Attitudinal Barriers on the Academic Performance of Students with Disabilities in Two Selected Primary Schools in Nyamagabe District" is motivated by the observed underperformance of students with disabilities in public primary schools within Nyamagabe District. To address this issue, the research aimed to assess the attitudinal barriers exhibited by teachers towards students with disabilities in these primary schools. Additionally, the study sought to evaluate the academic performance of students with disabilities in the selected schools within Nyamagabe District. Furthermore, the research aimed to investigate the potential relationship between teachers' attitudinal barriers and the academic performance of students with disabilities in the Nyamagabe District context. The research population consists of **70** individuals, primarily comprising teachers from public primary schools in Nyamagabe District. Additionally, key informants such as Head Teachers and Deputy Head Teachers were included in the population. For the study, a total of 57 respondents were selected, comprising 53 teachers chosen randomly from the pool of participants and 2 Sector Education Officers (SEOs) and 2 Head Teachers selected purposefully from two specific primary schools within the district. The selection process employed a combination of simple random sampling and purposive sampling based on respondent categories. The collected data underwent analysis and interpretation through a combination of qualitative and quantitative approaches. Qualitative data were analyzed using SPSS version 22, whereas quantitative data were scrutinized through extracts and explanations. The findings of the study reveal that there are different attitudinal barriers exhibited by teachers towards students with disabilities in primary schools in Nyamagabe District. It has been found that factors like negative attitudes and beliefs towards inclusive policies, stigmatization and stereotyping, low teachers' expectations, lack of empathy, inflexibility and negative perception towards inclusion contribute to poor performance of students with disabilities. Moreover, the Pearson correlation coefficient (r) stands at $.771^{**}$, signifying a robust correlation, highlighting a strong connection between teachers' attitudes and the academic success of students with disabilities in Nyamagabe District's primary schools. Ultimately, it is strongly encouraged that every stakeholder within the education sector prioritize investment in inclusive education for all individuals. This investment stands as the sole and most effective means to significantly enhance academic achievements among students with disabilities in Rwanda.

Key words: *Attitudinal Barriers, Academic Performance, Students with Disabilities*

TABLE OF CONTENT

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENT	v
LIST OF FIGURES.....	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS AND ACRONYMS	xi
CHAPTER ONE INTRODUCTION.....	1
1.1. Background of the Study.....	1
1.3 Problem Statement	5
1.4 Objectives of the Study	6
1.4.1 General Objective	6
1.4.2 Specific Objectives	6
1.5. Research Questions	6
1.6. Significance of the Study	7
1.7. Limitation of the Study	8
1.8 Scope of the Study.....	8
1.10 Summary	9
CHAPTER 2: LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Education of Students with Disabilities	10
2.3 Qualities of Expected Teacher in Fostering Students Academic Performance.....	11
2.3.1 Teacher Effectiveness.....	11

2.3.2 Teachers' Experience	12
2.3.3 Teacher Professional Knowledge	13
2.3.4 Certification Status	15
2.3.5 Teacher Content Knowledge	16
2.4 Teachers Attitudes towards Students with Disabilities	17
2.4.1 Willing to Participate in Professional Development Activities	17
2.4.2 Teacher Behaviors and Wiling to Grab Opportunity to Learn	19
2.4.3 Teacher Beliefs	20
2.4.4 Teachers attitudes towards Inclusion.....	21
2.4.5 Teacher Attitude about Student Performance.....	22
2.5 Challenges Faced by Learners with Disabilities Due to Teacher's Attitudinal Barriers in Regular Classes	23
2.6 Theoretical Framework	24
2.7. Conceptual Framework	25
2.8 Summary	27
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY	28
3.1. Introduction	28
3.1. Research Approaches and Design	28
3.1.1. Research Approach.....	28
3.1.2. Research Design	28
3.2 Targeted Population	29
3.3 Sampling Procedures.....	29
3.3.1 Simple Random Sampling	30
3.3.2 Purposive Sampling.....	30
3.4 Sample Size	31
3.5 Data Collection Methods.....	31
3.5.1 Data Collection Instruments	31

3.5.2 Administration of data Collection Instruments	31
3.6 Reliability and Validity of the Research Tools	32
3.7 Data Analysis Procedures	33
3.8 Ethical Consideration	33
3.9 Summary	33
CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION	34
4.1 Introduction	34
4.2 Demographic Characteristics of Respondents.....	34
4.2.1 Demographic characteristics of Respondents by Gender	34
4.2.2 Demographic Characteristics of Respondents by Age Group	35
4.2.3 Demographic characteristics of Respondents by Academic Level	36
4.2.4 Demographic characteristics of Respondents by Subject Taught	36
4.3 Presentation of Findings.....	37
4.3.1 Attitudinal Barriers Exhibited By Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District	37
4.3.2 The Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District	42
4.3.3 The Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda	46
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	52
5.1 Summary of the Findings	52
5.5.1 Attitudinal Barriers Exhibited By Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District	52
5.5.2 The Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District	53
5.5.3 The Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda	54
5.2. Conclusion.....	54
5.3. Recommendations	55

5.4. Suggestion for Further Study	55
REFERENCES	57
APPENDECES.....	59
Appendix I: Questionnaire For Teachers	59
Appendix II: Interview Guide With Head Teachers	65
Interview Guide with Sector Education Officers	66
Appendix III: The Map of Nyamagabe District	67

LIST OF FIGURES

Figure 1: Conceptual Framework	26
--------------------------------------	----

LIST OF TABLES

Table 1:Target Population of the Study	29
Table 2:Respondents' Gender (Students)	34
Table 3: Respondents' Age Group (Students)	35
Table 4: Respondents Academic Level.....	36
Table 5: Subject Taught by Respondents.....	36
Table 6: Teachers Views on Attitudinal Barriers Exhibited by Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District	39
Table 7: Teachers' Views on the Level of Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District	43
Table 8: Teachers' Views on the Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda	47
Table 9: Correlation between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities	49
Table 10: Model Summary	49

LIST OF ABBREVIATIONS AND ACRONYMS

IE: Inclusive Education.

NAEP: National Assessment of Educational Progress

OTL: Opportunity to Learn

PCK: Pedagogical Content Knowledge

PIAAC: International Assessment of Adult Competencies

REB: Rwanda Basic Education Board.

SEN: Special Educational Needs.

SN: Special Needs.

SNE: Special Needs Education.

TIMSS: International Results in Mathematics and Science Studies

TTC: Teacher Training College.

UR-CE: University of Rwanda College of Education.

CHAPTER ONE INTRODUCTION

1.1. Background of the Study

The research delves into how teachers' attitudes serve as barriers affecting the academic performance of students with disabilities in two specific primary schools within Nyamagabe district. This investigation was prompted by the increasing emphasis on teacher accountability, where educators' abilities, school environment, and their personal predispositions might not be conducive to accommodating students with disabilities in regular classrooms unless inclusive practices are more prevalent (Hines, 2011).

This study aimed to examine how teachers' attitudes affect the academic achievements of students with disabilities, recognizing the crucial role teachers play in supporting these students. Various scholars (Glaubman & Lifshitz, 2001; Mushoriwa, 2001; Singh & Alur, 2001; Tesfaye, 2005; Alghazo & Gaad, 2004; Singal, 2006b; Chhabra, Srivastava & Srivastava, 2010) have previously highlighted how negative attitudes among teachers towards inclusive education are linked to a lack of skills and apprehension in effectively catering to students with special educational needs.

The mindset of a teacher, whether consciously or subconsciously, significantly impacts students' academic performance (Shittu & Oanite, 2015). It's widely acknowledged that teachers' attitudes greatly shape students' interest in learning. Furthermore, the personality traits exhibited by teachers wield more influence and power over students than the actual course content or instructional methodologies employed in the classroom (Wubbels & Brekelmans, 2012). Additionally, educators with negative attitudes might not be as approachable to students compared to their positively motivated counterparts. Consequently, students may struggle to ask questions about unclear concepts from such teachers. Hence, the attitudes of teachers toward students including students with disabilities are pivotal for the success of students.

This aligns with Sylod's research (2016), which asserts that teachers' attitudes significantly impact students' academic performance. A positive attitude exhibited by a teacher can influence students' motivation, their attitudes toward school and schoolwork, bolster their self-confidence, and consequently contribute to their personality development.

Teachers play a critical role in shaping classroom dynamics, and many argue that fostering more inclusive classrooms necessitates teachers' ability to address diverse student learning needs by adapting or differentiating the curriculum (Forlin, 2004).

Similarly, a cross-cultural study encompassing the USA, Germany, Israel, Ghana, Taiwan, and the Philippines examined teachers' attitudes, revealing notable differences in their perspectives on integration (Leyser, Kapperman, and Keller, 1994). The research findings indicated that teachers in the USA and Germany exhibited the most favorable attitudes towards integration. Conversely, in countries such as Israel, Ghana, Taiwan, and the Philippines, teachers' attitudes appeared to be notably less positive (Avramidis & Norwich, 2002). This disparity was attributed to inadequate or lacking training in acquiring integration competencies, limited teaching experience, and a lack of exposure to students with Special Education Needs in those educational settings.

In Zambia, assessments of parental and teacher attitudes towards inclusive education have revealed that teachers' positive attitudes towards learners with disabilities are heavily influenced by several factors. These factors include the teachers' experiences with these learners, the quality of their education and training, the availability of adequate support systems, class sizes, and the overall workload of teachers (Chilufya, 2005). These elements collectively contribute to shaping teachers' attitudes towards inclusive education and their ability to effectively support students with disabilities in the classroom.

In the East African region, reports on teachers' attitudes towards inclusive education shed light on various challenges hindering effective implementation (Mngo & Mngo, 2018). In Kenya, significant challenges have been identified, including inadequate resources, negative attitudes, prevailing beliefs towards children with disabilities, and a rigid school curriculum. These factors collectively impede the successful execution of inclusive education initiatives (Adoyo, 2005).

Similarly, in Tanzania, poor collaboration and interaction among teachers, students, and parents have been identified as obstacles affecting the inclusion of students with disabilities (Chaula, 2014). The lack of cohesive efforts and communication between these stakeholders has hampered the successful integration of students with disabilities into mainstream educational settings.

Before the campaign, teachers in Rwanda often held mixed attitudes towards students with disabilities, which posed significant challenges to the implementation of inclusive education (Mukhopadhyay & Moswela, 2013). Many teachers lacked the training and resources needed to effectively support these students, leading to feelings of inadequacy and reluctance. There were also prevalent misconceptions and biases that further hindered the integration of students with disabilities into mainstream classrooms (Bines & Lei, 2011). Recognizing these issues, the Rwandan government took proactive measures by spearheading a campaign to promote inclusive education. This initiative aims to address the specific needs of students with disabilities, aligning with the targets of Education for All and the Sustainable Development Goals (UNICEF, 2015). Rwanda's efforts underscore a commitment to fostering an inclusive educational environment that caters to the diverse needs of all learners, including those with disabilities.

The government, alongside development partners, has demonstrated substantial support for the education of children with disabilities through policy and law in Rwanda. There is a clear intention to foster inclusive environments for these children in all schools, ensuring that educational settings can accommodate the diverse needs of learners. Specifically, teachers have received training and sensitization on how to effectively engage and support children with disabilities within school settings (UNICEF, 2015). This commitment reflects a concerted effort to promote inclusive education and address the historical exclusion of students with disabilities from mainstream educational opportunities.

Historically, children with disabilities were often relegated to separate special schools, focusing on specific impairments like schools for the blind. However, these institutions reached only a fraction of those in need and were not cost-effective. They tended to isolate individuals from their families and communities (UNESCO, 1988). Progress toward inclusivity began when legislation mandated the inclusion of children with disabilities in mainstream educational systems (UNESCO, 1994). Nonetheless, the success of inclusion relies significantly on teachers' positive attitudes towards learners with disabilities (D'Alonzo, et al., 1997), as teacher-student relationships greatly impact classroom learning.

In many general academic settings, students with disabilities are often treated differently, affecting their academic outcomes (Hodkinson, 2010). Some general education teachers express concerns about their ability to effectively teach in inclusive settings and meet the diverse needs of students with disabilities (Stahl, 2002). Additional planning and preparation required for inclusive settings are sometimes perceived as burdensome by teachers who fear neglecting students without disabilities (Rose, 2001). Studies indicate that general education teachers hold mixed perceptions about educating students with disabilities (Artiles, 2003; Gaskins & Labbo, 2007). Those with specialized training in special education are more receptive to teaching students with disabilities compared to their counterparts without such experience (Van Reusen, et al., 2001; McLeskey, Waldron, So, Swanson, & Loveland, 2001).

Labeling students with disabilities can lead to stigmatization, peer rejection, lower self-esteem, and limited opportunities (Florian, et al., 2006). The negative societal attitudes towards students with disabilities contribute to challenges in seeking support services and disclosing their disabilities (Kwon, 2005). Students often face ridicule and derogatory comments, especially within schools, affecting their sense of belonging and well-being (Nkeli & Associates, 2008).

