

**INFLUENCE OF PARENTAL INVOLVEMENT ON LEARNING OUTCOMES  
OF LEARNERS WITH HEARING IMPAIRMENT IN PUBLIC SPECIAL  
PRIMARY SCHOOLS IN KISUMU COUNTY, KENYA**

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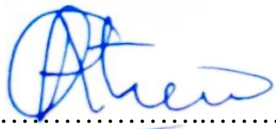
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## DECLARATION AND APPROVAL

### Declaration by the Candidate

This project is my original work and has not been, presented for a degree in any other university or for any other award.

Signature: .....Date: 6<sup>th</sup> November 2024

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### Approval by Supervisor

I confirm that the candidate under my supervision carried out this research project.

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## DEDICATION

I dedicate this project to my daughter, Melbride Akoth and my sons, Charles Obwaka Jollebo and Gabriel Ochien'g Jollebo, for encouraging my part-time learning despite my work duties.



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## ABSTRACT

Several international studies indicate a noteworthy positive association between parental engagement and enhanced academic achievements among children with hearing impairment. Active participation of the parents in their children's lives is crucial for providing invaluable support and cultivating a positive educational atmosphere. The purpose of this study is to investigate the influence of parental involvement on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya. The specific objectives of the research are: to examine the influence of parental communication with teachers, to determine parental participation in school activities, to identify the influence of parental involvement in decision-making processes and to investigate the influence of parents' KSL skills on the learning outcomes of learners with hearing impairment in Kisumu County. The study was based on the sociocultural theory of learning, emphasizing the impact of social interactions and cultural context on both learning and development. A concurrent embedded research design was employed for this study. The group consisted of 45 executive members of the Parents Teachers Association (PTA), 550 students with hearing impairment, 75 teachers, and 3 headteachers. These individuals were drawn from three public special primary schools catering for learners with hearing-impaired students in Kisumu County, resulting in a total of 673 target population. The determination of the sample size adhered to the methodology proposed by Krejcie and Morgan (1970) to ensure a comprehensive representation of the overall population. The selection process employed purposive sampling for teachers and headteachers. PTA executive members and teachers were chosen through a simple random sampling method, while learners with hearing impairment underwent stratified sampling based on grade level, followed by selection using a simple random sampling technique. Data was collected from questionnaires, interviews, and focus group discussions. Its collection involved the distribution of structured questionnaires to teachers, and interviews were conducted with members of the Parents Teachers Association and headteachers. The study employed quantitative analysis (frequency, mean, standard deviation) with qualitative techniques like thematic analysis and coding. This dual-method analysis offered a holistic understanding of parental involvement, enriching insights and interpretation of findings. This study emphasized the ethical duty to provide equitable educational opportunities for learners with hearing impairment through active parental involvement, upholding standards for confidence, support, and inclusivity.

## TABLE OF CONTENTS

<b>DECLARATION AND APPROVAL .....</b>	<b>ii</b>
<b>DEDICATION .....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>iv</b>
<b>ABSTRACT .....</b>	<b>v</b>
<b>TABLE OF CONTENTS .....</b>	<b>vi</b>
<b>LIST OF TABLES.....</b>	<b>x</b>
<b>LIST OF FIGURES.....</b>	<b>xi</b>
<b>LIST OF ABBREVIATIONS AND ACRONYMS.....</b>	<b>xii</b>
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.0 Introduction .....	1
1.1 Background to the Study .....	1
1.2 Statement of the problem.....	4
1.3 Purpose of the Study.....	5
1.4 Research objectives .....	5
1.5 Research questions .....	6
1.6 Significance of the Study.....	6
1.7 Scope of the study. ....	7
1.8 Limitations of the Study .....	8
1.9 Delimitations of the Study.....	9
1.10 Assumptions of the Study.....	9
1.11 Operational Definition of Key Terms.....	11
<b>CHAPTER TWO : LITERATURE REVIEW .....</b>	<b>12</b>
2.0 Introduction .....	12
2.1 Empirical literature review .....	12
2.2 Concept of Hearing Impairment.....	12
2.2.1 Parental Communication with Teachers and Learning Outcomes.....	13
2.2.2 Parental Participation in School Activities and Learning Outcomes .....	14
2.2.3 Parental Involvement in Decision-Making Processes and Learning Outcomes....	16
2.2.4 Parent’s KSL skills and Learning Outcome .....	17
2.3 Theoretical Framework .....	20
2.4 Conceptual Framework .....	22
2.6 Summary of Literature Review .....	24

<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>25</b>
3.0 Introduction .....	25
3.1 Research Methodology .....	25
3.2 Research Design .....	25
3.3 Location of the Study .....	26
3.4 Target Population .....	26
3.5 Sample Size and Sampling Procedures .....	27
3.6 Data collection Instruments .....	29
3.6.1 Interview Guides .....	29
3.7. Piloting of Research Instruments.....	31
3.8 Validity and Reliability of Research Instruments .....	31
3.8.1 Validity of Research Instrument .....	32
3.8.2 Reliability of Research Instruments .....	32
3.9 Data Collection Procedures .....	33
3.11 Data Analysis Methods.....	33
3.12 Ethical Consideration .....	34
<b>CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS .....</b>	<b>36</b>
4.0 Introduction .....	36
4.1 Response rate.....	36
4.2 Demographic study.....	36
4.2.1. Gender .....	36
4.2.2 Age.....	37
4.2.3 highest level of education.....	38
4.2.4 Responsibility.....	39
4.3 Parental communication with teachers on learning outcomes of learners with hearing impairment.....	40
4.4 Parental participation in school activities on learning outcomes of learners with hearing impairment.....	42
4.5 Parental involvement in decision-making processes on learning outcomes learners with hearing impairment.....	45
4.6 influence of parent’s KSL skills on learning outcomes of learners.....	47
4.7 Inferential analysis.....	50
4.7.1 Correlations between Variables. ....	50

4.7.2 Reliability .....	51
4.7.3 ANOVA with Friedman's Test .....	51
4.8 Discussion of findings .....	52
4.8.1 Influence of parental communication with teachers on learners with hearing impairment.....	52
4.8.2 Influence of parental participation in school activities on learners with hearing impairment.....	55
4.8.3 Influence of parental involvement in decision-making processes on learners with hearing impairment.....	56
4.8.4 Influence of parent’s KSL skills on learning outcomes for learners with hearing impairment.....	58
<b>CHAPTER FIVE .....</b>	<b>60</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>60</b>
5.0 Introduction .....	60
5.1 Summary of findings .....	60
5.1.1 Summary on influence of parental communication with teachers on learners with hearing impairment.....	60
5.1.2 Summary on influence of parental participation in school activities on learners with hearing impairment.....	61
5.1.3 Summary on influence of parental involvement in decision-making processes on learners with hearing impairment.....	61
5.1.4 Summary on influence of parent’s KSL skills on learners with hearing impairment .....	62
5.2 Conclusions of the Study.....	63
5.3 Recommendations to the study.....	64
5.4 Recommendations for further Study .....	66
<b>REFERENCES .....</b>	<b>67</b>
<b>APPENDICES.....</b>	<b>73</b>
Appendix I: Consent Form .....	73
Appendix II: Consent Form for Minor Participants .....	74
Appendix III: Questionnaire for Teachers.....	75
Appendix IV: Interview Guide for Headteachers.....	81
Appendix V: Interview Guide for PTA Executive Members .....	83

Appendix VI: Focus Group Discussion Guide .....	86
Appendix VII: Table for Determining Sample Size from a Given Population .....	88
Appendix VIII: ERC Certificate.....	89
Appendix IX: Introduction Letter from MKU.....	90
Appendix X: Approval Letter from NACOSTI.....	91
Appendix XI: Approval letter from Ministry of Interior and National Administration .	92
Appendix XII: Approval letter from Ministry of Education .....	93
Appendix XIII: Approval letter from County Government of Kisumu .....	94
Appendix XIV: Map of Kisumu County .....	95



## LIST OF TABLES

Table 1: Target population .....	27
Table 2: Sampling Grid .....	28
Table 3: Response rate.....	36
Table 4: Gender .....	37
Table 5: Age .....	37
Table 6: Highest level of education.....	38
Table 7: Responsibility.....	39
Table 8: Influence of parental communication with teachers on learning outcomes of learners .....	40
Table 9: Influence of parental participation in school activities on learning outcomes of learners .....	42
Table 10; influence of parental involvement in decision-making processes on learning outcomes.....	45
Table 11: influence of parent's KSL skills on learning outcomes of learners .....	48
Table 12: Correlations .....	50
Table 13: Reliability .....	51
Table 14: ANOVA with Friedman's Test.....	52

## LIST OF FIGURES

1: Conceptual framework .....	22
2: Gender .....	37
3: Age .....	38
4: Highest level of education.....	39



## LIST OF ABBREVIATIONS AND ACRONYMS

<b>AAC</b>	Augmentative and Alternative Communication
<b>BOM</b>	Board of Management
<b>HI</b>	Hearing Impairment
<b>IEP</b>	Individualized Education Plan
<b>KCPE</b>	Kenya Certificate of Primary Education
<b>KISE</b>	Kenya Institute of Special Education
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>KSL</b>	Kenya Sign Language
<b>MOE</b>	Ministry of Education
<b>NCES</b>	National Centre for Education Statistics
<b>WHO</b>	World Health Organization



## **CHAPTER ONE: INTRODUCTION**

### **1.0 Introduction**

This chapter provides an overview of the background of the study, the statement of the problem, purpose of the study, research objectives, and questions. It also explores the significance, scope, delimitations and limitations of the research, along with the assumptions of the study. Additionally, the chapter includes operational definitions of key terms.