In Rwanda, the government has taken proactive measures to promote inclusive education, aiming to address the specific needs of students with disabilities and align with the targets of Education for All and the Sustainable Development Goals (UNICEF, 2015). Despite these efforts, teachers often face significant challenges due to inadequate support and resources, hindering their ability to effectively accommodate learners with disabilities. During a school visit as an Inclusion Facilitator, the researcher noted that teachers lacked the necessary support to implement inclusive strategies effectively. Enhancing teachers' capacity to respond to diversity and addressing their attitudinal barriers is crucial in actualizing the goal of inclusive education for all. Supporting teachers in these aspects can significantly contribute to making inclusive education a reality.

This study aimed to examine how teachers' attitudes affect the academic achievements of students with disabilities, recognizing the crucial role teachers play in supporting these students. Various scholars (Glaubman & Lifshitz, 2001; Mushoriwa, 2001; Singh & Alur, 2001; Tesfaye, 2005; Alghazo & Gaad, 2004; Singal, 2006b; Chhabra, Srivastava & Srivastava, 2010) have previously highlighted how negative attitudes among teachers towards inclusive education are

linked to a lack of skills and apprehension in effectively catering to students with special educational needs. By addressing these attitudinal barriers and enhancing teacher support, this study seeks to contribute to the broader goal of fostering an inclusive educational environment in Rwanda.

1.3 Problem Statement

Teachers are the cornerstone of an inclusive education system, playing a pivotal role in creating a supportive and welcoming environment for all students, particularly those with disabilities. According to Girdhar (2017), teachers are expected to recognize and appreciate the strengths of their students while offering support to overcome their challenges. They are empathetic, patient, and dedicated, providing equal opportunities for learning and growth to every student. This dedication and positive attitude are essential in fostering a culture of inclusion and ensuring that every learner has the chance to thrive academically and personally.

Moreover, in this regard, teachers continuously engage in professional development to enhance their skills in inclusive education practices, thus ensuring an environment conducive to the academic and personal development of students with disabilities (Mberimana, 2019).

However, in Nyamagabe, the actual situation regarding teacher attitudes towards students with disabilities may present notable disparities from this ideal (Kamugisha, 2019). Observations and reports suggest that some teachers might demonstrate attitudinal barriers, ranging from indifference to a lack of adequate skills and knowledge in handling diverse learning needs (Mberimana, 2019 & Nyamagabe District Report, 2020). There might be instances of negative attitudes, such as a lack of patience or understanding, which could impede the progress of students with disabilities. Challenges may arise due to insufficient resources, limited training or pre-existing biases, hindering the creation of an inclusive learning environment.

Evidence from various sources highlights the disparities between the ideal and actual situations in Nyamagabe regarding teacher attitudes toward students with disabilities. The ideal situation, as outlined in UNESCO's initiative towards inclusive education, emphasizes the importance of creating a supportive and inclusive environment for all learners (UNESCO, 20233).

However, studies such as Mberimana (2019) and the Nyamagabe District Report (2020) provide evidence of attitudinal barriers among teachers, showcasing a gap between the desired inclusive education environment and the actual attitudes and practices observed in Nyamagabe District, Rwanda. This discrepancy between expected positive attitudes and the observed challenges and barriers suggests a pressing need to investigate and address these issues. The consequences of such disparities include the potential hindrance of academic progress and personal development of students with disabilities due to inadequate support, negative attitudes, and a lack of inclusive educational practices. Hence, the problem statement focuses on bridging this gap by exploring and exploration of teachers' attitudinal barriers on the academic performance of students with disabilities in two selected primary schools in Nyamagabe District.

14 Objectives of the Study

1.4.1 General Objective

This study explored teachers' attitudinal barriers on the academic performance of students with disabilities in two selected primary schools in Nyamagabe district.

1.4.2 Specific Objectives

The study sought to achieve the following specific objectives:

- i. To assess teachers' attitudinal barriers towards students with disabilities in primary schools in Nyamagabe District
- ii. To examine the academic performance of students with disabilities in the selected primary schools in Nyamagabe District
- iii. To analyze the relationship between teachers' attitudinal barriers and the academic performance of students with disabilities

1.5. Research Questions

The current study answered the following research questions:

- i. What is the nature and extent of attitudinal barriers displayed by teachers towards students with disabilities in the selected primary schools in Nyamagabe District?
- ii. How do students with disabilities perform academically in selected primary schools in Nyamagabe District?

- iii. Is there a significant correlation between teachers' attitudinal barriers and the academic performance of students with disabilities?

1.6. Significance of the Study

This study holds significant importance for various stakeholders within the educational realm and the broader community. Firstly, for researchers, it offers insights into the pivotal role of skilled special needs educators in empowering teachers to address barriers to learning in classroom settings. By contributing to the existing literature on inclusive education, this study provides findings that could guide corrective measures, offering lasting solutions to the lack of teacher support in primary schools. Furthermore, it aims to enrich the knowledge base concerning teacher support in inclusive education and proposes recommendations beneficial to policymakers and educational planners in Rwanda.

Moreover, the study's impact extends to the community and parents, advocating for the recognition and encouragement of every child in society, irrespective of any form of discrimination. By emphasizing inclusivity, it resonates particularly with parents of learners with disabilities and special educational needs, highlighting the importance of valuing and supporting every child to foster a more inclusive and accepting community.

Additionally, within the Ministry of Education, this study aligns with objectives aimed at providing quality and inclusive education for all Rwandan children.

It aids in advancing the understanding of inclusive education within the context of the Nyamagabe District, shedding light on how teachers' attitudes towards students with disabilities influence their educational experiences, thus informing and supporting the Ministry's policies and initiatives.

Lastly, the study's outcomes are significant for educational practitioners, including educators, school administrators, policymakers, and stakeholders. It offers valuable insights to help understand the importance of inclusive education and the necessity of removing psychological barriers.

The recommendations derived from this research can guide the development of interventions and policies aimed at creating an inclusive learning environment for students with disabilities, thereby aiding educational practitioners and stakeholders in their decision-making processes.

Overall, this study contributes significantly to the field of inclusive education, providing practical implications for various stakeholders involved in the education sector and the wider community.

1.7. Limitation of the Study

The study was undertaken in a few select primary schools situated in the Nyamagabe district. This selection was primarily influenced by the constrained timeframe allocated for the research and the geographical challenges within the district, which made traveling between schools during data collection a complex task.

1.8 Scope of the Study

This research endeavor took place within a selection of primary schools situated in Nyamagabe District. The participants consisted of School Education Officers (SEOs), Head Teachers, and teachers from public primary schools within Nyamagabe district in Rwanda. In terms of the duration, this project was confined to the timeframe spanning from 2021 to 2023. Lastly, regarding its scope, the focus of this project was restricted to examining teachers' attitudinal barriers and their effects on the academic performance of students with disabilities.

1.9. Organization of the Study

This study is organized into five distinct chapters, each with its specific role in the overall structure. The initial chapter functions as an introduction, providing an overview of the context, background, problem statement, research objectives, inquiry questions, significance, and study's scope. Following this, the second chapter focuses on an extensive literature review. The subsequent third chapter details the research methodology, outlining the data collection and analysis techniques utilized. Chapter four is dedicated to presenting the research findings. Lastly, the fifth and final chapter encompasses a discussion of the results, draws conclusions, and presents recommendations based on the study's findings.

1.10 Summary

In the first chapter of the ongoing research project, an introductory overview was presented, covering various essential sections. These included the background of the study, articulation of the research problem, formulation of research objectives, delineation of research questions, highlighting the study's significance, acknowledging the study limitations, specifying the study's scope, and describing the overall organizational structure of the research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of the pertinent literature that forms the foundation of the study. The review of literature is aligned with the study's objectives and aims. In essence, the literature review entails gathering published information and materials relevant to a specific research area or topic, such as scholarly books and journal articles. However, it's essential to note that a comprehensive literature review doesn't necessarily encompass every article and book available on the topic, as that could be overly broad. Instead, it aims to include key sources that relate to the primary debates, prevailing trends, and identified gaps within the research area.

2.2 Education of Students with Disabilities

The 35th Annual Report to the U.S. Congress on the Implementation of IDEA (2013) highlighted that a significant proportion, approximately 61.1%, of students with varying disabilities spent the entirety (80–100%) of their school day within a regular education classroom. Within the remaining 39.9%, almost half of the students were divided between spending between 40% and 80% of their school day in regular education classrooms, while the other half either spent less than 40% of their day in a general education setting or were placed in self-contained classrooms. This data indicated a diverse distribution of students with disabilities across different educational settings, showcasing varying degrees of inclusion within regular education environments based on individualized needs.

In the subsequent 40th Annual Report to the U.S. Congress on the Implementation of IDEA (U.S. Department of Education, 2018), it was noted that the majority, approximately 63.1%, of students between the ages of 6 through 21 served under IDEA, Part B, were primarily educated in regular classrooms for 80% or more of their school day. Additionally, around 18.3% of students within the same age group were placed in regular classrooms for 40% through 79% of the day, indicating a considerable portion of students spending a significant portion of their time in inclusive settings. However, 13.4% of students were educated in the regular classroom for less than 40% of the day, while a smaller proportion of 5.1% were placed outside the regular classroom in "Other environments."

These statistics from both reports highlight the diverse range of educational placements for students with disabilities. While a substantial majority of students spend significant portions of their day in regular education classrooms, a notable proportion still receive education outside of these settings. This data emphasizes the importance of individualized education plans tailored to students' specific needs, ensuring inclusive environments where students can thrive academically and socially. The varying percentages of students across different educational settings underscore the importance of ongoing evaluation, support, and implementation of inclusive practices to cater to the diverse needs of students with disabilities in the education system.

2.3 Qualities of Expected Teacher in Fostering Students Academic Performance

2.3.1 Teacher Effectiveness

Scholars concur on the crucial role teacher's play in determining students' future academic success and long-term life outcomes (Chetty et al., 2014; Rivkin et al., 2005; Rockoff, 2004). Consequently, there has been a concerted effort to improve teacher effectiveness as a means of augmenting student learning. Goe (2007) and others have defined teacher effectiveness in terms of student learning growth, often measured by standardized assessment results. Chetty et al. (2014) discovered that students taught by highly effective teachers, as identified by measures such as student growth percentile (SGP) and value-added measures, exhibited tendencies to attend college, earn higher incomes, reside in more affluent neighborhoods, save more for retirement, and were less likely to have children during their teenage years.

The profound impact of highly effective teachers on the lives of their students underscores the importance for researchers and policymakers to comprehensively comprehend the factors contributing to a teacher's effectiveness. However, as detailed further in this report, studies have presented mixed findings concerning the relationships between specific teacher characteristics and student achievement (Wayne and Youngs, 2003). This chapter delves into these findings, focusing on three primary categories identified in the research literature as pivotal to teacher effectiveness: teacher experience, teacher knowledge, and teacher behavior.

It's important to note that a considerable portion of the existing research body is derived from studies conducted in the United States. Therefore, the transferability and relevance of such national-level research to other contexts remain subject to discussion and exploration.

2.3.2 Teachers' Experience

Teachers' experience, defined as the duration a teacher has spent working in the classroom, has been a subject of study regarding its impact on student achievement. Numerous studies have indicated a positive relationship between teacher experience and student academic performance (Wayne and Youngs, 2003). For instance, an examination of data from 4,000 teachers in North Carolina revealed a positive association between teacher experience and student achievement in both reading and mathematics (Clotfelter et al., 2006). Rice (2003) further highlighted that the correlation between teacher experience and student achievement was notably stronger for students at the secondary level.

Multiple studies conducted in schools in the United States, such as those by Wiswall (2013), Papay and Kraft (2015), Ladd and Sorenson (2017), and Dutch research by Gerritsen et al. (2014), supported the cumulative effect of teacher experience on student outcomes. However, contrasting findings have emerged, with some studies failing to consistently establish significant associations between student achievement and teacher experience (Blomeke et al., 2016; Gustaffsson and Nilson, 2016; Hanushek and Luque, 2003; Luschei and Chudgar, 2011; Wilson and Floden, 2003).

Moreover, research from the United States has suggested that the impact of experience might be more pronounced early in a teacher's career, showing substantial gains in student achievement during the initial years (Boyd et al., 2006; Rivkin et al., 2005; Staiger and Rockoff, 2010). Rockoff (2004) discovered a positive relationship between teacher experience and student mathematics achievement, particularly within the first two years of teaching, after which the impact leveled off. Similarly, Papay and Kraft (2015), examining teachers in a large urban district from 2000 to 2008, confirmed that student outcomes improved most prominently during teachers' early years of employment. Yet, they observed continued gains beyond the initial five years of teaching experience.

Adding nuance to this discussion, Pil and Leana (2009) highlighted that accumulating experience specifically within the same grade level over several years, rather than generalized experience across multiple grades, was positively associated with student achievement. This distinction underscores the complexity in understanding the precise relationship between teacher experience and its impact on student outcomes.

2.3.3 Teacher Professional Knowledge

A teacher's professional knowledge encompasses their expertise in subject matter, curriculum, and pedagogy (Collinson, 1999). This comprehensive knowledge base is shaped by various factors, including the teacher's undergraduate degrees, the institution they attended, participation in graduate studies, and engagement in on-the-job training or professional development opportunities (Collinson, 1999; Rice, 2003; Wayne and Youngs, 2003).

Through extensive quantitative analyses of the United States' 1993–1994 Schools and Staffing Survey (SASS) and National Assessment of Educational Progress (NAEP) data sets, Darling-Hammond (2000) concluded that teacher preparation and certification were notably strong determinants of student achievement in reading and mathematics. This conclusion remained robust even after accounting for variables such as student poverty levels and language status.

However, similar to the findings related to teacher experience, research concerning the impact of teacher advanced degrees, subject specializations, and certification has yielded inconclusive results. Several studies (Aaronson et al., 2007; Blomeke et al., 2016; Hanushek and Luque, 2003; Harris and Sass, 2011; Luschei and Chudgar, 2011) have suggested weak, inconsistent, or non-significant relationships between these factors and student achievement.

Contrastingly, various international studies comparing country averages found significant associations between teacher degrees and student outcomes (Akiba et al., 2007; Gustaffsson and Nilson, 2016; Montt, 2011). Woessman's (2003) study, which analyzed multiple countries at the student level, also supported the relationship between teacher degrees and student outcomes. These differing conclusions highlight the complexity and variability in the impact of teacher qualifications on student achievement, warranting further exploration and nuanced understanding.

2.3.3.1 Undergraduate Education

In their extensive review of teacher effectiveness, Wayne and Youngs (2003) highlighted three studies suggesting a potential link between the quality of the undergraduate institution where a teacher received education and the subsequent success of their students in standardized tests.

Additionally, Rice (2003), in a comprehensive examination of research on teacher attributes influencing effectiveness, noted that the selectivity of the undergraduate institution and the quality of the teacher preparation program might correlate with student achievement, especially among high school students and those from high-poverty backgrounds.

Boyd et al. (2009) conducted a study encompassing 31 teacher preparation programs aimed at training educators for the New York City School District. They drew upon various data sources, including document analyses, interviews, surveys of teacher preparation instructors and participants, graduates' surveys, and student value-added scores. Their findings suggested that effective programs, focusing on teaching practices and classroom immersion, tended to produce more successful teachers. Additionally, programs incorporating final project elements like personal research papers or portfolio presentations were associated with preparing more effective teachers.

2.3.3.2 Graduate Education

Certainly, the research landscape examining the correlation between teacher education level and student achievement is intricate and sometimes contradictory. Wilson and Floden's comprehensive review of 14 studies encountered difficulties in consistently establishing connections between a teacher's level of education and their students' academic performance. Similarly, Clotfelter et al. (2006) found, in an analysis involving 4,000 teachers in North Carolina, that teachers possessing a master's degree were linked with lower student achievement.

However, when focusing on mathematics instruction, Goe (2007) observed a positive relationship between teachers with higher degrees and increased coursework during their education and the academic achievement of their students in mathematics. On the other hand, Harris and Sass (2011) reported a positive association between teachers who acquired advanced degrees during their teaching career and the achievement of their middle school mathematics students. However, this relationship was not evident across other subject areas.

Additionally, Phillips (2010) used data from the United States' Early Childhood Longitudinal Study (ECLS-K) and found that subject-specific graduate degrees in elementary or early-childhood education were positively linked to gains in students' reading achievement.

The varied results highlight the complexity of the relationship between teacher education level and student achievement. While certain studies indicate positive associations, particularly in specific subjects like mathematics and reading, others emphasize the challenge of consistently establishing connections between teachers' higher degrees and overall student achievement. This complexity underscores the necessity for further nuanced exploration and analysis in this area to better understand the dynamics between teacher education and student outcomes.

2.3.4 Certification Status

The impact of teacher certification on teacher effectiveness, often examined within the context of the United States educational system, remains an area of intricate and ambiguous findings. The certification approaches in the U.S. vary, with lower grades typically requiring multi-subject general certifications and higher grades mandating certifications in specific subjects.

Wayne and Youngs (2003) discovered an uncertain relationship between teachers' certification status in the U.S. and their students' overall achievement, except for mathematics. In the case of mathematics, students tended to exhibit higher test scores when taught by teachers holding standard mathematics certifications. Rice (2003) also noted a correlation between U.S. teacher certification and high school mathematics achievement, observing some indications of a relationship between certification status and student achievement in lower grades.

Additionally, Palardy and Rumberger's study (2008) involving grade one students found evidence supporting greater reading ability gains when taught by fully certified teachers. However, Darling-Hammond et al.'s longitudinal study (2005) using data from teachers in grades four and five in the Houston School District in Texas presented contrasting findings. They revealed that teachers with recognized teaching certificates were more effective than those without dedicated teaching qualifications. Teachers lacking recognized U.S. certification or holding non-standard certifications appeared to have negative effects on student achievement, even after accounting for student characteristics, prior achievement, teacher experience, and degrees. Notably, the effects of teacher certification on student achievement were observed to be notably stronger than those attributed to teacher experience.

However, contrasting results emerge from Phillips' analysis (2010) of data from the Early Childhood Longitudinal Study (ECLS-K). Phillips found that grade one students exhibited lower mathematics achievement gains when taught by teachers with standard certification.

In summary, the literature examining the influence of teacher certification on student achievement remains inconclusive and complex, displaying varied and contradictory findings across different studies and subject areas.

2.3.5 Teacher Content Knowledge

Undoubtedly, evaluating characteristics like experience and education as proxies for teacher content knowledge can be challenging, especially as content knowledge itself is difficult to assess directly. However, a growing body of research implies a potential association between teacher content knowledge and student learning outcomes. It's crucial to note the distinction between general content knowledge about a subject (CK) and pedagogical content knowledge (PCK) specifically related to teaching that subject, as each may independently influence student outcomes (Baumert et al., 2010).

Several studies conducted in the United States (Chingos and Peterson, 2011; Clotfelter et al., 2006; Constantine et al., 2009; Hill et al., 2005; Shuls and Trivitt, 2015) have indicated that higher cognitive skills of teachers in mathematics are associated with increased student scores. Similarly, positive associations between teacher content knowledge and student outcomes were observed in studies from Germany (Baumert et al., 2010) and Peru (Metzler and Woessman, 2012), as well as in a comparative study utilizing Programme for the International Assessment of Adult Competencies (PIAAC) data conducted by Hanushek et al. (2018).

However, it's important to note that these findings are not universal. Other studies from the United States (Blazar, 2015; Garet et al., 2016; Rockoff et al., 2011) did not find statistically significant associations between teacher content knowledge and student learning. Notably, these studies utilized direct measures of teacher content knowledge.

An alternative approach to assess mathematics teacher content knowledge is through self-reported teacher preparation to teach mathematics topics.

While Luschei and Chudgar (2011) and Gustafsson and Nilson (2016) found a weak direct relationship between these self-reported items and student achievement across countries, other research has suggested that readiness might be linked to instructional quality (Blomeke et al., 2016) as well as content knowledge and preparation (Schmidt et al., 2017). This implies that instructional quality may indirectly impact student learning, mediated through its influence on teacher content knowledge and preparation.

2.4 Teachers Attitudes towards Students with Disabilities

2.4.1 Willing to Participate in Professional Development Activities

The influence of professional development on teacher effectiveness and subsequent student achievement remains a topic of considerable debate and nuanced findings among researchers. While Desimone et al.'s work (2002, 2013) suggested that professional development could impact instructional quality, many studies have indicated limited associations between teachers' professional development experiences and their overall effectiveness. However, it's worth noting that middle- and high-school mathematics teachers who engaged in more content-focused training might be an exception to this trend (Blomeke et al., 2016; Harris and Sass, 2011).

In a meta-analysis conducted by Blank and De Las Alas (2009), examining the effects of professional development on student achievement, significant and positive relationships between professional development and student outcomes were reported in 16 studies. For mathematics, the average effect size in studies utilizing a pre-post assessment design was 0.21 standard deviations.

Wallace (2009), utilizing data from six datasets - including two from the Beginning Teacher Preparation Survey in Connecticut and Tennessee, and four from the United States National Center for Education Statistics' National Assessment of Educational Progress (NAEP) - employed structural equation modeling to explore the impact of professional development on student achievement. Her findings indicated a very small yet occasionally statistically significant effect of professional development on student achievement. For instance, based on NAEP mathematics data from 2000, an increase of 1.2 additional hours of professional development per year was related to an average increase in student scores of 0.62 points.

Similarly, in reading, an additional 1.1 hour of professional development correlated with an average increase in student scores of 0.24 points. Overall, Wallace's research highlighted moderate effects of professional development on teacher practice and some minor effects on student achievement, especially when mediated by changes in teacher practice.

The study on professional development's impact on teaching practices and teachers' capabilities reveals significant findings across various domains. Firstly, professional development initiatives notably enhanced teachers' knowledge, as demonstrated by substantial effect sizes ($g=0.93$ [0.76; 1.1]). However, this improvement was comparatively less pronounced among older teachers, indicating potential challenges in knowledge acquisition due to pre-existing knowledge bases or reluctance towards embracing new practices (Saborit et al., 2016; Thomas, 2012). While knowledge tests showcased increased awareness of inclusive education, self-reports indicated teachers' perception of increased knowledge through professional development. This implies that addressing teachers' perceived lack of knowledge, often considered a barrier to implementing inclusive education, can be achieved through targeted professional development programs.

Secondly, the study identified a notable improvement in teachers' skills following professional development endeavors ($g=0.49$ [0.41; 0.56]). This finding aligns with prior research, albeit to a lesser extent, suggesting potential methodological differences. Notably, the meta-analysis encompassed both published and unpublished studies, unveiling that published studies reported larger effects for self-efficacy, potentially influenced by publication biases (Rosenthal, 1979). Despite improvements in self-perceived capability to implement inclusive education, there remains room for enhancement in implementing practices effectively, as reflected in the variance in teaching methods and utilization of evidence-based strategies (Nilholm, 2021; Ramberg & Watkins, 2020).

Lastly, while professional development exhibited a small positive effect on altering teacher beliefs, particularly in attitudes toward inclusive education and perceptions of teaching methods ($g=0.23$ [0.17; 0.28]), it had minimal influence on concerns about inclusive education. This lack of impact on concerns might be attributed to teachers' predominant focus on challenges within school settings hindering implementation rather than the information disseminated through professional development (Abakah et al., 2022; Sharma et al., 2018).

Changing deeply held beliefs demands considerable effort, often stemming from acquiring new knowledge and positive experiences (Gregoire, 2003). However, the study highlights the challenge of altering beliefs when participants already possess moderately positive beliefs regarding the topic.

In summary, the research underscores that professional development significantly improves teachers' knowledge and skills, impacting their self-perceived capability to implement inclusive education practices. However, it highlights the persistent challenges in effectively implementing inclusive strategies and altering entrenched beliefs, emphasizing the need to address practical hurdles within school environments to facilitate successful implementation and belief transformation.

2.4.2 Teacher Behaviors and Wiling to Grab Opportunity to Learn

The influence of teacher characteristics like experience and education on student outcomes remains an area of ongoing exploration, marked by inconsistent findings. However, there appears to be a more consistent relationship between student achievement and certain teacher behaviors, particularly those related to instructional time and instructional content.

Studies, such as those conducted by Schmidt et al. (2001, 2015), have highlighted the association between classroom opportunity to learn (OTL), focusing on student exposure to instructional content, and student achievement using TIMSS and PISA data across various educational systems. These findings underscore the significance of instructional content in impacting student achievement. National policymakers have recognized the importance of instructional content, leading to initiatives like standards-based reforms such as the Common Core in the United States (Common Core Standards Initiative, 2018), aiming to enhance student achievement by emphasizing content quality.

However, limited research has investigated whether teacher instructional content aligned with national standards effectively improves student learning. Notably, a study by Polikoff and Porter (2014) revealed only weak associations between instructional content alignment with national standards and student mathematics scores.

Additionally, findings derived from student-reported data suggest a relationship between instructional time (defined as classroom time dedicated to a particular subject) and mathematics achievement (Cattaneo et al., 2016; Jerrim et al., 2017; Lavy, 2015; Rivkin and Schiman, 2015; Woessman, 2003). These studies highlight the potential impact of the amount of time spent on specific subjects in the classroom on students' mathematics achievement.

2.4.3 Teacher Beliefs

The study explored teachers' belief systems regarding inclusive education, focusing on cognitive appraisals, emotional evaluations, and self-efficacy in teaching inclusive classrooms. It utilized meta-analysis to comprehend the level and variability of teachers' beliefs about inclusive education, examining factors influencing these beliefs such as career stage, specialized training, and specific programs. The research, based on 102 papers from 2000-2020 involving 40,898 teachers across 40 countries, found substantial disparities in teachers' beliefs despite robust findings, particularly concerning basic skills instruction.