### **1.1 Background to the Study**

Education is a fundamental right and a critical component of human development, playing a key role in shaping the future of individuals and societies. Inclusive education, which ensures that all learners, including those with disabilities, have access to quality education, is essential for achieving educational equity. Among the various disabilities, hearing impairment presents unique challenges that can significantly impact a learner's academic performance and social development.

Learners with hearing impairments often face difficulties in communication, social interaction, and access to mainstream educational resources. These challenges necessitate specialized support and interventions to ensure they receive a quality education. One of the critical factors that can influence the educational outcomes of these learners is parental involvement. The active participation of parents in their children's education has been shown to positively impact academic achievement, motivation, and overall well-being.

Parental involvement can take many forms, including attending school meetings, helping with homework, communicating with teachers, and advocating for appropriate

educational resources and accommodations. For learners with hearing impairments, parental involvement can be particularly crucial, as parents can provide additional support in communication, reinforce learning at home, and collaborate with educators to tailor educational strategies to meet their children's specific needs.

In Kisumu County, Kenya, public special primary schools cater to the educational needs of learners with hearing impairments. Understanding the influence of parental involvement on the learning outcomes of these learners is vital for developing effective educational policies and practices. This study aims to explore the relationship between parental involvement and the academic performance of learners with hearing impairments in public special primary schools in Kisumu County.

UNESCO (2023) in a report on Africa states that an increasing number of African governments are committing to tackle the challenge of ensuring that children with disabilities have access to quality education. It reports limitations in the provision of a nurturing learning environment for children with disabilities in many countries in Africa.

Hearing impairment, a prevalent disability, affects individuals across various demographics, disregarding factors such as age, race, or socioeconomic status. Its impact on education is widespread, with around 1 in 50 children in the United States facing significant obstacles due to severe hearing loss, hindering their effective learning in traditional classrooms (National Institute on Deafness and Other Communication Disorders, 2022). This emphasizes the global nature of the intersection between disability, particularly hearing impairment, and its consequential effect on educational outcomes.

In Asia, Chinese researchers have investigated the advantages of parental engagement in the education of learners with hearing impairment. Actively involving parents has been shown to enhance motivation and boost academic performance in the classroom (Zhou and Wang, 2019). Similar outcomes were found in Saudi Arabia, where studies at King Abdulaziz University indicated a positive link between parental involvement and academic achievement among hearing-impaired learners (King Abdulaziz University, 2019). These studies also highlighted the potential of parental engagement in enhancing emotional well-being and reducing stress and anxiety in learners with hearing impairment (Al-Ghamdi, 2018).

Learners with hearing impairment in South Africa and Tanzania face significant educational challenges. Studies by Chetty and Knight (2018) underscored the considerable obstacles hindering these learners from accessing educational opportunities and achieving academic success. Parental involvement emerged as a crucial factor positively influencing the academic performance of hearing-impaired students. However, a knowledge gap exists, especially in the South African context, demanding further investigation (DBE, 2019). Similarly, in Tanzania, academic achievement among learners with hearing impairment is observed to be lower compared to their hearing peers, attributed to factors such as learning in noisy environments and a lack of accessible resources (Wanjiru, 2018). Under these circumstances, parental participation has also been found to be a highly important predictor of academic progress (Mwangi et al., 2020).

In Kenya, the objective of attaining comprehensive and equitable education is closely linked to the education of students with hearing impairment. Parental engagement in the educational system is crucial for students with hearing impairment, according to the

Kenya Institute of Special Education (KISE),( 2021). Meeting these demands is still hampered, though, by issues with little resources and a lack of knowledge about inclusive methods. Parental engagement is essential in forming the learning environment and providing a supportive educational experience for students with hearing impairment. This includes communicating with instructors, participating in school events, and helping their children with their homework at home (KISE, 2021).

Despite the recognized importance of parental involvement, there is a scarcity of research focusing on the Kenyan context, highlighting the need for further studies to address this information gap and identify effective strategies for fostering family participation in supporting these learners (Okumu and Mwathi, 2019). Considering this context, the primary objective of this study is to explore the influence of parental involvement on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

## **1.2 Statement of the problem**

With access to the right resources and support, all learners, including those with hearing impairments, can achieve academic success. Research conducted by the World Health Organization (WHO, 2019) indicates that timely intervention and effective teaching can enable students with hearing impairment to attain academic results on par with their hearing counterparts. However, despite the possibility of academic success for learners with hearing impairment, the educational outcomes in public special primary schools in Kisumu County fall short of those achieved by regular learners. Data from the Kisumu County Education Office (2022) suggest that this disparity stems from limited resources, social stigma, and discrimination faced by these learners, hindering their ability to fully engage in the learning process. Addressing these challenges through parental

involvement, awareness campaigns, and resource allocation can help close the gap between their learning outcomes and those of regular learners. Therefore, this study looked at the influence of parental involvement on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

### **1.3 Purpose of the Study**

The purpose of this study is to assess the influence of parental involvement on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

### **1.4 Research objectives**

The objectives of the study are:

- i. To examine the influence of parental communication with teachers on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu central County, Kenya.
- ii. To determine the influence of parental participation in school activities on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.
- iii. To identify the influence of parental involvement in decision-making processes on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.
- iv. To investigate the influence of parent's KSL skills on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

## **1.5 Research questions**

The following research questions were served as the study focus:

- i. What is the influence of parental communication with teachers on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya?
- ii. What is the influence of parental participation in school activities on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya?
- iii. How does parental involvement influence decision-making processes on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya?
- iv. What is the influence of parent's KSL skills on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya?

## **1.6 Significance of the Study**

The results of this investigation highlighted the crucial role of parental engagement in improving the academic performance of students with hearing impairment in public special primary schools. Actively involving parents, identified as a key element, is expected to have a positive effect on the distinct challenges these students encounter in communication and comprehension within the classroom. By reinforcing learning concepts, providing additional practice opportunities and offering emotional support, parental engagement is predicted to significantly enhance learning outcomes, fostering a positive learning atmosphere both at home and in school. Additionally, the study

envisions that parental involvement bridged the communication divide between teachers and students with hearing impairment. Empowering parents to understand specialized teaching methods and assistive technologies can result in collaborative efforts with teachers to develop personalized learning plans tailored to individual needs. This approach aims to optimize the educational potential of students with hearing impairment, cultivating a positive environment that emphasizes the value and significance of their education. Furthermore, the research anticipates a positive correlation between parental involvement and improved attendance rates among students with hearing impairment. The establishment of regular communication channels between parents and teachers is expected to facilitate the timely identification and resolution of attendance issues, promoting a comprehensive educational approach. Overall, the study envisions that its findings contributed to the establishment of a more supportive and inclusive educational environment for students with hearing impairment, thereby positively impacting their learning outcomes and overall educational experience.

### **1.7 Scope of the study.**

According to Marilyn and Goes (2013), the study's scope describes the geographical and methodological limitations governing its execution. The research focused on students with hearing impairment enrolled in public special primary schools within Kisumu County, Kenya. The selection of Kisumu County is based on the elevated prevalence of children with hearing impairment, as indicated by a study conducted by the Kenya National Bureau of Statistics in 2019. The research is scheduled to take place from November 2023 to August 2024. Employing a mixed-methods approach, encompassing both qualitative and quantitative research methods, the study aims to gain comprehensive insights into the perspectives of parents, teachers, and headteachers. It explored various

aspects of parental involvement, such as communication with teachers, participation in school activities, engagement in decision-making processes, and the proficiency of parents in Kenyan Sign Language (KSL).

### **1.8 Limitations of the Study**

- i. **Communication Challenges and Sign Language Usage:** The researcher may encounter challenges in effectively communicating and utilizing sign language, potentially complicating data gathering. To address potential sign language challenges, the researcher utilized diverse communication methods, including written communication and visual aids, alongside sign language specialists. This ensures inclusivity and caters to the varied communication preferences of participants.
- ii. **Sample Size and Representativeness:** The study's reliance on a small sample size in Kisumu County public special primary schools could limit the generalizability of findings. To enhance external validity, random sampling methods were employed to select participants, broadening the representation of parents and learners with hearing impairment.
- iii. **Access to Academic and Parental Participation Records:** Privacy laws and data availability concerns may restrict access to detailed academic achievement records and parental participation information. Collaboration with school administrations and adherence to necessary permits were prioritized to address these limitations and safeguard data confidentiality.
- iv. **Measurement of Parental Engagement:** Accurately measuring the multifaceted nature of parental engagement, including communication, involvement in extracurricular activities, and domestic support, poses a challenge. To mitigate this, a

triangulation approach was adopted, incorporating both qualitative and quantitative methods to ensure a comprehensive understanding.

### **1.9 Delimitations of the Study**

In accordance with Simon and Goes (2014), delimitations within a study pertain to deliberate constraints imposed by the researcher concerning the scope of interest, encompassing decisions about what to incorporate and exclude from the research domain. The investigation employed a sample from three public special primary schools in Kisumu County, involving a total of 673 participants. The research participants consisted of 201 students with hearing impairment, 17 members of the Parents Teachers Association (PTA), 27 teachers and 3 headteachers. It is crucial to emphasize that the study was restricted to public special primary schools specifically within Kisumu County, thereby limiting its capacity to represent the diverse educational contexts present in other regions of Kenya. Additionally, the research specifically concentrated on students with hearing impairment, excluding other forms of disabilities that might have distinct impacts on academic performance. As a result, the study may not comprehensively explore other school-related factors that could affect academic success when investigating the role of parental involvement.

### **1.10 Assumptions of the Study**

- i. This study posits that there is a potential correlation between active parental assistance and the academic performance of children with hearing impairment in public special primary schools. However, it remains open to the empirical findings to ascertain the nature and extent of this influence.