Criticism of the emphasis on observable behaviors in teaching practices prompted a shift towards studying teachers' deeper beliefs and attitudes toward teaching. Belief systems were deemed dynamic, evolving structures, susceptible to change based on experience. The relationship between beliefs and practice was portrayed as reciprocal rather than unidirectional, where beliefs are influenced by practical experiences. In contrast to behaviorist research that mainly focused on observable behaviors, the study delved into the wide-ranging universe of teacher beliefs, necessitating a focus on limited belief systems for research.

One such belief structure identified by Askew et al. (1997) involved connectionist, transmission, and discovery orientations in numeracy education. These orientations reflect teachers' beliefs about numeracy, teaching strategies, and student learning approaches. Connectionist teachers prioritize efficient problem-solving and curriculum connections, emphasizing real-world applications. Transmission-oriented teachers stress standardized routines, while discovery-oriented teachers encourage diverse methods.

Moreover, these beliefs extend to how teachers perceive students' numeracy learning. Connectionist teachers believe in students' learning potential, focusing on efficient strategies and addressing misconceptions.

Transmission-oriented teachers prioritize set methods, attributing learning challenges to students' perceived inability. Discovery-oriented teachers view learning as individualized, occurring when students are ready, and value students' unique strategies.

Finally, teachers' beliefs about teaching numeracy differ. Connectionist teachers advocate interactive teaching, engaging in discussions to explore strategies. Transmission-oriented teachers prioritize teaching procedures through explanations, while discovery-oriented teachers support students in finding methods through practical experiences. Notably, highly effective teachers often held connectionist beliefs, while less effective teachers leaned towards transmission or discovery orientations according to Askew et al.'s (1997) study of 90 teachers.

2.4.4 Teachers attitudes towards Inclusion

The successful implementation of inclusion programs in education requires careful consideration of several key factors, primarily centered around adequately preparing and training teachers to effectively work with students with disabilities (Salend, 2001). Teachers have expressed concerns regarding their readiness and lack of training for inclusive education, leading to negative attitudes towards these programs (Hardy, 1999). This lack of preparation often leaves teachers feeling ill-equipped to teach students with disabilities, affecting their perception of teaching within the new education reforms (Burstein et al., 2004).

Research by Cook (2001), Cook, Semmel, and Gerber (1999), and Gunter et al. (2000) suggests that teachers find themselves in challenging situations due to inadequate preparation, which has contributed to their resistance towards inclusion. It's been emphasized that providing teachers with necessary development and a comprehensive understanding of inclusive practices is crucial for success (Cook et al., 1999).

Overwhelmed by planning and excessive workloads associated with inclusion programs, teachers struggle to create lesson plans that effectively cater to all students (D'Alonzo et al., 1997; McLesky & Waldron, 2002; Shade & Stewart, 2001). To address these challenges, teachers require additional training, presentations, relevant information about students with disabilities, and models illustrating ideal inclusive settings (Leyser & Tappendorf, 2001).

Creating an inclusive environment necessitates teachers' ability to manage classrooms effectively, ensuring that learning isn't impeded for any students, disabled or not (Wood, 2002).

Support structures, including low student-teacher ratios, are integral for the success of inclusive settings (Achilles & Finn, 2000; Gersten & Dimino, 2001; Thurlow, Ysseldyke, & Wotruba, 1989). Low ratios enable teachers to meet individual student needs effectively. Collaborative problem-solving between general education and special education teachers is crucial for the education of students with disabilities (Salend, 2001). Joint training for both sets of teachers could help clarify their respective roles in educating students with disabilities, fostering a better understanding and promoting positive attitudes towards inclusion (Leyser & Tappendorf, 2001; Smith, 2001).

Positive teacher attitudes are vital for the success of inclusion programs (D'Alonzo et al., 1997). To ensure such positivity, ongoing training and preparation for inclusion practices are essential. Despite differing attitudes, inclusion has demonstrated its effectiveness in enhancing the development of students with disabilities over the years.

2.4.5 Teacher Attitude about Student Performance

Despite the prevailing negative attitudes toward inclusion programs among teachers, there's a belief in the academic potential of students with disabilities. However, educators are conflicted about whether these students can meet grade-level achievement standards set by statewide assessments (McGrew & Evans, 2003). There's uncertainty among educators regarding the academic capabilities of students with disabilities, leading to varying expectations and conflicting viewpoints (Hardy, 1999; Goldstein, 2006).

Some argue that providing appropriate access to high-quality instruction and curriculum practices could significantly enhance the academic performance of students with disabilities (Goldstein, 2006; McGrew & Evans, 2003). They emphasize that teachers' positive expectations and the presentation of high-quality instruction could elevate the proficiency levels of these students (D'Alonzo et al., 1997).

On the contrary, certain educators' express skepticism about the potential success of students with disabilities, attributing it to their disabilities despite quality instruction, services, and accommodations being in place (Deno et al., 1996; Bender et al., 1995). Cotton (2001) suggests that such beliefs are often rooted in misunderstanding rather than malicious intent, with teachers unaware of the underlying false reasoning shaping their perceptions.

Negative perceptions of students with disabilities are considered unethical and inappropriate for teachers (Babad, 1993). Research by Silva and Morgado (2004) and Cooper & Burger (1980) points out that teachers' attitudes and attribution patterns significantly influence student performance outcomes, with negative attributions impacting students adversely.

Teachers' beliefs and behaviors are shown to impact students' academic performance (Silva & Morgado, 2004; Sze, 2009; Wood, 2002). Olson, Chalmers, and Hoover (1997) found that teachers' perceptions directly influenced students' academic achievements. However, Rolinson and Medway (1985) revealed a tendency among some teachers to shift responsibility onto students rather than owning up to their role in students' achievements when expectations weren't met.

2.5 Challenges Faced by Learners with Disabilities Due to Teacher's Attitudinal Barriers in Regular Classes

Attitudinal barriers significantly impact the successful implementation of inclusive education for students with disabilities. These barriers encompass negative beliefs and attitudes held by various stakeholders, including teachers, parents, peers, administrators, and policymakers. Despite efforts to promote inclusion, negative attitudes persist among these stakeholders, hindering the progress of inclusive education initiatives (Dr. Yash Pal Singh, 2015).

Teachers' attitudes play a pivotal role in shaping the experiences of students with disabilities in inclusive settings. Negative attitudes may arise due to a lack of information, misinformation, or fears about the effectiveness of teaching in inclusive environments. Misconceptions about working with students with disabilities, concerns about classroom dynamics, and apprehensions about affecting other students' education may contribute to these negative attitudes (Alice-Ann Darrow, 2009).

Students with special needs often face difficulties in social interactions within regular classrooms due to a lack of understanding among peers and teachers. Labeling students negatively, such as using terms like "mentally retarded," affects how teachers observe, rate, and plan interventions for these students (Dorcas, 2015). Teachers' fear of lacking the necessary skills for teaching students with disabilities or perceiving it as less gratifying than teaching "normal" students contributes to negative attitudes (Dorcas, 2015; Ottman, 1981).

Teacher attitudes significantly influence the performance and educational experiences of students with disabilities. Studies have shown that positive attitudes among teachers lead to better outcomes for students with disabilities, including increased practice attempts and higher levels of success (Dorcas, 2015; Elliot, 2008). Conversely, negative attitudes have been linked to poor expectations, low academic achievement, and reduced self-esteem among students with disabilities (Dorcas, 2015; Bevan-Brown, 2000; Elliot, 2008).

In surveys conducted among teachers, many expressed reservations about the inclusion of students with special educational needs (SEN) due to concerns about meeting learning requirements, specific needs, behavioral issues, and potential humiliation for these students in inclusive classrooms (Muna Amr Mayada Al-Natour Bassam Al-Abdallat, 2016). Teachers' beliefs and attitudes significantly affect their acceptance and commitment to implementing inclusive education (Das and Kattumuri, 2013). Some teachers consider children with disabilities solely the responsibility of resource teachers, viewing them as disturbances in the classroom that hinder lesson execution (Dr. Girdhar Lal Sharma, 2017). These attitudes pose significant challenges to the successful integration of students with disabilities into mainstream educational settings.

2.6 Theoretical Framework

The theoretical framework guiding this research, rooted in Kruglanski's theory, emphasizes the relationship between teachers' attitudes and their subsequent behaviors, particularly concerning students with disabilities in the educational context. Drawing from Allport's foundational work in 1935, attitude is considered a pivotal and indispensable concept within social psychology, being viewed as a driving force behind actions.

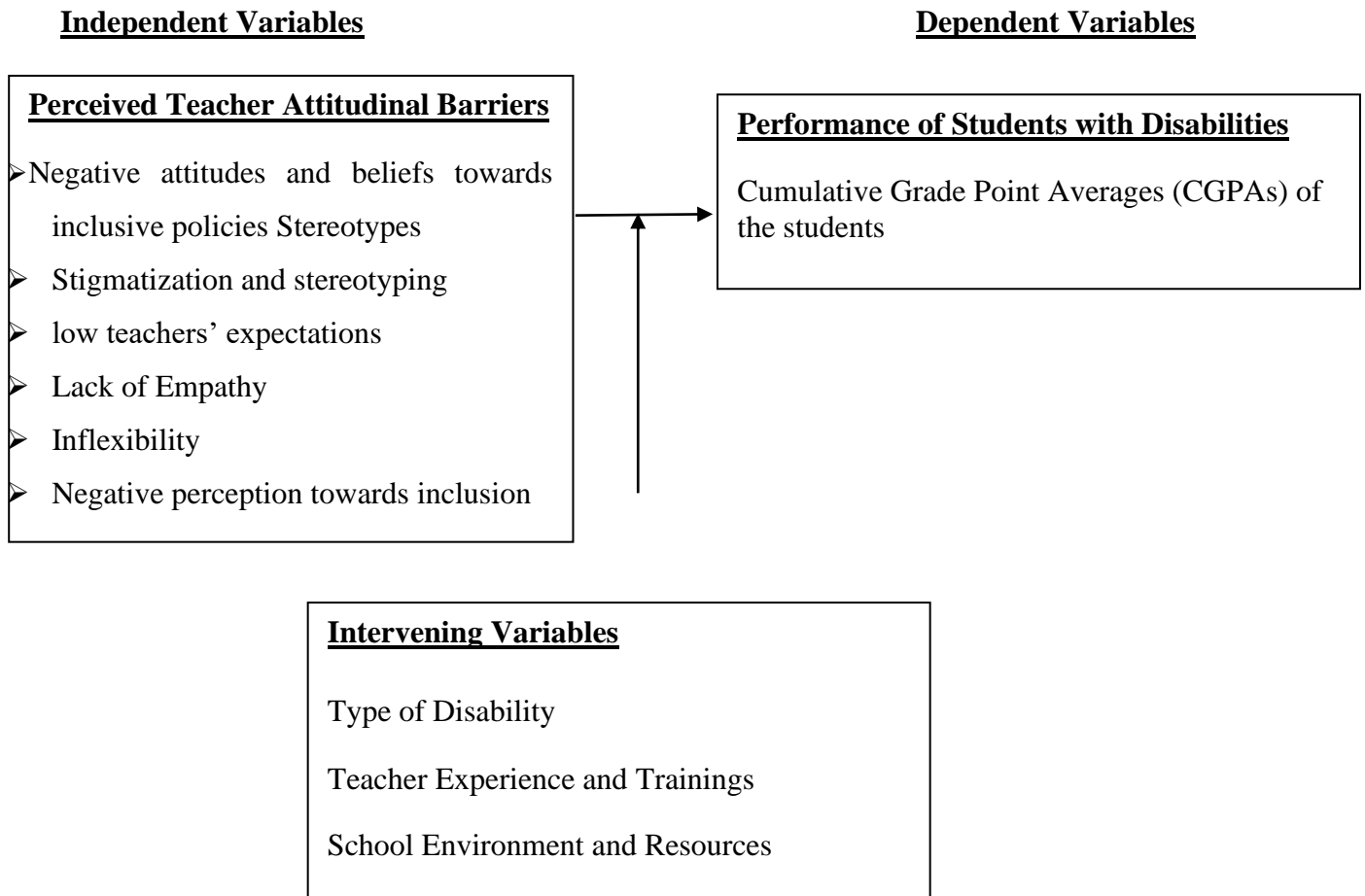
Cohen (1960) furthered this perspective by establishing attitudes as antecedents to behavior, implying that teachers' attitudes play a significant role in shaping their actions towards students with disabilities. However, Wicker's review in 1969 introduced skepticism, suggesting limited evidence linking attitudes directly to behaviors. Wicker's analysis applied stringent criteria to studies, indicating that some research failed to fully utilize collected data. Wicker called for exploration into alternative predictors, yet noted that the attitude-behavior correlation was stronger under specific conditions, such as when attitudes were formed from direct experiences, held with certainty, or influenced by inner beliefs and values.

This theoretical lens, as elaborated by Kruglanski et al. (2015), posits that attitude strength serves as a key determinant driving behavior. Kraus (1990) supported this notion, highlighting those direct experiences significantly predicted subsequent behavior. Applied to the context of teachers' attitudes towards students with disabilities, this theory implies that negative attitudes are likely to predict negative behaviors, whereas positive attitudes are expected to elicit positive behaviors towards these students. Thus, within the theoretical framework of this research, teachers' attitudes are considered influential factors that shape their behaviors and interactions with students with disabilities, potentially impacting the educational outcomes and experiences of these students within the primary school settings in Nyamagabe District.

2.7. Conceptual Framework

A concept is an abstract or overarching idea derived from specific occurrences, while a conceptualization is a simplified, abstract representation of reality created for a specific intent (Kombo & Tromp, 2014). On the other hand, a conceptual framework is a compilation of fundamental ideas and principles drawn from relevant fields of study, used to organize future discussions (Reichel & Ramey, 1987). The relationship between independent and dependent variable is indicated in the conceptual work below in this framework, the independent variable was teachers' attitudinal barriers which was classified into three categories (teacher effectiveness, teacher's life-long learning and teacher's personality) and the dependent variable was performance

Figure 1: Conceptual Framework



The diagram presented in Figure 1 outlines various factors that can significantly impact the academic performance of Students with Disabilities. These factors encompass negative attitudes and beliefs towards inclusive policies, stigmatization, and stereotyping, low expectations among teachers, lack of empathy, inflexibility, and negative perceptions regarding inclusion. These elements directly affect the effectiveness of academic performance among students with disabilities. Furthermore, the figure emphasizes other critical elements such as the types of disabilities, teachers' experience and training, as well as the school environment and available resources. This comprehensive illustration aims to capture the complex dynamics influencing the academic performance of students with disabilities within educational settings.

2.8 Summary

Chapter Two of this research work extensively delves into the literature review, focusing on previous studies that have investigated the correlation between teachers' attitudinal barriers and students' academic performance. This chapter synthesizes and presents comprehensive information derived from various scholarly sources, highlighting empirical studies, theoretical frameworks, and relevant findings that explore teachers' attitudes on the academic achievement of students, particularly those with disabilities. It covers a wide array of research studies conducted across diverse educational settings and contexts, shedding light on the intricate relationship between teachers' attitudes, inclusive practices, and students' learning outcomes. Moving forward, Chapter Three, which is the subsequent section of the research, will primarily focus on delineating the research methodology employed in this study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

This segment describes the methodology utilized in this study. It details the research design, approach, study population, sample size, sampling methods, research tools, and the approach employed for analyzing and interpreting the data, offering an overview of the study's procedural framework.

3.1. Research Approaches and Design

3.1.1. Research Approach

The structured approaches in quantitative methods refer to the use of standardized instruments such as questionnaires or surveys with predetermined response options. These instruments follow a set format and sequence of questions, allowing for systematic data collection and comparison across respondents. Statistical analyses, such as descriptive statistics and inferential tests, were then applied to analyze the data quantitatively, providing numerical insights into patterns, relationships, and trends within the data. On the other hand, qualitative methods involved techniques like interviews, observations, and document analysis. These methods focused on capturing rich, detailed information, often exploring participants' experiences, perceptions, and behaviors in depth. The combination of both quantitative and qualitative methods enhances the comprehensiveness and depth of the research findings, offering a holistic understanding of the effects of psychology education on the behavioral development of secondary school students in Ruhango District.

3.1.2. Research Design

The present study adopts a descriptive research design, inspired by the concept of conducting on-site surveys where the researcher directly interacts with respondents to investigate the specific issue under scrutiny (Kakooza, 1996). Accordingly, to align with the research objectives, the study embraced a descriptive research design during the data collection phase. This particular design aims to explore and understand the effects of teachers' attitudinal barriers on the academic performance of students with disabilities within the public primary schools of Nyamagabe District in Rwanda.

3.2 Targeted Population

Bakkabulindi (2004) defines population as the collective units of analysis, such as respondents, for which the researcher measures variables. The target population encompasses all members of a specific group relevant to the investigation, while the accessible population refers to the subset of individuals within this group that the researcher can reach (Mukurira, 2012). As such, this study was conducted within two primary schools in Nyamagabe District, namely EP Mbuga and GS Uwinkomo.

These schools were selected due to their inclusion of students with disabilities, which aligns with the primary focus of this study. The target population for this research comprised 70 individuals, encompassing 66 teachers, 2 head teachers, and 2 Special Education Officers (SEOs). The distribution of the total target population was as follows:

Table 1: Target Population of the Study

Respondents	School	Gender	Number	Total Population
		Male	20	45
	EP Mbuga	Female	12	38
Teachers		Male	16	45
	GS			
	Uwinkomo	Female	18	38
Head Teachers			2	2
SEOSs			2	2
Total			70	170

3.3 Sampling Procedures

Sampling techniques in this study were meticulously selected to mirror the traits and diversity of the larger population. This involved a combination of simple random sampling and purposive sampling methods, allowing for a comprehensive representation of various segments within the study population. The choice of Nyamagabe District from Rwanda's 30 districts was strategic, considering factors like accessibility, demographic variety, and the presence of relevant educational institutions. Two schools were specifically chosen based on their reputation, student

size, and willingness to participate, ensuring a balanced representation of urban and rural contexts. Involving teachers and students from these schools was intentional, aiming to gather insights directly from key stakeholders in psychology education and behavioral development. Purposive sampling further targeted specific groups with expertise or experience pertinent to the research objectives, enriching the study with diverse perspectives and nuanced understandings.

3.3.1 Simple Random Sampling

As Cormack (1991) highlights, implementing a random selection method requires establishing a systematic protocol that ensures every unit within the population has an equal chance of being chosen. To select the sample size of teachers, a simple random sampling technique was employed. Subsequently, the Yamane formula was utilized to determine the selection of participants from the total pool of 53 teachers who were invited to take part in the research. The formula used for this purpose is:

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

Whereas:

n= Number of samples or sample size

N= Total population

e= Error of tolerance (5% =0.5)

3.3.2 Purposive Sampling

Purposive sampling, also known as judgmental, selective, or subjective sampling, is a non-probability technique in which researchers use their own judgment to select participants from the population for inclusion in their surveys (Cormack, 1991). According to Morgan (1983), in the context of purposive sampling, the composition of the sample is determined by the investigator's informed judgment, aligning with the study's objectives and the intended target audience. For the current research, a purposive sampling approach was employed to intentionally select 2 Head Teachers and 2 Special Education Officers (SEOs) from Nyamagabe District. These individuals were chosen based on their potential to offer reliable and relevant insights pertinent to the study's aims and objectives.

3.4 Sample Size

Yamane's formula is a valuable tool for researchers seeking to determine an appropriate sample size from a known population, ensuring a desired level of precision (Stephanie, 2013). In this study, the calculation of the sample size for student participants involved adopting a confidence level of 95%, as recommended by Kothari (2004). This confidence level indicates a 95 out of 100 probabilities (or 0.95 in 1) that the outcomes derived from the sample accurately represent the true characteristics of the entire population within a specified margin of error, contrasting with a 10 out of 100 probabilities (or 0.1 in 1) that it does not. This approach ensures a reliable and statistically significant sample size for the study's objectives.

The computation of Yamane's formula is applied to a student population of 66 teachers from public primary schools in Nyamagabe District, considering a sampling error of 5%. The formula for calculating the sample size is as follows:

$$\frac{N}{1+N(e)^2}$$
$$= \frac{66}{1 + 66(0.05)^2}$$
$$= 53 \text{ teachers}$$

Therefore, 53 students, 2 Head teachers and 2 SEOS were selected as sample, thus 57 respondents.

3.5 Data Collection Methods

3.5.1 Data Collection Instruments

Data instrumentation encompasses the tools and methodologies employed in the process of data collection. This includes the careful selection, design, construction and implementation of an instrument or technique for gathering data. The primary objective of such instruments is to effectively collect the required data. In this research, questionnaires, interview guides, document analysis guides and observation guides have been used.

3.5.2 Administration of data Collection Instruments

The administration of data collection instruments involved implementing tools and methods to gather data for the research study on attitudinal barriers and academic performance of students with disabilities in Nyamagabe district. The researcher met with respondents at selected schools to administer questionnaires, which were completed by teachers and collected on-site. Following this, interviews were conducted with head teachers and DOSs in their offices, and school reports were reviewed for additional insights.

Before commencing the interviews, the researcher introduced themselves and explained the purpose of the interview. Official authorization from relevant institutions was provided to conduct the study and interviews. Respondents were assured of the confidentiality of the information provided, maintaining a professional and ethical approach throughout the data collection process.

3.6 Reliability and Validity of the Research Tools

Validity of the instruments was assessed to ensure they accurately measured the intended variables. Questionnaires and interview guides were tested on a small sample of respondents to confirm content validity, criterion-related validity, and construct validity. Any identified issues were addressed through revisions to enhance the accuracy of the collected data.

After being addressed by the supervisor, the questionnaires were presented clearly to the respondents, and their responses were analyzed for clarity and relevance. Expert judgment was sought to improve the validity of the instruments. The research supervisor, an expert in the field, provided valuable guidance and insights to ensure the instruments effectively measured the research topic.

Reliability of the instruments was also examined to determine the consistency of the measurements obtained. A pilot study was conducted with 10% of the respondents, and reliability analysis, such as Cronbach's alpha coefficient, was performed. Instruments with a Cronbach's alpha above 0.70 were considered reliable and suitable for the research project.

The primary focus of the study was on investigating teachers' attitudinal barriers and their impact on the academic performance of students with disabilities in public primary schools within Nyamagabe District, Rwanda.

3.7 Data Analysis Procedures

The data analysis procedures involved utilizing a statistical package to evaluate the responses, where mean equivalences were employed to gauge respondents' perceptions of variables. Standard deviation was also used to assess the distribution of responses, complementing the evaluation of central tendencies. Quantitative data from the questionnaire were analyzed using descriptive statistics such as frequencies, percentages, mean, and standard deviation through SPSS version 22 software. Qualitative data from interviews were analyzed using a thematic approach, grouping collected responses into relevant themes. The effects of teachers' attitudinal barriers on academic performance of students with disabilities in selected primary schools of Nyamagabe District, Rwanda, were measured using the Karl Pearson coefficient of correlation in SPSS version 22.

3.8 Ethical Consideration

In this study, participant identities were safeguarded, and their voluntary participation was emphasized. Individuals who lacked interest had the freedom to withdraw from the research at any stage. The researcher obtained essential research clearance letters from the University of Rwanda-College of Education and Nyamagabe District, securing permission to engage with various participants in selected schools within the study area. Furthermore, no form of payment was provided to gather information.

3.9 Summary

The third chapter of this study extensively covered the methodologies utilized in the research. It provided a comprehensive explanation of the research design, research approach, attributes of the study population, the process of determining the sample size, methodologies for sample selection, utilization of research instruments, and the strategy employed for analyzing and interpreting the acquired data.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

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 assess the level of attitudinal barriers exhibited by teachers towards students with disabilities in primary schools in Nyamagabe District, to examine the academic performance of students with disabilities in the selected primary schools in Nyamagabe District and to investigate the relationship between teacher attitudinal barriers and the academic performance of students with disabilities. 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 offers insights into the demographic compositions of the participants, encompassing details regarding their gender, age groups, educational backgrounds, subjects taught, and teaching experience for educators. The research engaged a total of 57 respondents, consisting of 53 teachers, 2 School Head Teachers and 2 Sector Education Officers from Nyamagabe District, Rwanda, who contributed their viewpoints on the research subject.

4.2.1 Demographic characteristics of Respondents by Gender

Through the distribution of questionnaires, the present researcher requested participants to specify their gender, aiming to investigate potential influences of gender on the responses provided by the respondents.

Table 2: Respondents' Gender (Students)

		Frequenc		Valid		Cumulative	
		y	Percent	Percent	Percent		
Valid	Male	23	43.4	43.4	43.4		
	Female	30	56.6	56.6	100.0		
Total		53	100.0	100.0			

Table 2 illustrates the gender distribution among students involved in the current research. The data presented in this table reveals that 56.6% of the total respondents were female, with the

remaining 43.4% being male. This showcases the study's success in achieving a balanced participation of both genders, acknowledging and valuing their respective perspectives and experiences within the research. Moreover, it emphasizes the research's dedication to inclusivity by ensuring diverse representation and consideration of both men and women's viewpoints and experiences.

4.2.2 Demographic Characteristics of Respondents by Age Group

The level of maturity among respondents stands as a significant variable, aiding the current researcher in securing credible information crucial to this study. The age brackets of primary school teachers in Nyamagabe District were particularly essential in evaluating their capacity and effectiveness in their roles.