- ii. The assumption underlying this research is that parental involvement in children's education is feasible, facilitated by the availability of various resources such as educational tools, information, learning aids, and accessible channels for communication with teachers. The study remains receptive to exploring the actual impact of these factors on the academic outcomes of students with hearing impairment.
- iii. This study presupposes a collaborative effort between parents and teachers within public special primary schools in Kisumu County to support the academic progress of learners with hearing impairment. Nevertheless, the investigation acknowledges the need to empirically verify the extent and effectiveness of such collaboration in practice.



## 1.11 Operational Definition of Key Terms

- Hearing Impairment** Relates to a loss of auditory function, affecting the ability to perceive and process sound, thereby affecting communication and environmental interaction.
- Parent's KSL Skills** Refers to the proficiency and ability of parents in using the sign language system employed in Kenya for effective communication with their children who have hearing impairment.
- Parental Communication with Teachers** Relates to teachers providing parents with academic information about their children.
- Parental Involvement in Decision-Making Processes** Refers to actively participating in making decisions that have an influence on their children's education and school experiences.
- Parental Participation in School Activities** Describes how parents are involved in school initiatives, events, and programs that enhance the learning environment and the education of their children.
- Public Special Primary Schools** Government-run public educational institutions that serve outstanding students with special needs or disabilities.

## **CHAPTER TWO : LITERATURE REVIEW**

### **2.0 Introduction**

This section engages in a comprehensive and evaluative examination of peer-reviewed articles, scholarly papers and credible sources pertinent to the subject under scrutiny. Within this chapter, attention is directed towards parental communication with teachers, parental participation in school activities, participation in decision-making processes and the sign language skills of parents. It encompasses the theoretical framework, conceptual framework, and research gap, along with a succinct recapitulation of the literature review.

### **2.1 Empirical literature review**

The literature review in this section is based on relevant and current research and studies that specifically relate to the research questions and objectives.

### **2.2 Concept of Hearing Impairment**

Hearing impairment, also known as hearing loss or deafness, covers a range from partial to complete loss of hearing in one or both ears, impacting 466 million people worldwide (World Health Organization, 2021). It is classified by type and severity, with conductive hearing loss stemming from issues in the outer or middle ear, sensorineural hearing loss resulting from inner ear damage and mixed hearing loss combining both (American Speech-Language-Hearing Association, 2021). There are two main types: congenital, present at birth due to genetic factors, and acquired, developing later in life from various causes (National Institute on Deafness and Other Communication Disorders, 2021). The consequences of hearing loss are significant, affecting communication, relationships, and contributing to social isolation. In children, it impacts academic performance, mental health, and speech development. In adults, hearing loss influences employment

opportunities and overall quality of life. Despite these challenges, advancements in audiology, such as hearing aids and cochlear implants, provide opportunities for enhanced hearing and communication (World Federation of the Deaf, 2021), emphasizing the crucial link between hearing loss and academic achievement.

### **2.2.1 Parental Communication with Teachers and Learning Outcomes**

Facilitating effective communication between parents and teachers is pivotal in shaping the academic outcomes of students with hearing impairment, particularly within Israel's distinct educational setting. Recent research has brought attention to the intricate link between parental involvement, communication methodologies, and the scholastic achievements of these students. For instance, Cohen's investigation (2020) underscores the significance of collaborative partnerships between parents and teachers, allowing for tailored educational approaches that address individual needs. Similarly, Levy et al., (2019) emphasize the crucial role of technology-assisted communication, such as augmentative and alternative communication (AAC) systems, in bridging communication gaps and enhancing academic engagement. Avrahami and colleagues (2021) contribute insights into cultural considerations, highlighting the importance of understanding diverse cultural norms to facilitate effective communication among parents, teachers, and students. Exploring the evolving landscape of parental participation in Israel's education, Feldman and Shemesh (2022) reveal the dynamic interplay of communication strategies, parental roles, and educational outcomes.

Adeyemo and Adeyemo's research (2020) in Nigeria underscores the transformative impact of parent-teacher communication on the academic development of students with hearing impairment. Their study emphasizes the role of regular updates, progress discussions, and shared strategies in fostering positive outcomes. Additionally, Okoli and

Chukwuebuka (2019) highlight the empowering effects of communication initiatives that educate parents of students with hearing impairment about effective support strategies and communication approaches. These initiatives also offer teachers insights into individual learning needs and promote an inclusive classroom environment.

Odhiambo, Omondi and Omolo (2023) investigated the impact of parental contact with teachers on the academic achievement of kids with hearing impairment in Kenya via a descriptive survey research method. In elementary schools around the nation, the researchers polled 300 parents of children with hearing impairment. The results showed that parental communication with instructors and the academic achievement of kids with hearing impairment are positively correlated. Effective communication methods between parents and teachers were found to be crucial in creating a conducive learning environment for hearing-impaired children. However, the study's limitations include its focus on Kenya and limited generalizability. To enhance the research, the researchers could have explored parental communication in diverse cultural and educational contexts, utilizing a longitudinal approach to monitor the impact of parental participation on academic achievement over time. Additionally, incorporating qualitative research methods for instance, focus groups or interviews could have enriched the study's findings, providing deeper insights into effective communication strategies.

### **2.2.2 Parental Participation in School Activities and Learning Outcomes**

In a recent investigation carried out in China, Wang and colleagues (2020) discovered a constructive correspondence between parental involvement in school activities and the academic success of students facing hearing impairment. Their study emphasizes the crucial role of active parental engagement in fostering a supportive learning environment, strengthening communication links between educators and parents, and facilitating the

development of customized learning approaches. Similarly, Li et al. (2019), in their exploration within the Chinese context, underscored the importance of collaborative efforts between parents and teachers in extracurricular activities designed for learners with hearing impairment. Their results highlight the essential role of parental participation in such initiatives, resulting in enhanced self-esteem, better social relationships and the development of a strong feeling of belonging. Consequently, this contributes to increased levels of academic engagement among students.

These recent investigations collectively advocate for heightened parental participation in school-related activities as a robust approach to empower learners with hearing impairment, strengthen communication channels among various stakeholders, and foster a comprehensive and inclusive educational environment in China (Wang et al., 2020). Contrarily, a study performed by Akellot and Bangirana (2019) in Uganda did not find a significant correlation between parental involvement in school activities and academic achievement among learners with hearing impairment. However, the study did reveal a positive link between parental participation and improved attendance, enhanced behaviour, and increased self-confidence among these students. The research also shed light on the challenges encountered by parents of learners with hearing impairment in engaging in school activities, including time constraints, lack of transportation, and financial limitations.

To address these challenges, the study recommends that schools and community organizations take proactive measures to assist parents of learners with hearing impairment in overcoming these obstacles. This could involve providing transportation services, offering financial support, and providing guidance on the importance of parental engagement. Creating opportunities for parents to volunteer in classrooms, attend parent-

teacher conferences, and participate in various school activities would also promote a more active role for parents in their children's education (Akellot and Bangirana, 2019).

### **2.2.3 Parental Involvement in Decision-Making Processes and Learning Outcomes**

In the United Kingdom, Lindsay (2019) conducted a study revealing those parents of students facing hearing impairment encounter difficulties in making educational decisions for their children. These challenges involve selecting an appropriate school, acquiring necessary support services, and establishing effective communication with teachers. Despite these obstacles, the research emphasizes the crucial role parents play in fostering their child's academic success, demonstrating how their active involvement contributes to improved educational outcomes. Children with hearing impairment benefit from parental decision-making as parents help enhance communication skills, advocate for specialized needs, and ensure access to suitable educational resources. Additionally, parents provide emotional support and motivation, assisting their children in overcoming challenges posed by hearing impairment and excelling in their educational pursuits. Teachers also gain from parental involvement in decision-making, receiving insights into the child's hearing impairment, understanding educational aspirations, and receiving suggestions for effective classroom support strategies (Lindsay, 2019).

Based on these findings, Lindsay (2019) advocates for schools to provide heightened support and information to parents regarding hearing impairment. Increased collaboration between parents and teachers is also recommended. The study proposes the development of comprehensive policies and practices, including the provision of sign language interpreters and accommodations tailored to the needs of learners with hearing impairment. Research by Tobias (2022) in Tanzania indicates that parental decision-making is influenced by factors such as educational attainment, understanding of hearing

impairment, financial capacities, and cultural beliefs. The study also underscores the impact of available services and support tailored to learners with hearing impairment on parental choices.

Parents with higher educational attainment, a comprehensive understanding of hearing impairment, improved financial resources, and a cultural emphasis on education are more likely to make well-informed decisions about their children's education. However, even parents with these advantages may face challenges in decision-making due to the limited availability of services and supports in the Tanzanian context. Tanzanian parents of children with hearing impairment often base decisions on their children's verbal communication abilities. Those who believe their children won't communicate verbally may choose schools for the deaf, while parents confident in their children's verbal communication potential may opt for mainstream schools. However, this decision is complex, given the lack of guaranteed outcomes in verbal communication skill development, even in schools for the deaf (Tobias, 2022).

#### **2.2.4 Parent's KSL skills and Learning Outcome**

Stuart and Holdsworth (2016) conducted a study in the United Kingdom aimed at exploring the factors influencing parental utilization of sign language with their children experiencing hearing impairment. The research involved a sample of 20 parents whose children were diagnosed with hearing impairment before the age of 3 years. The study revealed a significant correlation between parents' proficiency in sign language and their children's linguistic development. Children of parents with higher fluency in sign language demonstrated more extensive vocabularies, superior grammar skills, and more intricate sentence structures compared to children whose parents had lower proficiency in sign language. Additionally, the study found that parents' sign language proficiency

was linked to improved social-emotional outcomes for their hearing-impaired children, contributing to heightened self-esteem and confidence.

Given the importance of sign language as a primary communication mode for individuals with hearing impairment, creating a linguistically rich environment is crucial for the language development of these children. The study suggests that educational institutions and early intervention programs should support parents in learning sign language. This assistance may include facilitating access to sign language classes, providing opportunities for collaborative sign language practice among parents, and offering comprehensive resources on effectively using sign language with their children (Stuart and Holdsworth, 2016). However, it's essential to note a limitation in the study, which involved a single sample without controlling for factors like educational quality. The researcher could have improved the study by using larger and more diverse samples, controlling for relevant variables, and employing longitudinal designs to track development.

In a study conducted by Mkhize and Masango (2020) in South Africa, it was observed that learners with hearing impairment whose parents were proficient in sign language achieved higher scores on standardized language and literacy tests compared to those whose parent's lacked proficiency in sign language. Additionally, learners with hearing impairment whose parents were adept in sign language were more likely to be integrated into mainstream schools and perform at grade-appropriate academic levels. Another study by Mchunu and Ndhlovu (2021) found that learners with hearing impairment whose parents were skilled in sign language exhibited significantly elevated levels of self-esteem and social competencies compared to those whose parents were not proficient in sign language. The study also revealed that these learners were more

inclined to participate in extracurricular activities and foster positive peer relationships. By acquiring sign language skills, parents can create an enriched linguistic environment for their children, thereby fostering the acquisition of crucial skills essential for success within the educational realm (Mchunu and Ndhlovu, 2021).

Recent studies by Atema et al., (2018) in Kenya have highlighted the multifaceted relationship between parental Kenyan Sign Language (KSL) proficiency and academic outcomes, emphasizing the positive impact on learners, parents, and teachers. These studies underscore how parents' proficiency in KSL contributes to a supportive learning environment, effective communication between parents and teachers, and personalized learning strategies catering to individual needs. Additionally, research by Kiptoo and Mboya (2021) emphasizes how parental KSL skills positively influence learners' linguistic development, facilitating language acquisition and literacy skills. This comprehensive approach has the potential to foster increased engagement and success in the academic domain. Atema et al., (2018) and Kiptoo and Mboya (2021) demonstrate that parental proficiency in KSL facilitates improved communication, personalized support, and heightened academic engagement. It is crucial for institutions, policymakers, and educators to recognize the significance of supporting parents in acquiring KSL skills, with initiatives such as accessible KSL classes, promoting parental involvement in school activities, and providing resources to further amplify the positive impact of parental KSL proficiency on learners with hearing impairment in Kenya.

### 2.3 Theoretical Framework

This study was founded in the sociocultural theory of learning, initially proposed by Lev Vygotsky in the early 1900s and further refined by scholars such as Jerome Bruner and Michael Cole in the 1970s. According to this theory, learning is a social process embedded within a cultural context, where learners' development is shaped by their encounters and conversations with people who Vygotsky refers to as “significant others”. Family members, teachers and peers are some of those significant others that learners socialise with and from whom they get to learn a lot.

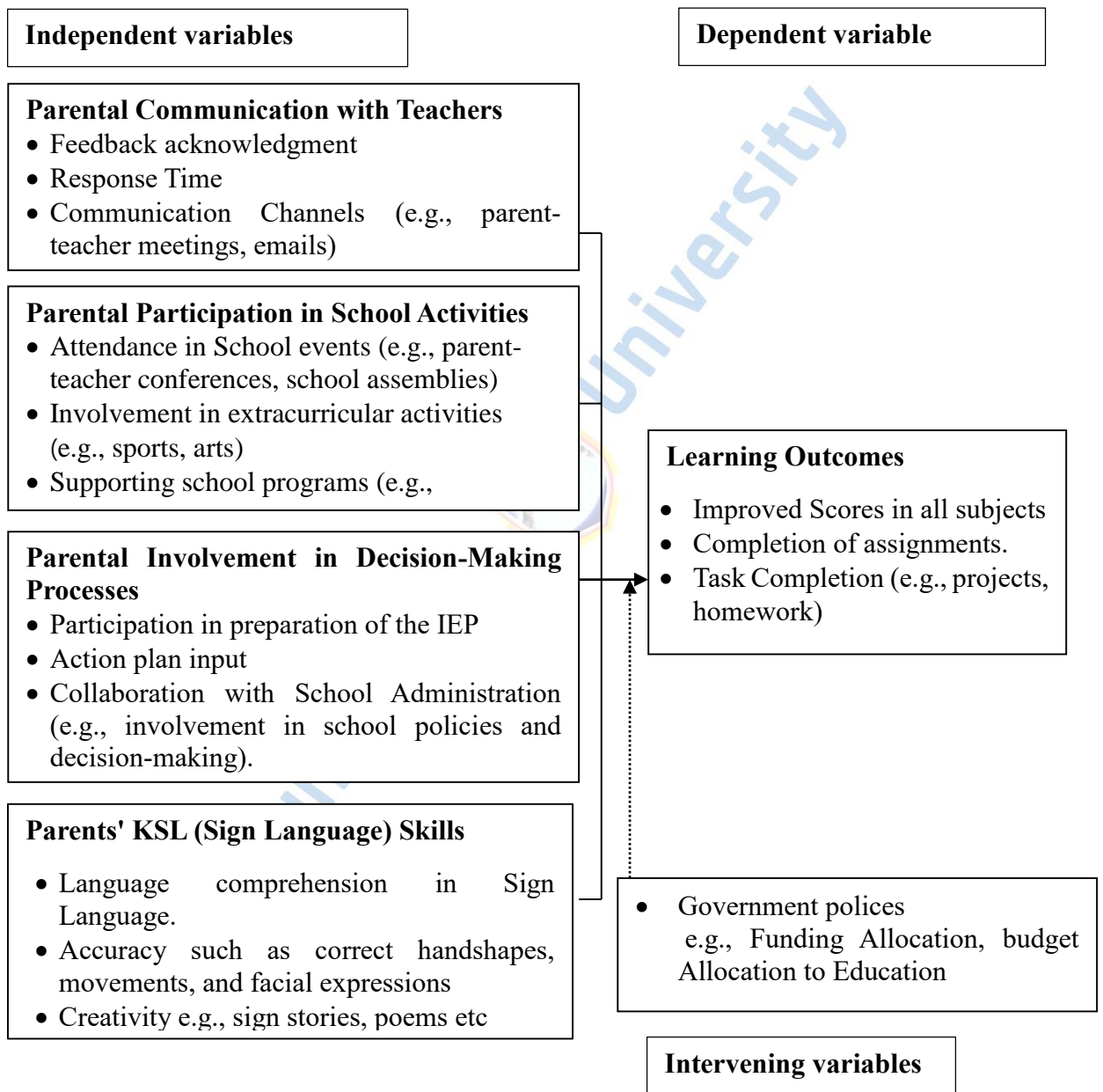
This theory, therefore, is relevant to the current study because it offers a framework for comprehending how parental involvement might impact the educational success for individuals with hearing impairment. Parents, significant socializing agents in their children's lives, have the potential to shape their learning experiences through active involvement in their education. Academic success can be achieved through various means, including providing support, assisting with homework, participating in school events, and maintaining communication with teachers.

The link between parental involvement and enhanced academic achievement in children with hearing impairment is supported by studies such by Ntshangase et al., (2022). These findings indicate that specific aspects of parental engagement, such as emotional support, provision of sign language assistance, and help with homework, are associated with positive academic outcomes. The sociocultural theory of learning contextualizes these findings by highlighting the social nature of learning and the influential role of parents as active participants in their children's educational journey. Consequently, this theoretical framework guided the investigation into how parental involvement influences the learning outcomes of learners with hearing impairment in this study.

The selection of the sociocultural theory of learning as the foundation for this study was based on its acknowledgment of the crucial role played by social interactions and cultural contexts in cognitive development. This theory underscores the collaborative aspect of learning and the influence of cultural tools in shaping educational experiences. In the context of learners with hearing impairment, the sociocultural theory provides a relevant perspective for exploring the influence of parental involvement on learning outcomes. Emphasizing the dynamic interplay between learners and their social environment, this theory underscores how parents, as key social agents, contribute to their children's educational journey. By examining the connection between parental involvement and academic outcomes within this theoretical framework, the study delves into the intricate relationship between cultural contexts, social interactions, and the learning trajectory of individuals with hearing impairment. Therefore, this research investigated the influence of parental involvement on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

## 2.4 Conceptual Framework

A conceptual framework serves as a well-organized structure presenting the fundamental concepts, variables, and relationships that direct a research study, offering a coherent and transparent representation.



**Figure 1: Conceptual framework**

**Source: Researcher (2024)**

## 2.5 Research Gaps

Previous research on deaf education has largely focused on affluent countries or specialized schools for hearing-impaired students. For instance, Cohen (2020) investigated parental engagement among deaf children in Israel, but the study overlooked how this involvement impacts academic outcomes. In Ghana, Agyeman et al., (2020) explored the use of augmentative communication systems with deaf students but did not address academic performance. Additionally, Colin, Easterbrooks and Harris (2020) demonstrated that family language proficiency and educational settings shape literacy outcomes in the UK, while Lederberg et al., (2019) emphasized the importance of home sign language exposure for early literacy. There remains a gap, however, in exploring how parental involvement influences academic performance among hearing-impaired students in public primary schools, especially in Kenyan contexts like Kisumu County. This study aims to address this gap and deepen our understanding.