Table 3: Respondents' Age Group (Students)

		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	Below 21	2	3.8	3.8	3.8
	21-35	16	30.2	30.2	96.2
	36-40	24	45.3	45.3	66.0
	41-50	9	17.0	17.0	20.8
	More than 50	2	3.8	3.8	100.0
	Total	53	100.0	100.0	

Table 3 demonstrates that a significant segment of the student respondents, accounting for 45.3%, belonged to the age range of 36 to 40 years old. Subsequently, 30.5% of respondents were categorized within the age group of 21 to 35 years old, while 17% fell into the 41 to 50 years old category. Furthermore, 3.8% of respondents were below 21 years old, and an additional 3.8% were 50 years old and above, as per the study's data.

These findings indicate a considerable proportion of mature teachers among the respondents, whose valuable input contributed crucial and reliable information to the current study.

4.2.3 Demographic characteristics of Respondents by Academic Level

In this study, the teacher participants were asked to furnish demographic details, notably their education level. This data collection aimed to evaluate the precision and reliability of the information they contributed to the study.

Table 4: Respondents Academic Level

		Frequenc		Valid	Cumulative
		y	Percent	Percent	Percent
Valid	A2	51	96.2	96.2	96.2
	A0	2	3.8	3.8	100.0
	Total	53	100.0	100.0	

According to the information displayed in Table 4 which delineates the demographic details of respondents segmented by their academic qualifications, the findings demonstrate that a significant majority, comprising 96.2% of the respondents, possessed an A2 academic level. This qualification is recognized for teaching roles within Rwanda's primary schools. Conversely, a smaller percentage, specifically 3.8% of the respondents, held an A0 academic qualification. This implies that all participants in the study possessed the requisite qualifications necessary to provide valuable insights into the impact of teachers' attitudinal barriers on the performance of students with disabilities in primary schools within Nyamagabe District.

4.2.4 Demographic characteristics of Respondents by Subject Taught

The diversity of subjects taught by the respondents was a crucial aspect of this study. It played a pivotal role as it allowed the current researcher to gather insights from various departments, aiding in the analysis of the impact of teachers' attitudinal barriers on the performance of students with disabilities in two specific primary schools within Nyamagabe District.

Table 5: Subject Taught by Respondents

		Frequenc		Valid	Cumulative
		y	Percent	Percent	Percent
Valid	Mathematics	16	30.2	30.2	30.2
	Social Studies	15	28.3	28.3	58.5
	Languages	17	32.1	32.1	90.6
	Sciences	5	9.4	9.4	100.0
	Total	53	100.0	100.0	

Table 5 illustrates that out of the respondents, 17 individuals (32.1%) teach languages, 16 (30.2%) teach Mathematics, 15 (28.3%) are involved in Social Studies and 5 (9.4%) are language instructors. This study's findings indicate that a considerable portion of the respondents are language teachers, representing 32.1% of the total. This observation aligns with UNESCO's 2010 report on Education in Africa, highlighting the prevalence of language instructors outnumbering their counterparts in the educational landscape.

4.3 Presentation of Findings

This segment primarily focuses on presenting the study's findings, which are categorized into three subsections aligned with the specific objectives of the research. To assess the level of attitudinal barriers exhibited by teachers towards students with disabilities in primary schools in Nyamagabe District, to examine the academic performance of students with disabilities in the selected primary schools in Nyamagabe District and to investigate the relationship between teacher attitudinal barriers and the academic performance of students with disabilities.

4.3.1 Attitudinal Barriers Exhibited By Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District

The primary aim of this research was to evaluate the attitudinal barriers displayed by teachers toward students with disabilities in primary schools within Nyamagabe District. To accomplish this, the researcher employed questionnaires and interviews to gather data from teachers, head teachers, and sector education officers. Consequently, the findings in this section are segregated into three distinct categories.

The first category encompasses teachers' perspectives regarding attitudinal barriers exhibited by their colleagues toward students with disabilities in primary schools in Nyamagabe District. The second category pertains to the views of Head Teachers concerning attitudinal barriers displayed by teachers toward students with disabilities in primary schools in Nyamagabe District. Lastly, the third category presents the perspectives of Sector Education Officers on the attitudinal barriers exhibited by teachers toward students with disabilities in primary schools in Nyamagabe District.

4.3.1.1 Data from Interview with Teachers Attitudinal Barriers Exhibited by Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District

The present researcher collected numerical data regarding teachers' viewpoints on the attitudinal barriers demonstrated by educators towards students with disabilities in primary schools within Nyamagabe District. Consequently, the table presented below showcases the outcomes reflecting the perspectives of teachers.

Table 6: Teachers Views on Attitudinal Barriers Exhibited by Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District

Statements	SA		A		N		D		SD		Mean	Std
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
Negative attitudes and beliefs towards inclusive policies are among the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.	23	43.3	19	35.8	4	7.5	5	9.4	2	3.8	1.9	1.1
Stigmatization and Stereotyping are some of the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.	21	39.6	18	34.0	5	9.5	7	13.2	2	3.8	2.0	1.1
Low Teachers' Expectations are among the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.	20	37.7	13	24.5	11	20.8	7	13.2	2	3.8	2.3	1.1
Lack of empathy is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.	21	39.6	13	24.5	7	13.2	6	11.3	6	11.3	2.2	1.3
Inflexibility is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District.	21	39.6	18	34.0	3	5.7	3	5.7	8	15.1	2.2	1.4
Negative Perception towards inclusion is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District.	23	43.4	13	24.5	8	15.1	2	3.8	7	13.2	2.1	1.3

The results presented in Table 6 reveal the responses of teachers regarding the attitudinal barriers demonstrated by educators towards students with disabilities in primary schools within Nyamagabe District. It is evident from the table that a majority of respondents, totaling 42 (79.1%), agreed that negative attitudes and beliefs toward inclusive policies constitute perceived attitudinal barriers demonstrated by teachers toward students with disabilities in primary schools within Nyamagabe District, Rwanda. This perception yielded a mean of 1.9 and a standard deviation of 1.1.

Additionally, 39 respondents (73.6%) acknowledged stigmatization and stereotyping as other perceived attitudinal barriers, presenting a mean of 2.0 and a standard deviation of 1.1.

The findings further highlight those 33 teachers (62.2%) recognized low expectations held by teachers toward students with disabilities as another perceived attitudinal barrier, with a mean of 2.2 and a standard deviation of 1.1. Additionally, 34 respondents (64.1%) identified lack of empathy as a perceived barrier, displaying a mean of 2.3 and a standard deviation of 1.4.

Moreover, the table indicates that 39 teachers (73.6%) identified inflexibility as a perceived attitudinal barrier, demonstrating a mean of 4.0 and a standard deviation of 1.1. Finally, 36 teachers (67.9%) acknowledged negative perceptions toward inclusion as another perceived attitudinal barrier, with a mean of 2.1 and a standard deviation of 1.3. These findings collectively underscore various perceived attitudinal barriers exhibited by teachers toward students with disabilities in primary schools within Nyamagabe District.

As per the perspectives of teachers, the aforementioned results distinctly point out the various attitudinal barriers manifested by teachers toward students with disabilities in primary schools within Nyamagabe District. These barriers encompass negative attitudes and beliefs regarding inclusive policies, stigmatization and stereotyping among teachers, low expectations held by teachers, lack of empathy, inflexibility exhibited by some teachers as well negative perceptions toward inclusion. This identified deficiency in the teacher-student dynamics has been correlated with substandard academic performance among students with disabilities in primary schools within Nyamagabe District, Rwanda. These attitudinal barriers collectively contribute to an environment that hampers the academic progress and overall well-being of students with disabilities in the primary schools located in Nyamagabe District.

4.3.1.2 Data from Key Informers on Attitudinal Barriers Exhibited by Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District

During this research, the researcher sought to get the views of the key informers on attitudinal barriers exhibited by teachers towards students with disabilities in primary schools in Nyamagabe District. The key informers who participated in this research were Head Teachers and SEOs from Nyamagabe District.

In all the interaction with the above mentioned key informers, the key question was the following: “What are the attitudinal barriers exhibited by teachers towards students with disabilities in primary schools in Nyamagabe District?”

The following are some answers provided by key informers.

“In Nyamagabe District's primary schools, teachers often display attitudinal barriers towards students with disabilities, notably through their negative perceptions and lack of empathy. These negative attitudes contribute to an environment where students with disabilities might face discrimination or a lack of support. Furthermore, teachers' pessimistic beliefs about these students' capabilities can limit opportunities for their academic and social growth, impacting their overall educational experience. These attitudinal barriers hinder the creation of an inclusive and supportive learning environment where every student feels valued and has an equal opportunity to thrive academically and socially.” (Primary Data: 2023)

In addition, another respondent provided the following answer:

“In schools in Nyamagabe District, teachers sometimes make students with disabilities feel left out or different. This happens because teachers might have unfair ideas or beliefs about these students. These beliefs can make the students feel like they don't belong or can't do as well as others in school. When teachers think this way, it might stop these students from getting the help and chances they need to learn and succeed like everyone else.” (Primary Data: 2023)

Finally, another respondent said:

“In some primary schools in Nyamagabe District, some teachers don't change how they teach when there are students with disabilities. They might keep doing things the same way for all students, which can make it hard for those with disabilities to join in or understand everything.

This could mean these students don't get the extra help they need to learn well. If teachers were more open to trying different ways of teaching, it could help these students feel more included and do better in class.” (Primary Data: 2023)

The information gathered from key informers shows that teachers in primary schools in Nyamagabe District have certain attitudes that create barriers for students with disabilities. These attitudes include having negative beliefs about these students, having low expectations for their abilities, lacking empathy towards them and some teachers being inflexible in adjusting their teaching methods to support students with disabilities. These attitudes and behaviors can make it harder for these students to feel accepted, understood and supported in their learning environment, affecting their academic performance.

The current study's findings align with a study conducted by Ginevra, Maggio, Valbusa, Santilli & Nota in 2022, which also highlighted several attitudinal barriers exhibited by teachers towards students with disabilities. Both studies identified similar challenges, such as teachers' negative attitudes towards students with disabilities, the exclusion of these students from important activities, resistance to change among some teachers, and the presence of stereotyping and stigmatization by certain teachers. These attitudinal barriers observed in both studies indicate common challenges faced by students with disabilities in terms of acceptance, inclusion, and support within the school environment.

4.3.2 The Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District

The second objective of this research aimed to examining the academic performance of students with disabilities in the selected primary schools in Nyamagabe District in Rwanda. 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 key informers, notably Sector Education Officers (SEOs) and Head Teachers, representing selected public primary schools within Rwanda's Nyamagabe District.

4.3.2.1 Teachers' Views on the Level the Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District

Throughout the data collection phase of this study, quantitative data regarding teachers' perspectives on the academic performance of students with disabilities in chosen primary schools within Nyamagabe District was gathered. The outcomes of this data collection are showcased in the following table.

Table 7: Teachers' Views on the Level of Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District

Statements	SD		D		N		A		SA		Mean	Std
	Fre q	%	Fre q	%	Fre q	%	Fre q	%	Fre q	%		
The standardized test scores of students with disabilities are high in in primary schools of Nyamagabe District.	25	47.2	9	17.0	4	7.5	7	13.2	8	15.1	2.3	1.5
Students with disabilities in primary schools of Nyamagabe District get high Grade Point Average (GPA).	24	45.3	13	24.5	4	7.5	2	3.8	10	18.9	2.2	1.5
Individual subject grades of students with disabilities are high in in primary schools of Nyamagabe District.	25	47.2	9	17.0	7	13.2	3	5.7	9	17.0	2.2	1.5
Students with disabilities in primary schools of Nyamagabe District get higher marks in classroom assessments.	23	43.4	11	20.8	5	9.4	11	20.8	3	5.7	2.4	1.6
Students with disabilities in primary schools of Nyamagabe score higher marks in national examinations.	22	41.5	15	28.3	5	9.4	0	0.0	11	20.8	2.3	1.5

The data presented indicates that the majority of respondents, comprising 34 individuals (64.2%), disagreed that standardized test scores of students with disabilities in primary schools within Nyamagabe District are high. This disagreement was associated with a mean of 2.3 and a standard deviation of 1.5. Additionally, 37 respondents (69.8%) disagreed that students with disabilities in these primary schools attain high Grade Point Averages (GPAs), correlating with a mean of 2.2 and a standard deviation of 1.5.

Similarly, the findings show that 34 teachers (64.2%) disagreed, with a mean of 2.2 and a standard deviation of 1.5, regarding the notion that individual subject grades of students with disabilities are high in primary schools within Nyamagabe District. Moreover, 34 teachers (64.2%) disagreed, with a mean of 2.4 and a standard deviation of 1.6, that students with disabilities receive higher marks in classroom assessments in these primary schools.

Furthermore, the data indicates that 37 teachers (69.8%) agreed, with a mean of 2.3 and a standard deviation of 1.5, that students with disabilities in primary schools within Nyamagabe District score higher marks in national examinations. These findings collectively provide insights into teachers' perceptions regarding the academic performance of students with disabilities in the specified primary schools.