## **2.6 Summary of Literature Review**

After a thorough examination of the available literature, it becomes increasingly clear that parental engagement plays a crucial role in enhancing the academic achievements of children with hearing impairment. The synthesized research highlights the essential role of family involvement in providing pivotal support for the educational success of students facing hearing impairment challenges. This parental involvement manifests in various ways, including fostering learning activities at home, actively participating in school events, and assisting with homework tasks. However, to identify the most effective forms of parental engagement, additional empirical investigation is unquestionably necessary. While the existing body of evidence strongly emphasizes the positive influence of parental involvement on the academic success of learners with hearing impairment, it is essential to recognise certain limitations in some studies. These limitations encompass a small number of participating schools, the absence of control groups for meaningful comparisons and a lack of comprehensive data on the long-term benefits resulting from consistent parental participation. These constraints underscore the urgent need for more comprehensive and rigorously designed research endeavours. Such efforts could offer a deeper understanding of how parental involvement precisely shapes the educational achievements of learners with hearing impairment. Addressing these gaps in the current research landscape, this study aims to significantly contribute to a deeper understanding of the intricate correlation between parental involvement and the educational accomplishments of students dealing with hearing impairment.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0 Introduction**

This section outlines the methodology intended for use in the research, covering aspects such as study design, target population, sample size, sampling methods, research instruments, validity and reliability of instruments, data collection procedures, data analysis and ethical considerations.

### **3.1 Research Methodology**

A mixed-methods strategy was used for this study, combining quantitative and qualitative techniques. The qualitative component was encompassed the analysis of content derived from interview guides and focus group discussions, while the quantitative aspect entailed the statistical analysis of data gathered from questionnaires.

### **3.2 Research Design**

This study employed a concurrent embedded research design to examine the specific aspects related to the research topic. An embedded research design, as per Creswell and Plano Clark (2017), is a mixed-methods approach where one form of data collection and analysis is incorporated within another. It involves emphasizing either quantitative or qualitative data, with the other type offering supplementary insights, depth, comprehension, or validation. This design is chosen because it allows for the simultaneous gathering of both quantitative and qualitative data to allow for a thorough comprehension of the intricate connection between learning outcomes and involvement from parents. Employing this design facilitated the acquisition besides analysis of both quantitative and qualitative data, offering a holistic understanding of the topic. It provides

a means to systematically investigate occurrences, gathering comprehensive insights into the phenomenon.

### **3.3 Location of the Study**

This research was conducted in Kisumu County, Kenya, specifically focusing on public special primary schools. Kisumu County shares its borders with Siaya County to the west, Vihiga County to the north, Nandi County to the northeast, and Kericho County to the east. According to the 2019 Kenya Population and Housing Census, the county has an approximate population of 1,155,574 people. The primary economic activities in Kisumu County include agriculture, fishing, and trade, with additional prominence in industries such as sugar, tea, and manufacturing.

The choice of Kisumu County as the study location for investigating the study topic is motivated by several factors. Notably, the County hosts multiple special primary schools for learners with hearing impairment, coupled with a high prevalence of such students. As per the Kenya National Bureau of Statistics (2019) study, approximately 1,000 children with hearing impairment are enrolled in public special primary schools in Kisumu County. This demographic context renders the County an ideal setting to explore the relationship between parental involvement and the academic achievements of learners with hearing impairment

### **3.4 Target Population**

In accordance with Creswell (2014), a population is well-defined as a cluster of individuals or objects who share certain familiar characteristics. This research focused on public special primary schools, specifically targeting the Parents Teachers Association (PTA) executive committee members, Headteachers, Teachers and students

with hearing impairment. As reported by the Ministry of Education (2022), Kisumu County has three public special primary schools for learners with hearing impairment, encompassing three headteachers, 45 PTA members, 75 teachers and 550 learners with hearing impairment giving 673 people in all. These results are as organized in Table 1.

**Table 1: Target population**

<b>Target group</b>	<b>Total population</b>
PTA executive committee members	45
Headteachers	3
Teachers	75
Learners with Hearing Impairment	550
<b>Total</b>	<b>673</b>

**Source: Ministry of Education, Kisumu County Office (2023)**

### **3.5 Sample Size and Sampling Procedures**

According to Falex (2018), a sample refers to a fraction of a population selected to symbolize the all-inclusive population and gather data for making inferences. The selection must accurately reflect the population to instil confidence in the accuracy of the collected data. In the present research investigation, a thoughtful blend of sampling methods was utilized to guarantee thorough insights from various viewpoints. The headteachers were selected through purposive sampling technique due to their roles as authoritative decision-makers within educational institutions. Simple random sampling was used to select Parents Teachers Association (PTA) executive committee members, capitalizing on their active engagement in school operations, which is pivotal for understanding the experiences of learners with hearing impairment. This method not only

acknowledges their vital contributions but also aligns with efficiency in implementation. For the selection of teachers, a simple random sampling approach was adopted. This unbiased method offers fairness by ensuring equal opportunities for each teacher to be part of the study. By incorporating this technique, a well-balanced and representative sample of educators from selected schools were obtained. A stratified random sampling technique was employed to include learners with hearing impairments from various grade levels, ensuring a balanced representation across grades. This method allowed for diverse insights, with participants selected specifically from grades five, six, and seven. These grades were chosen due to the learners' more advanced language and communication skills, enabling them to provide deeper, more detailed perspectives. This approach aimed to capture a broad range of experiences, thereby enriching the research findings with nuanced viewpoints. According to the table, a population consisting of 673 individuals corresponds to a sample size of 248 respondents, as indicated in Table 2.

*Table 2: Sampling Grid*

<b>Target group</b>	<b>Total population</b>	<b>Sample size</b>	<b>% of Total Samples</b>
PTA executive committee members	45	17	6.85
Headteachers	3	3	1.21
Teachers	75	27	10.89
Learners with Hearing Impairment	550	201	81.05
<b>Total</b>	<b>673</b>	<b>248</b>	<b>100</b>

### **3.6 Data collection Instruments**

This research employed interview guides to collect information from school principals and members of the Parent-Teacher Association (PTA) executive committee. Questionnaires were distributed to teachers and focus group discussions were conducted to learners with hearing impairment by use of focus group discussion guide. By employing multiple tools for data collection and facilitating the cross-validation of identified gaps by the initial instrument, Tucker and Norris (2018) recommend triangulation as a method to enhance the effectiveness of data analysis.

#### **3.6.1 Interview Guides**

According to Kombo and Tromp (2006), this research employs semi-structured interviews with both headteachers and parents of students with hearing impairment to gather crucial information. The interview guide was encompassed various aspects aligned with research objectives. It delved into participants' views on the significance of parental involvement in the academic success of learners with hearing impairment. The investigation was also explored specific types of support provided by parents and their contributions to the academic well-being of learners. Additionally, the interviews were identified and discuss challenges faced by parents and headteachers in fostering effective parental involvement and look into in-depth examination of parents' Knowledge of Sign Language (KSL) skills, including comprehension and proficiency. Lastly, participants provided insights into suggested strategies and interventions for enhancing parental engagement in the academic journey of learners with hearing impairment.

### **3.6.2 Questionnaires**

According to Creswell (2014), a questionnaire is defined as a written set of questions designed to collect information. In this research, teachers received standardized questionnaires covering various objective variables. These included the evaluation of teacher perceptions regarding the extent and nature of parental involvement in the academic lives of learners with hearing impairment. Teachers also rated the perceived influence of parental involvement on the learning outcomes of these students. The questionnaires incorporated open-ended questions to allow for detailed responses and insights from teachers regarding parental involvement. Additionally, Likert scale items were included to quantify teachers' opinions on specific aspects of parental involvement.

### **3.6.3 Focus Group Discussion Guide**

Utilizing a focus group discussion was instrumental in gathering insights into the experiences, challenges, and support needs of students dealing with hearing impairment. Following the approach outlined by Stewart and Shamdasani (2014), the focus group discussion, as a qualitative research method, entails a gathering of individuals engaging in conversation about a specific topic to explore their experiences, attitudes and beliefs. These sessions were conducted privately, with participants providing consent and receiving a concise overview of the subject. The facilitator introduced the topic, prompt participants for their perspectives and steer the conversation. The justification for using focus group discussions lied in their capacity to facilitate interactive dialogue and mutual exchange among learners with hearing impairment, fostering a rich and collective exploration of their experiences, challenges, and support needs. The discussion guide was structured to include exploration of the daily experiences and challenges encountered by learners with hearing impairment in their academic journey,

identification and discussion of the support requirements perceived by learners, and facilitation of interactive dialogue among learners, fostering a collective exploration of their experiences, challenges and support needs.

### **3.7. Piloting of Research Instruments**

In accordance with Yin (2014), a pilot investigation refers to a preliminary and scaled-down assessment carried out before the primary study. Its purpose is to refine the research design and procedures for data collection, while addressing potential methodological flaws, logistical challenges, and other issues. The instruments utilized in this study underwent a pilot phase within a primary school catering to students with hearing impairment, situated in a nearby special primary school in Vihiga County. The pilot phase participants were not part of the final research sample. This methodology ensures that the research is examined for appropriateness, efficacy, and clarity prior to the main study, which improves the validity and reliability of the findings. Furthermore, by facilitating the evaluation of research tools like questionnaires and interview guides, the pilot study guarantees that they are appropriate for the particular setting of the study. The investigator can get important knowledge to improve the general calibre and effectiveness of the main investigation by conducting a pilot study. The main research success and the validity of its findings were ensured by incorporating the pilot study's findings into adjustments to research tools, protocols, and data gathering techniques.

### **3.8 Validity and Reliability of Research Instruments**

This research assessed the dependability besides precision of the data gathering techniques employed to uphold the authenticity of the results.