These data points and responses gathered from the teachers' perspectives collectively suggest a trend indicating a lower academic performance among students with disabilities in the specified district's primary schools in Nyamagabe District, Rwanda.

4.3.2.2 Key Informers' Views about the Level of Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District

The researcher conducted interviews with Special Education Officers (SEOs) and Head Teachers to gather information regarding the academic performance of students with disabilities in chosen primary schools within Nyamagabe District. In order to get required information, all the interaction was around the key question. "How do students with disabilities perform academically in primary schools in Nyamagabe District?" The following are answers provided by the respondents.

All of the key informers interviewed unanimously reported that the academic performance of students with disabilities in primary schools within Nyamagabe District, Rwanda, is notably low. This consensus underscores the ongoing challenge surrounding the academic achievement of students with disabilities within these educational institutions. Some of the responses provided by the interviewees emphasized and highlighted this issue. One of them said:

Students with disabilities in primary schools within Nyamagabe District perform poorly in their studies compared to students without disabilities. This is seen in their lower scores in national exams. They face challenges like not having enough support and resources. These difficulties make it hard for them to do well in school. To help these students, there's a need for better strategies and more help tailored to their needs in the district's schools.” (Primary Data: 2023)

Another respondent highlighted that:

“Students with disabilities in primary schools in Nyamagabe district are not doing well in their studies. They get low marks in class activities, homework, quizzes, and even in the big tests at the end of the term made by teachers and the district education board. This shows they need more help and specific ways of teaching that suit their needs so that they can do better in school like other students.” (Primary Data: 2023)

Furthermore, another key informer provided the following answer:

“Students with disabilities in Nyamagabe's primary schools don't do well on tests given to everyone, in class exams, and even in the big tests for the whole country. They need more help and different ways of learning so they can do better in school.” (Primary Data: 2023)

Therefore, the findings of the current study indicate that Students with disabilities attending primary schools in Nyamagabe consistently struggle in standardized tests, classroom assessments and national examinations. Their performance in these assessments falls below expectations compared to their peers, signaling the need for more inclusive educational strategies and support systems tailored to their specific learning requirements. This implies that the academic performance of students with disability is poor within primary schools of Nyamagabe District in Rwanda. According to Santos, Kupczynski & Mundy (2019: 17) Students with disabilities often face unique challenges that can impact their academic performance in comparison to their peers. These challenges may include learning difficulties, limited access to specialized resources and the need for tailored support systems.

4.3.3 The Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda

The third objective of the present study aimed to investigate the relationship between teachers' attitudinal barriers and the academic performance of students with disabilities in public primary schools within Rwanda's Nyamagabe District. To fulfill this objective, the researcher followed several steps. Initially, data were collected from teachers through questionnaires and subsequently refined for accuracy. Following this, the research examined the correlation between the independent and dependent variables. Thirdly, a regression analysis was conducted to scrutinize the specific relationship between teachers' attitudinal barriers and the academic performance of students with disabilities in public primary schools situated in Nyamagabe District, Rwanda. Finally, the researcher gathered information from key informants, such as School Head Teachers and SEOs, using interviews to gather their perspectives on the association between teachers' attitudinal barriers and the academic performance of students with disabilities in public primary schools within Nyamagabe District, Rwanda.

4.3.3.1 Teachers' Views on the Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda

During the data collection phase of the present study, quantitative data concerning the relationship between teacher attitudinal barriers and the academic performance of students with disabilities was collected. As a result, the outcomes and findings derived from this data collection process are presented in the following table.

Table 8: Teachers' Views on the Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda

Statements	SA		A		N		D		SD		Mean	Std
	Fre q	%	Fre q	%	Fre q	%	Fre q	%	Fre q	%		
Negative attitudes and beliefs towards inclusive policies among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.	21	39.6	14	26.5	8	15.1	2	3.8	8	15.1	2.2	1.4
Stigmatization and Stereotyping among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.	21	39.6	13	24.5	5	9.4	5	9.4	9	17.0	2.3	1.5
Low Teachers' Expectations among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.	25	47.2	13	24.5	4	7.5	2	3.8	9	17.0	2.1	1.4
Lack of empathy among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.	26	49.1	10	18.5	6	11.3	3	5.7	8	15.1	2.1	1.4
Inflexibility of some teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.	26	49.1	9	17.0	4	7.5	4	7.5	10	18.9	2.3	1.5
Teachers' negative perception towards inclusion affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.	26	49.1	10	18.9	6	11.3	2	3.8	9	17.0	2.3	1.9

The results indicates that the majority of respondents, totaling 36 individuals (68%), agreed that negative attitudes and beliefs toward inclusive policies among teachers have an impact on the academic performance of students with disabilities in primary schools located within Nyamagabe District, Rwanda. This agreement was associated with a mean of 2.2 and a standard deviation of 1.4.

Furthermore, 34 respondents (64.1%) disagreed that stigmatization and stereotyping among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda, reflecting a mean of 2.3 and a standard deviation of 1.5.

Additionally, 37 teachers (71.7%) agreed, with a mean of 2.1 and a standard deviation of 1.4, that low teachers' expectations among educators impact the academic performance of students with disabilities in primary schools within Nyamagabe District. Similarly, 35 respondents (66.1%) agreed that lack of empathy among teachers affects the academic performance of students with disabilities in these primary schools, with a mean of 2.1 and a standard deviation of 1.4. Moreover, 35 teachers (66.1%) concurred that the inflexibility of some teachers has an impact on the academic performance of students with disabilities in primary schools within Nyamagabe District, reflecting a mean of 2.3 and a standard deviation of 1.5. Finally, 36 teachers (68%) agreed, with a mean of 2.3 and a standard deviation of 1.9, that teachers' negative perception towards inclusion affects the academic performance of students with disabilities in these primary schools. These findings collectively emphasize various attitudinal barriers perceived by teachers and their potential influence on the academic performance of students with disabilities in Nyamagabe District's primary schools.

4.3.3.2 Correlation between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities

The following table showcases the relationship between teacher attitudinal barriers and the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.

Table 9: Correlation between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities

		Teacher Attitudinal Barriers	Academic Performance of Students with Disabilities
Teacher Attitudinal Barriers	Pearson Correlation	1	.771**
	Sig. (2-tailed)		.000
	N	53	53
Academic Performance of Students with Disabilities	Pearson Correlation	.771**	0
	Sig. (2-tailed)		.000
	N		53

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

The findings outlined in Table 9 reveal a significant link between teachers' attitudes and the academic achievement of students with disabilities in primary schools located in Nyamagabe District, Rwanda. This significance is evidenced by a p-value of .000, below the chosen significance level of .01. Moreover, the Pearson correlation coefficient (r) stands at .771**, signifying a robust correlation, highlighting a strong connection between teachers' attitudes and the academic success of students with disabilities in Nyamagabe District's primary schools. Consequently, the presence of teachers' attitudinal barriers impacts the academic performance of students with disabilities.

4.3.3.3 Regression Analysis between Teachers' Attitudinal Barriers and the Academic Performance of Students with Disabilities

In this research, a regression analysis was conducted to examine the relationship between teachers' attitudinal barriers and the academic performance of students with disabilities in public primary schools located in the Nyamagabe District of Rwanda. The tables below present a summary of the regression model and an analysis of variance (ANOVA) pertaining to teachers' attitudinal barriers and the academic performance of students with disabilities.

4.3.3.3.1 Regression Analysis between Teachers' Attitudinal Barriers and the Academic Performance of Students with Disabilities

Table 10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.923 ^a	.852	.851	.41661

a. Predictors: (Constant): Teachers' Attitudinal Barriers

According to the information presented in Table 10, an Adjusted R-Square value of .852 indicates that roughly 85.2% of the fluctuation in academic performance among students with disabilities can be explained by the independent variables, particularly the presence of teachers' attitudinal barriers. This points to a robust and significant correlation between teachers' attitudinal barriers and the academic achievements of students with disabilities within the public primary schools situated in Rwanda's Nyamagabe District.

4.3.3.4 Key Informers' Views on the Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda

The researcher diligently ensured the inclusion of perspectives from SEOs and Head Teachers regarding the relationship between teacher attitudinal barriers and the academic performance of students with disabilities in Nyamagabe, Rwanda. To attain crucial insights essential for the research, interviews were conducted with SEOs and Head Teachers from Nyamagabe District. The focus of these interactions centered on a key question: "Is there a notable correlation between teachers' attitudinal barriers and the academic performance of students with disabilities in primary schools in Nyamagabe District?" Subsequently, the respondents provided the following findings have been gotten:

The entirety of interviewees, comprising both School Education Officers (SEOs) and Head Teachers, were in complete agreement, unanimously affirming the presence of a positive correlation between teachers' attitudinal barriers and the academic performance of students with disabilities in primary schools located in Nyamagabe. They collectively established a direct connection between the diminished academic performance of students with disabilities and the

presence of teachers' attitudinal barriers. According to their insights, these barriers acted as impediments that hindered students with disabilities from achieving better academic outcomes.

They emphasized that, in Nyamagabe District's public primary schools, a discernible correlation exists between teachers' attitudinal barriers and the academic performance of students with disabilities. When educators harbor negative attitudes or misconceptions about students with disabilities, it inadvertently hampers the academic progress of these students. This negative predisposition often results in limited support and a lack of tailored assistance for students with disabilities. Such students might not receive the necessary accommodations or adapted teaching methods that could significantly enhance their learning experiences. Consequently, without adequate support and understanding from their teachers, these students might struggle to meet their academic potential, leading to underperformance compared to their peers.

Furthermore, the findings from the key informers evidences that, the impact of teachers' negative attitudes becomes particularly evident in the academic realm, where students with disabilities may face additional hurdles due to the lack of appropriate guidance or support.

When teachers' perceptions hinder the provision of essential accommodations or personalized assistance, students with disabilities may find it challenging to fully engage in the learning process. This limited engagement can impede their academic performance, preventing them from demonstrating their true capabilities.

Therefore, teachers' attitudes attitudinal barriers correlate with academic performance among students with disabilities in public primary schools of Nyamagabe District, hindering adequate support. This notable correlation signifies that when teachers lack positive attitudes, students with disabilities face academic challenges due to insufficient assistance.

Therefore, the findings of the current study are supported by Wasielewski (2016: 307) who says that Teachers' attitudinal barriers directly impact students with disabilities, hindering their academic performance by limiting tailored support and necessary accommodations, affecting their overall educational outcomes significantly.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Findings

5.5.1 Attitudinal Barriers Exhibited By Teachers towards Students with Disabilities in Primary Schools in Nyamagabe District

This first objective sought to evaluate the attitudinal barriers displayed by teachers toward students with disabilities in primary schools within Nyamagabe District. The following statements were used in the real examination: low teachers' expectations are among the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda. Negative attitudes and beliefs towards inclusive policies are among the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda. Negative Perception towards inclusion is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District. Stigmatization and Stereotyping are some of the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda. Lack of empathy is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda. Inflexibility is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District.

The findings show that the majority of respondents highlighted that teachers in primary schools in Nyamagabe District have certain attitudes that create barriers for students with disabilities. These attitudes include having negative beliefs about these students, having low expectations for their abilities, lacking empathy towards them and some teachers being inflexible in adjusting their teaching methods to support students with disabilities.

These attitudes and behaviors make it harder for these students to feel accepted, understood and supported in their learning environment, affecting their academic performance.

5.5.2 The Academic Performance of Students with Disabilities in the Selected Primary Schools in Nyamagabe District

The second objective of the study was to examining the academic performance of students with disabilities in the selected primary schools in Nyamagabe District in Rwanda. the academic performance of students with disabilities has been assessed in that following angles: improved academic performance, high standardized test scores, high individual subject grades, higher marks in classroom assessments and increased marks in national examinations.

The findings of the study highlighted a prevalent issue of poor academic performance in among students with disabilities in public primary schools of Nyamagabe District, as evidenced by consistently low marks in national examinations. This academic challenge poses a dilemma for the academic performance of students with disabilities within these schools. Respondents emphasized the urgent need for strategic interventions to enhance the academic performance of students with disabilities, providing students with the necessary support and resources to excel in this critical subject. The disparity in the academic performance of students with disabilities performance compared to others underscores the necessity for targeted efforts to improve the academic performance of students with disabilities.

Moreover, the findings of the current study revealed that the academic performance of students with disabilities in Nyamagabe District's primary schools in Rwanda remains conspicuously deficient. This widespread agreement underscores the persistent and challenging nature of the situation concerning these students' educational achievements within these specific educational institutions. The consistent low performance among students with disabilities signals an ongoing hurdle in addressing their academic needs effectively within the educational framework of Nyamagabe District, highlighting the need for targeted interventions and tailored support mechanisms to improve their educational outcomes.

5.5.3 The Relationship between Teacher Attitudinal Barriers and the Academic Performance of Students with Disabilities in Nyamagabe in Rwanda

The third objective of the current study was to investigate the relationship between teachers' attitudinal barriers and the academic performance of students with disabilities in public primary schools within Rwanda's Nyamagabe District. Therefore, as reflected in chapter four, the correlation between teachers' attitudinal barriers (negative attitudes and beliefs towards inclusive policies, stigmatization and stereotyping, low teachers' expectations, lack of empathy, inflexibility and negative perception towards inclusion) and the academic performance of students with disabilities was positive. This shows that the relationship was all positive and statistically significant. Each of the teachers' attitudinal barriers influence the academic performance of students with disabilities within public primary schools of Nyamagabe District in Rwanda.

5.2. Conclusion

In conclusion, findings from the present research show that attitudinal barriers of teachers towards students with disabilities in primary schools in Nyamagabe District are negative attitudes and beliefs towards inclusive policies, stigmatization and stereotyping, low teachers' expectations, lack of empathy, inflexibility and negative perception towards inclusion.

After exploring attitudinal barriers exhibited by teachers towards students with disabilities in public primary schools of Nyamagabe District in Rwanda, the researcher discovered prevalent issue of poor academic performance among students with disability in public primary schools, as evidenced by consistently low marks in national examinations. Even the findings from the key informants highlighted that the academic performance of students with disabilities precisely in public primary schools of Nyamagabe District in Rwanda is poor.

In establishment of the relationship between two variables (independent and dependent variables), it has been found that negative attitudes and beliefs towards inclusive policies, stigmatization and stereotyping, low teachers' expectations, lack of empathy, inflexibility and negative perception towards inclusion affects the academic performance of students with disabilities in public primary schools of Nyamagabe District in Rwanda. The correlation between teachers' attitudes and the academic success of students with disabilities in Nyamagabe District's

primary schools was found meaningful. This shows that the relationships between independent and dependent variables were positive and statistically significant. Each of the teachers' attitudinal barriers affects the academic performance of students with disabilities in public primary schools located in the Nyamagabe District of Rwanda.

5.3. Recommendations

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

It is advised that all individuals engaged in the education sector within Nyamagabe district collaborate closely to address and eliminate any attitudinal barriers among teachers. This collective effort is crucial to guarantee enhanced academic performance among students with disabilities across all educational levels in Rwanda. By fostering a united approach, focusing on changing and removing these barriers, educators can create a more inclusive and supportive environment that enables better academic outcomes for students with disabilities.

Furthermore, it is advised that MINEDUC, via the Rwanda Education Basic Board, ensures the provision of ample educational resources that sufficiently support students with disabilities in their teaching and learning endeavors. This entails making available an adequate array of materials tailored to meet the diverse needs of students who have disabilities, thereby enabling a more inclusive and supportive educational environment.

Ultimately, it is strongly encouraged that every stakeholder within the education sector prioritize investment in inclusive education for all individuals. This investment stands as the sole and most effective means to significantly enhance academic achievements among students with disabilities in Rwanda. By embracing and dedicating resources to inclusive educational practices, stakeholders can pave the way for substantial improvements in the academic performance of students with diverse needs.

5.4. Suggestion for Further Study

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

1. The effect of creating awareness on importance of inclusive education at all levels of education

2. Effect of teachers' attitudinal barriers on Rwandan students' academic performance
3. Other factors that the academic performance of students with disabilities in primary schools of Rwanda
4. Government's strategies for changing attitudes towards education of students with disabilities among teachers.

REFERENCES

- Ajay S. Singh, Micah B. Masuku. (2013). Fundamentals of Applied Research and Sampling Techniques. *International Journal of Medical and Applied Sciences*, 2(3), 128-137.
- Alice, A. D. (2009). Barriers to Effective Inclusion. *General Music Today*, 5 (2) 1-1.
- Alzahrani, N. (2020). The development of inclusive education practice: A review of Literature. *International Journal of Early Childhood Special Education*, 12(1), 68–83. <https://doi.org/10.20489/intjecse.722380>.
- Bloomberg, L.D. M. (2012). *Completing Your Qualitative Dissertation*. Sage Publication.
- Cozby, P.C. (2001). *Measurement Concepts*. Methods in Behavioral Research. 7th ed.
- Dignath, C., Rimm-Kaufman, S., van Ewijk, R., & Kunter, M. (2022). *Teachers' Beliefs about Inclusive Education and Insights on what Contributes to those Beliefs: a Meta-Analytica*
- Fareo, D.s O. (2015). Attitude of Teachers to Students with Special Needs in Mainstreamed Public Secondary Schools in Southwestern Nigeria: The Need for a Change. *European Scientific Journal*, 11(10), 1857 – 7881.
- Gay, L.R., Mills, G.E., & Airasian, P. (2008). *Educational Research: Competencies for Analysis and Applications*. (8th ed.) Ohio: Pearsons.
- Ginevra, M. C., Maggio, I., Valbusa, I., Santilli, S., & Nota, L. (2022). Teachers' Attitudes towards Students with Disabilities: The Role of the Type of Information Provided in the Students' Profiles of Children with Disabilities. *European Journal of Special Needs Education*, 37(3), 357–370. <https://doi.org/10.1080/08856257.2021.1878658>.
- Girdhar, L.S. (2017). Inclusive Education: Challenges and Barriers. *Scholarly Research Journal for Interdisciplinary Studies*, 416-416.
- Landsburg, E., Kruger, D& Nel, N. (2005). *Addressing Barriers to Learning: a South African perspective*. Pretoria.
- Mabuya, M.O.M. (2003). *The impact of Inclusive Education in Special and Developed/Mainstream schools as Perceived by Parents, Educators and Learners in Soweto Schools*. Med Dissertation. Vista University.
- Mahlo, F.D. (2011). *Experiences of Learning Support Teachers in the Foundation Phase*. PhD thesis. University of South Africa: Pretoria.
- Mberimana, E. (2019). *Factors that Hinder Academic Performance for People with Visual Impairment*. Kigali.

- McGrew, K. S., Vanderwood, M. L., Thurlow, M. L., & Ysseldyke, J. E. (1995). *Why We Can't Say Much about the Status of Students with Disabilities during Education Reform*. (Synthesis Report No. 21).
- McIntosh, R., Vaughn, S., Schumm, J. S., Haager, D., & Lee, O. (1993). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes). Observations of Students with Learning Disabilities in General Education Classrooms. *Exceptional Children*, 60, 249-261.
- MINIJUSTE (2015). *Rwanda Constitution of 2013 as Amended in 2015*. Kigali.
- Mohamed A. & Ahmed N. (2018). *Sampling methods and Clinical Research*. Archive of Academic Emergence Medicine.
- Muna A.M. A. (2016). Primary School Teachers' Knowledge, Attitudes and Views on Barriers to Inclusion in Jordan. *International Journal of Special Education*, 6(3), 64-64.
- Nyandwi,V. (2016). *Contribution of Small and Medium Enterprise to the Economic Development of Rwanda*. Rwanda.
- REB (2018). *Training Manual on Inclusive and Special Needs Education*. Kigali-Rwanda.
- Santos, S. B. D. L., Kupczynski, L., & Mundy, M.-A. (2019). Determining Academic Success in Students with Disabilities in Higher Education. *International Journal of Higher Education*, 8(2), 16. <https://doi.org/10.5430/ijhe.v8n2p16>.
- Van Schaik Leedy, P.D., &Ormrod, J.E. (2005). *Practical Research, Planning and Design*. (8th ed.) New Jersey: Pearson Education.
- Van Schaik. Landsburg, E., Kruger, D & Swart, A. (2011). *Addressing Barriers to Learning: a South African perspective*. Pretoria.
- Wasielewski, L. M. (2016). Academic Performance of Students with Disabilities in Higher Education: Insights from a Study of One Catholic College. *Journal of Catholic Education*, 20 (1). <http://dx.doi.org/10.15365/joce.200106201>.
- Yash P. S. (2015). Attitudinal Barriers to Inclusive Education in India. Attitudinal Barriers to Inclusive Education in India, *Journal of Inclusive Education*, 4(2), 1-1.

APPENDECES

Appendix I: Questionnaire for Teachers

UNIVERSITY OF RWANDA

SCHOOL OF EDUCATION

Dear respondent,

I am conducting a research entitled “**The Impact of Teacher’s Attitudinal Barriers on Academic Performance of Students with Disabilities in Primary Schools of Nyamagabe District in Rwanda**”.

Please help me and answer all the questions provided as honestly as possible, to the best of your knowledge. This research is purely academic and its purpose is only to collect views concerning the above topic. All the answers that you provide will be kept confidential, only members of the survey team will have access to this information and it will only be used for this research. You can stop responding at any time, to ask me to clarify any question, or ask me to repeat something you don’t understand well. Thanks in advance for your co-operation.

INSTRUCTIONS

- 1 Your name should not be written anywhere in this questionnaire.
- 2 The information you provide regarding your feelings towards asked questions will be treated confidentially. Please respond to the following items as honestly as possible.
- 3 Place a checkmark [√] inside the brackets that correspond to your answer.

I. IDENTIFICATION OF THE RESPONDENT

1. Gender of Respondents

Male

Female

2. Age of Respondent in Years

Below 21

21-35

36-40

41-50

More than 50

3. Academic Level

Senior six certificate (A2)

Diploma (A1)

Bachelor's Degree (A0)

Master's degree

4. Teaching Experience

0- 5 years

6-10 years

11-15 years

16 years and more

5. Subject Taught

Mathematics Social Study Science Languages Other

II. ATTITUDINAL BARRIERS EXHIBITED BY TEACHERS TOWARDS STUDENTS WITH DISABILITIES IN PRIMARY SCHOOLS IN NYAMAGABE DISTRICT

The following are the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda. 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
Negative attitudes and beliefs towards inclusive policies are among the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Stigmatization and Stereotyping are some of the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Low Teachers' Expectations are among the perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Lack of empathy is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Inflexibility is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District.					
Negative Perception towards inclusion is one of perceived attitudinal barriers exhibited by teachers towards students with disabilities in primary schools of Nyamagabe District.					

III. ACADEMIC PERFORMANCE OF STUDENTS WITH DISABILITIES IN THE SELECTED PRIMARY SCHOOLS IN NYAMAGABE DISTRICT IN RWANDA

The following are statements about academic performance of students with disability in primary schools of Nyamagabe District in Rwanda. 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
The standardized test scores of students with disabilities are high in in primary schools of Nyamagabe District.					
Students with disabilities in primary schools of Nyamagabe District get high Grade Point Average (GPA).					
Individual subject grades of students with disabilities are high in in primary schools of Nyamagabe District.					
Students with disabilities in primary schools of Nyamagabe District get higher marks in classroom assessments.					
Students with disabilities in primary schools of Nyamagabe score higher marks in national examinations.					

IV. THE RELATIONSHIP BETWEEN TEACHERS' ATTITUDINAL BARRIERS AND THE ACADEMIC PERFORMANCE OF STUDENTS WITH DISABILITIES

The following are statements about the relationship between teachers' attitudinal barriers and the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda. 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
Negative attitudes and beliefs towards inclusive policies among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Stigmatization and Stereotyping among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Low Teachers' Expectations among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Lack of empathy among teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Inflexibility of some teachers affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.					
Teachers' negative perception towards inclusion affect the academic performance of students with disabilities in primary schools of Nyamagabe District in Rwanda.					

Thank you for taking the time to complete this questionnaire. Your responses will remain confidential and will be used for research purposes only.

Appendix II: Interview Guide With Head Teachers

UNIVERSITY OF RWANDA

SCHOOL OF EDUCATION

Dear respondent,

Greetings,

We kindly request your participation in this interview aimed at examining the impact of teacher's attitudinal barriers on academic performance of students with disabilities in primary schools of Nyamagabe district in Rwanda. Your answers to the following questions will help us to achieve the specific objectives of our research project.

- i. What are the attitudinal barriers exhibited by teachers towards students with disabilities in primary schools in Nyamagabe District?
- ii. How do students with disabilities perform academically in primary schools in Nyamagabe District?
- iii. Is there a significant correlation between teacher attitudinal barriers and the academic performance of students with disabilities in primary schools in Nyamagabe District??

Thank you for taking the time to participate in this interview. Your responses will remain confidential and will be used for research purposes only.

Interview Guide with Sector Education Officers

UNIVERSITY OF RWANDA

SCHOOL OF EDUCATION

Dear respondent,

Greetings,

We kindly request your participation in this interview aimed at examining the impact of teacher's attitudinal barriers on academic performance of students with disabilities in primary schools of Nyamagabe district in Rwanda. Your answers to the following questions will help us to achieve the specific objectives of our research project.

- iv. What are the attitudinal barriers exhibited by teachers towards students with disabilities in primary schools in Nyamagabe District?
- v. How do students with disabilities perform academically in primary schools in Nyamagabe District?
- vi. Is there a significant correlation between teacher attitudinal barriers and the academic performance of students with disabilities in primary schools in Nyamagabe District?

Thank you for taking the time to participate in this interview. Your responses will remain confidential and will be used for research purposes only.

Appendix III: The Map of Nyamagabe District