### **3.8.1 Validity of Research Instrument**

In line with Kothari (2004), validity in research instruments pertains to the precision with which the instrument measures a designated variable or concept. To ensure validity, expert reviewers scrutinized items for correctness, relevance, language, clarity, and alignment with research objectives and theoretical frameworks. This comprehensive assessment aims to enhance the accuracy of research instruments. Addressing unclear or repetitive elements is a key strategy employed by reviewers to bolster content validity. Any necessary adjustments were made prior to the complete implementation of the data gathering process. This rigorous evaluation process contributes to the improvement of the accuracy, credibility, and overall validity of the results and conclusions.

### **3.8.2 Reliability of Research Instruments**

In accordance with Creswell (2014), an instrument's dependability pertains to its ability to produce consistent findings over time. A reliable instrument should exhibit uniform results when the identical item is measured on multiple occasions by different users. The reliability of research holds significant importance, ensuring that the study's outcomes maintain consistency and reliability. The dependability of an instrument is instrumental in determining the significance and applicability of research findings. In this particular investigation, the test-retest reliability approach was utilized. This approach involves administering the same instrument to the identical participants on two separate occasions. The evaluation of the instrument's dependability was conducted by examining the correlation between the two sets of results. A correlation coefficient of 0.70 or higher, as stipulated by Cronbach's alpha, was deemed appropriate for establishing reliability.

### **3.9 Data Collection Procedures**

To secure research authorization from the National Commission for Science, Technology, and Innovation (NACOSTI), the researcher must furnish an introductory letter acquired from the Ethical and Review Commission at Mount Kenya University as an integral component of the permit application procedure. Furthermore, duplicates of both the permission and introduction letter was sent to the Kisumu County Commissioner and the County Director of Education to obtain approval for the research to be carried out within their jurisdiction. Subsequently, the researcher embarked on school visits within the sampled institutions to both obtain permission from the head teachers and arrange for the requisite logistics. Sequential visits ensued, involving the distribution and collection of questionnaires, as well as the conduction of interviews and focus group discussions. The initial school visit coincided with the dissemination of questionnaires among teachers, with collection taking place on the same day within each sampled school to prevent any potential loss or collusion. The ensuing visitations involved comprehensive engagements, encompassing interviews and focus group discussions. To ensure clarity and understanding, the researcher communicated instructions and relevant terms in Kenyan Sign Language (KSL) during focus group discussions. The researcher also elaborated on the study's purpose, while assuring respondents of the confidentiality of the provided information. Notably, data collection from head teachers and PTA executive committee members adhered to pre-structured Interview Schedules to maintain consistency and reliability in information elicitation.

### **3.10 Data Analysis Methods**

Upon completion of data collection for the study, the researcher proceeded to conduct data analysis. The information gathered through questionnaires underwent a thorough

editing process, where it was carefully organized and coded based on the respondents' answers. Open-ended responses underwent content analysis coding before being presented in a descriptive narrative format. Qualitative data obtained from interviews with parents and headteachers, as well as focused group discussions with learners experiencing hearing impairment, was subjected to a thematic analysis approach. This method entails transcribing and meticulously reviewing written notes from these sessions to identify recurring themes and patterns within the responses. The identified themes were then organized and interpreted to obtain a deeper understanding of the participants' perspectives on parental involvement and its impact on academic performance.

For analyzing quantitative data, the researcher used SPSS (version 28). Descriptive statistical techniques such as frequencies, percentages and measures of central tendency were applied to explore the research questions. To enhance the research reliability, the study employed triangulation by integrating both quantitative and qualitative data, thereby bolstering validity. The dissertation presented results using tables, charts, and descriptive narratives. Supporting materials included participant consent forms, transcripts of interviews and focus groups, completed questionnaires, and documentation of the data coding process, all of which highlighted the study's thoroughness and supported the findings and conclusions.

### **3.11 Ethical Consideration**

Ethical considerations involve the principles and guidelines followed by a researcher to safeguard the welfare of participants in a study (Saunders, Lewis and Thornhill, 2019). These encompass securing informed consent, preserving privacy, minimizing discomfort, and preventing harm. The researcher diligently assessed the benefits and risks of the study, ensuring that the research significance outweighed potential adverse

effects. Data collection, analysis, and reporting prioritized integrity, transparency, and accuracy, refraining from misrepresentation. The research prioritized participants' rights and well-being, including obtaining consent from guardians or parents of minors with hearing impairment, upholding privacy and maintaining anonymity and confidentiality. This comprehensive approach reflects the core principles of ethical research practices and ensures the well-being of all participants, particularly minors with hearing impairment, through meticulous adherence to ethical standards.



## CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS

### 4.0 Introduction

This chapter contains data analysis based on the objectives of the study, which included examining the influence of parental communication with teachers, parental participation in school activities, parental involvement in decision-making processes and parents' KSL skills on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

### 4.1 Response rate

The researcher issued 248 questionnaires, 221 (89.11%) of the questionnaires were returned while 27 (10.89%) of the questionnaires were not returned the study therefore, had a respondent rate of 89.11%.

**Table 3: Response rate**

Questionnaires	frequency	percentage
Returned	221	89.11
Not returned	27	27
<b>Total</b>	<b>248</b>	<b>100</b>

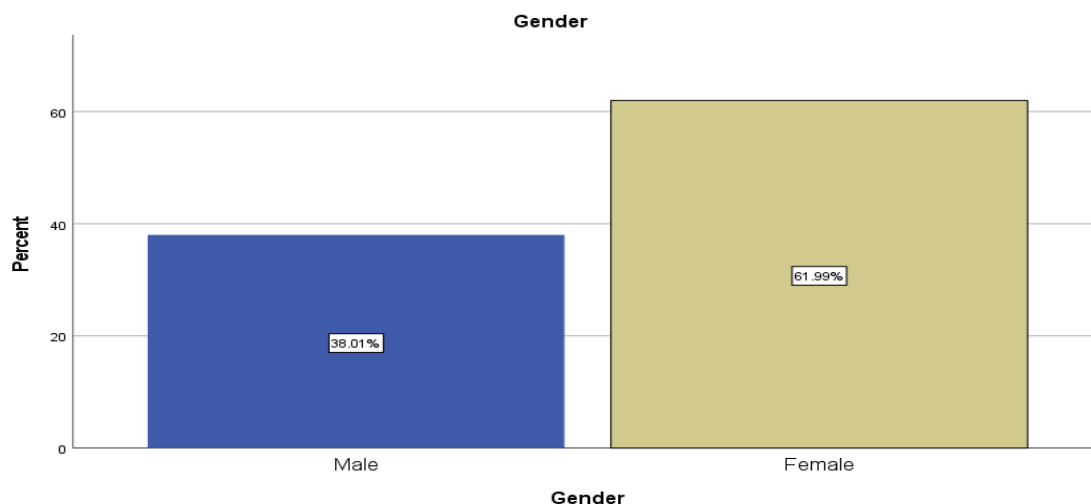
### 4.2 Demographic study

#### 4.2.1. Gender

The study revealed that 84 (38%) of the respondents were male while 137 (62%) of the respondents were female. Majority of the respondents were female in the study carried out to determine the influence of parental involvement on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

**Table 4: Gender**

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Male	84	38.0	38.0	38.0
	Female	137	62.0	62.0	100.0
	<b>Total</b>	<b>221</b>	<b>100.0</b>	<b>100.0</b>	



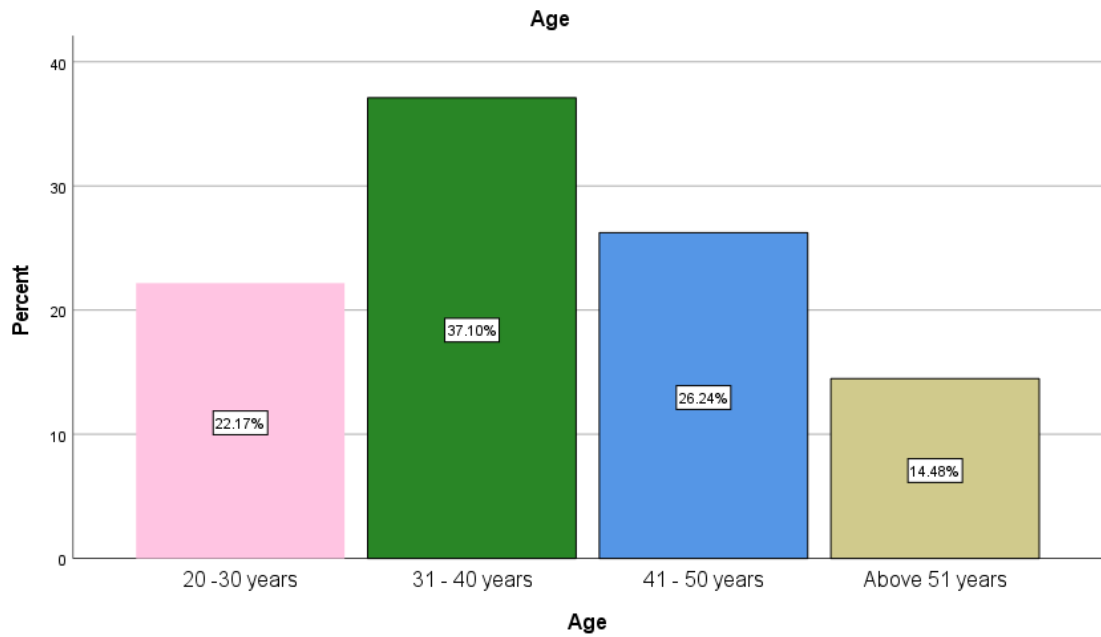
**Figure 2: Gender**

#### 4.2.2 Age

The study found out the ages of the respondents involved in the study, the study revealed that 49 (22.2%) of the respondents were between 20 to 30 years of age, 82 (37.1%) of the respondents were between 31 to 40 years of age, 58 (26.2%) of the respondents were between 41 to 50 years of age while 32 (14.5%) of the respondents were above 51 years. Majority of the respondents were between 31 to 40 years of age

**Table 5: Age**

		<b>Frequency</b>	<b>Percent</b>
Valid	20 -30 years	49	22.2
	31 - 40 years	82	37.1
	41 - 50 years	58	26.2
	Above 51 years	32	14.5
	<b>Total</b>	<b>221</b>	<b>100.0</b>



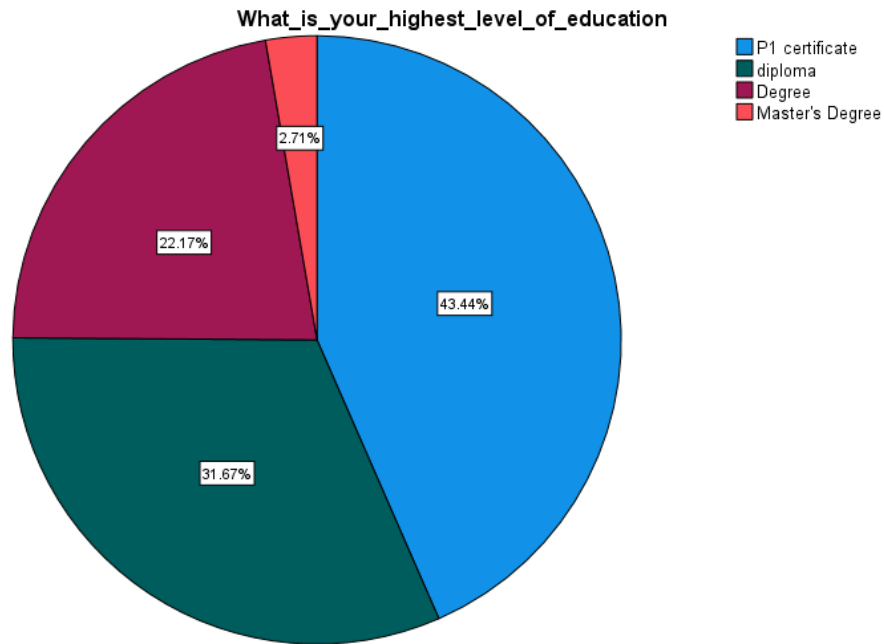
**Figure 3: Age**

#### 4.2.3 Highest Level of Education

The study also identified the highest level of education attained by the respondents. Among them, 96 individuals (43.4%) held a P1 certificate as their highest qualification. Additionally, 70 respondents (31.7%) had achieved a diploma level of education, 49 respondents (22.2%) had obtained a degree, and 6 respondents (2.7%) had earned a Master's degree. The majority of the respondents had a P1 certificate as their highest level of education.

**Table 6: Highest level of education**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid P1 certificate	96	43.4	43.4	43.4
Diploma	70	31.7	31.7	75.1
Degree	49	22.2	22.2	97.3
Master's Degree	6	2.7	2.7	100.0
Total	221	100.0	100.0	



**Figure 4: Highest level of education**

#### 4.2.4 Responsibility

The study also found the responsibilities of the respondents, 8(3.6%) of the respondents were senior teachers, 76(34.4%) of the respondents were games teachers while 137(62%) of the respondents were class teachers. Majority of the respondents were class teachers, see table 7.

**Table 7: Responsibility**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	senior teacher	8	3.6	3.6	3.6
	Games teacher	76	34.4	34.4	38.0
	Class teacher	137	62.0	62.0	100.0
	Total	221	100.0	100.0	

### 4.3 Parental Communication with Teachers on Learning Outcomes of Learners with Hearing Impairment

The study sought to examine the influence of parental communication with teachers on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu central County, Kenya.

**Table 8: Parental communication with teachers on learning outcomes of learners with hearing impairment**

	N	Minimum	Maximum	Mean	Std. Deviation
Regular attendance of Parent-Teacher Meetings impacts students' learning outcomes	221	1.00	5.00	3.2986	1.24369
Teachers find Parent-Teacher Meetings beneficial for gauging students' learning outcomes	221	1.00	5.00	3.2534	1.27174
Parent-Teacher Meetings assist in recognizing areas for learning achievement	221	1.00	5.00	3.2805	1.28028
Learners learning outcomes is influenced by the frequency of Parent-Teacher Meetings.	221	1.00	5.00	3.3439	1.28251
Clear feedback from teachers impacts learners learning outcomes.	221	1.00	5.00	3.5068	1.29552
Timely responses to communications affect learners' academic progress.	221	1.00	5.00	3.4932	1.30251
Open communication with teachers influences learners learning outcomes.	221	1.00	5.00	2.8054	1.32568
Providing multiple communication channels enhances parental involvement and learners learning outcomes.	221	1.00	5.00	3.4253	1.28632
Clear awareness of communication channels impacts learners learning outcomes	221	1.00	5.00	3.4434	1.29780

Effective communication about academic performance expectations influences students' progress.	221	1.00	5.00	2.9548	1.38424
Valid N (listwise)	221				

Source (Field Data, 2024)

According to Table 8, the data indicates that regular attendance at Parent-Teacher Meetings ( $M = 3.30$ ,  $SD = 1.24$ ) positively impacts students' learning outcomes. Teachers consider these meetings beneficial for assessing student progress ( $M = 3.25$ ,  $SD = 1.27$ ). Participants also agreed that such meetings help in identifying areas of learning achievement ( $M = 3.28$ ,  $SD = 1.28$ ) and that the frequency of these meetings influences outcomes ( $M = 3.34$ ,  $SD = 1.28$ ). Additionally, clear feedback from teachers is deemed crucial ( $M = 3.51$ ,  $SD = 1.30$ ), as are timely responses to communications ( $M = 3.49$ ,  $SD = 1.30$ ). Although open communication with teachers is considered important, it is perceived as less critical ( $M = 2.81$ ,  $SD = 1.33$ ). Providing multiple communication channels enhances parental involvement and learning outcomes ( $M = 3.43$ ,  $SD = 1.29$ ), and awareness of these channels is also significant ( $M = 3.44$ ,  $SD = 1.30$ ). However, clear communication about academic performance expectations only moderately influences students' progress ( $M = 2.95$ ,  $SD = 1.38$ ). Overall, the data suggests that various aspects of parental communication with teachers positively impact the learning outcomes of students with hearing impairments.

Additionally, face-to-face interviews and focus group discussions were conducted to further explore the influence of parental communication with teachers on the learning outcomes of learners with hearing impairments in public special primary schools in Kisumu Central County, Kenya. The analysis provided significant insights. Headteachers emphasized that regular communication between parents and teachers fosters a

supportive learning environment and enhances student outcomes. For instance, a male headteacher with 10 years of experience remarked;

*"Regular updates and open dialogue with parents help us address specific needs of learners, thus improving their academic performance."*

Similarly, PTA members reflected on the benefits of active parental participation in school events. One female PTA member, with 6 years of involvement, stated;

*"When parents are engaged and informed about school activities, their children tend to perform better academically."*

Focus group discussions with learners also highlighted improvements in performance linked to regular communication between parents and teachers. A 14-year-old learner shared;

*"My grades went up when my parents and teacher talked more about what I needed to work on."*

These findings align with existing literature, which suggests that effective communication between parents and teachers positively impacts learning outcomes (Cohen, 2020; Levy et al., 2019; Avrahami et al., 2021).

#### **4.4 Parental Participation in School activities on Learning Outcomes of Learners with Hearing Impairment**

The study sought to determine the influence of parental participation in school activities on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

**Table 9: Influence of parental participation in school activities on learning outcomes of learners**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Active participation in school events positively influences learners learning outcomes.	221	1.00	5.00	3.1991	1.27785
Parental attendance at school events enhances the connection between learners learning outcomes and parents.	221	1.00	5.00	3.1267	1.40203

Encouraging students' engagement in extracurricular activities impacts their learners' learning outcomes.	221	1.00	5.00	3.3258	1.28017
Personal involvement in organizing extracurricular activities correlates with learners' learning outcomes	221	1.00	5.00	2.6063	1.31901
Awareness of available extracurricular activities affects learners' learning outcomes.	221	1.00	5.00	3.3167	1.28245
Parental involvement contributes to a more conducive environment for learners' learning outcomes	221	1.00	5.00	3.3529	1.28004
Support for school programs enhances learners' learning outcomes.	221	1.00	5.00	3.4389	1.21061
Effective communication about upcoming school activities influences learners' learning outcomes.	221	1.00	5.00	3.2489	1.29915
School facilitation of parental participation impacts learners' learning outcomes	221	1.00	5.00	3.3710	1.30310
Parental satisfaction with involvement opportunities contributes to learners' learning academic success.	221	1.00	5.00	3.3665	1.29564
Valid N (listwise)	221				

Source (Field Data, 2024)

According to Table 9, the findings reveal that active participation in school events positively influences learning outcomes ( $M = 3.1991$ ,  $SD = 1.27785$ ). Additionally, parental attendance at school events enhances the connection between learning outcomes and parents ( $M = 3.1267$ ,  $SD = 1.40203$ ). Encouraging student engagement in extracurricular activities significantly impacts learning outcomes ( $M = 3.3258$ ,  $SD = 1.28017$ ). Conversely, personal involvement in organizing these activities correlates with less impact on outcomes ( $M = 2.6063$ ,  $SD = 1.31901$ ). Awareness of available

extracurricular activities also affects learning outcomes positively ( $M = 3.3167$ ,  $SD = 1.28245$ ). Furthermore, parental involvement contributes to creating a more conducive learning environment ( $M = 3.3529$ ,  $SD = 1.28004$ ), and support for school programs enhances learning outcomes ( $M = 3.4389$ ,  $SD = 1.21061$ ). Effective communication about upcoming school activities ( $M = 3.2489$ ,  $SD = 1.29915$ ) and school facilitation of parental participation ( $M = 3.3710$ ,  $SD = 1.30310$ ) both positively impact learning outcomes. Lastly, parental satisfaction with involvement opportunities is linked to academic success ( $M = 3.3665$ ,  $SD = 1.29564$ ). The majority of respondents confirmed that support for school programs enhances learners' outcomes.

Additionally, face-to-face interviews and focus group discussions were conducted to determine the influence of parental participation in school activities on learning outcomes for learners with hearing impairments in public special primary schools in Kisumu County, Kenya. The study found that parental involvement in school activities significantly affects these learners. Headteachers reported that active parental engagement in school events and extracurricular activities leads to improved student performance. For instance, a female headteacher with 8 years of experience had this to say;

*"When parents participate in school functions, it creates a more inclusive and supportive environment for students, positively affecting their academic success."*

PTA members supported these findings, with one member highlighting that parental involvement in organizing and attending events supports better student engagement. A PTA executive interviewed had this to comment;

*"Active parental involvement in school activities boosts students' confidence and academic performance."*

Similarly, learners in focus groups acknowledged that parental support in school events had a positive effect on their learning. A 12-year-old learner stated;

*"When my parents come to school events, I feel more motivated and do better in my studies."*

This is consistent with recent studies indicating that parental participation is crucial for enhancing academic outcomes (Wang et al., 2020; Li et al., 2019; Akellot & Bangirana, 2019).

#### **4.5 Parental Involvement in Decision-Making Processes on Learning Outcomes of Learners with Hearing Impairment**

The study sought to identify the influence of parental involvement in decision-making processes on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

**Table 10: influence of parental involvement in decision-making processes on learning outcomes**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Parental involvement in meetings regarding students' Individualized Education Plan (IEP) impacts their learning achievement	221	1.00	5.00	3.1493	1.35860
Valuable insights from parents during IEP meetings influence learners' achievement progress.	221	1.00	5.00	3.1176	1.39958
Timely communication about upcoming IEP plan meetings affects learners' achievement progress	221	1.00	5.00	3.1538	1.38625
Serious consideration of parental input in school policy discussions correlates with learners' learning outcomes	221	1.00	5.00	3.2941	1.38479
Seeking parental input for important policy decisions impacts learners' learning outcomes .	221	1.00	5.00	3.1538	1.36975
Comfortable expression of parental opinions on school policies contributes to learners' learning outcomes	221	1.00	5.00	3.2805	1.35614

Collaboration opportunities with school administration influence learners' learning outcomes.	221	1.00	5.00	3.2941	1.35493
Positive changes resulting from collaboration with parents and school administration enhance learners' learning achievement.	221	1.00	5.00	3.1312	1.41292
Clear channels for parental participation in decision-making processes impact learners' learning outcomes	221	1.00	5.00	3.2172	1.39084
Satisfaction with the level of parental involvement in school decision-making relates to learners' learning outcomes.	221	1.00	5.00	2.7828	1.35441
Valid N (listwise)	221				

Source (Field Data, 2024)

According to Table 10, the results indicate that parental involvement in Individualized Education Plan (IEP) meetings has a significant impact on learners' achievement ( $M = 3.1493$ ,  $SD = 1.35860$ ). Similarly, the insights provided by parents during these meetings positively influence learners' progress ( $M = 3.1176$ ,  $SD = 1.39958$ ). Timely communication regarding upcoming IEP meetings ( $M = 3.1538$ ,  $SD = 1.38625$ ) and serious consideration of parental input in school policy discussions ( $M = 3.2941$ ,  $SD = 1.38479$ ) are correlated with improved learning outcomes. Additionally, seeking parental input for important policy decisions ( $M = 3.1538$ ,  $SD = 1.36975$ ) and providing opportunities for parents to express opinions on school policies ( $M = 3.2805$ ,  $SD = 1.35614$ ) contribute positively to learners' outcomes. Collaboration opportunities with school administration ( $M = 3.2940$ ,  $SD = 1.35493$ ) and the positive changes resulting from such collaborations ( $M = 3.1312$ ,  $SD = 1.41292$ ) also enhance learners' achievement. Clear channels for parental participation in decision-making processes ( $M = 3.2172$ ,  $SD = 1.39084$ ) are noted to impact learning outcomes. However, satisfaction with the level of parental involvement in school decision-making is somewhat lower ( $M$

= 2.7828, SD = 1.35441), indicating areas for improvement. Overall, the study highlights the significant role of parental involvement in decision-making processes in enhancing the educational achievements of learners with hearing impairments.

Additionally, face-to-face interviews and Focus Group Discussions were conducted to further explore the influence of parental involvement in decision-making processes on the learning outcomes of learners with hearing impairments in public special primary schools in Kisumu County, Kenya. Observations from headteachers and PTA members underscore the positive impact of parental involvement. For instance, a female headteacher with 12 years of experience interviewed had this to say;

*"Parents' participation in IEP meetings allows for tailored educational plans that better meet students' needs, leading to improved outcomes."*

PTA members similarly emphasized that engaging parents in educational decisions ensures that their children's specific needs are addressed, thereby enhancing their learning experience. One member stated;

*"Engaging parents in educational decisions ensures that their children's specific needs are addressed, which enhances their learning experience."*

Learners themselves confirmed improvements in academic progress when their parents were actively involved in educational decisions. A 15-year-old learner shared;

*"My performance improved when my parents were involved in making decisions about my learning needs."*

These observations align with international research, which underscores the critical role of parental involvement in educational decisions (Lindsay, 2019; Tobias, 2022).

#### **4.6 Influence of Parent's KSL Skills on Learning Outcomes of Learners**

The study sought to investigate the influence of parent's KSL skills on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya.

**Table 11: influence of parent’s KSL skills on learning outcomes of learners**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Parents' proficiency in KSL influences their children's learning achievement	221	1.00	5.00	3.2851	1.40299
Effective communication between parents and their children through KSL skills influences the child's learning achievement	221	1.00	5.00	3.4118	1.34423
Accurate production of correct handshapes in KSL by parents influences their child's learning achievement	221	1.00	5.00	3.4434	1.33917
Parents' accurate KSL movements, such as signs and gestures, influences their child's learning achievement	221	1.00	5.00	3.6380	1.28105
Appropriate use of facial expressions while signing in KSL by parents contributes to their child's learning achievement	221	1.00	5.00	3.4525	1.30515
Creative use of KSL by parents for storytelling or sharing poems influences their child's learning achievement	221	1.00	5.00	3.1946	1.34947
Parents' confidence in signing effectively in various situations correlates with their child's learning achievement	221	1.00	5.00	3.3077	1.32986
Continuous improvement of parents' KSL skills through practice influences their child's learning achievement	221	1.00	5.00	3.4796	1.33341
Valid N (listwise)	221				

Source (Field Data, 2024)

According to Table 11, the study data reveals that parents' proficiency in Kenyan Sign Language (KSL) significantly affects their children's learning achievements (M =

3.2851, SD = 1.40299). Effective communication between parents and their children through KSL is also crucial (M = 3.4118, SD = 1.34423). Additionally, the accuracy of handshapes produced by parents (M = 3.4434, SD = 1.33917) and precise KSL movements, such as signs and gestures (M = 3.6380, SD = 1.28105), positively contribute to children's learning outcomes. The appropriate use of facial expressions while signing (M = 3.4525, SD = 1.30515) is similarly important. Moreover, creative applications of KSL for storytelling or sharing poems (M = 3.1946, SD = 1.34947), parental confidence in signing across various contexts (M = 3.3077, SD = 1.32986), and continuous improvement of KSL skills through practice (M = 3.4796, SD = 1.33341) are positively associated with children's learning achievements. Overall, the data indicates that accurate KSL movements, including signs and gestures, are particularly influential in enhancing children's learning outcomes.

Furthermore, face-to-face interviews and Focus Group Discussions were conducted to investigate the influence of parents' KSL skills on the learning outcomes of learners with hearing impairments in public special primary schools in Kisumu County, Kenya. The study revealed that parental proficiency in KSL significantly impacts learning outcomes. Headteachers noted that parents' KSL skills facilitate better communication and understanding between parents and their children, which positively affects academic performance. For instance, a male headteacher with 15 years of experience stated;

*"Parents who are proficient in KSL can engage more effectively with their children, leading to better educational outcomes."*

Similarly, PTA members supported this view, with one member commenting;

*"Parents who use KSL can better support their children's learning and communication needs, enhancing their academic success."*

Learners also reported improvements in their learning when their parents used KSL effectively. A 13-year-old learner noted;

*"My grades got better because my parents can sign well, so they help me with my homework more."*

These findings align with previous research, which shows that sign language proficiency

among parents contributes to better educational outcomes (Stuart & Holdsworth, 2016; Mkhize & Masango, 2020; Atema et al., 2018).

#### 4.7 Inferential analysis

##### 4.7.1 Correlations between Variables.

The study findings reveal strong positive correlations among the various dimensions of parental involvement. Specifically, parental communication with teachers shows a significant correlation with both parental participation in school activities ( $r = .897, p < .001$ ) and parental involvement in decision-making ( $r = .863, p < .001$ ). Similarly, parental participation in school activities is significantly correlated with parental involvement in decision-making ( $r = .858, p < .001$ ). Additionally, parents' Kenya Sign Language (KSL) skills exhibit significant correlations with parental communication with teachers ( $r = .863, p < .001$ ), parental participation in school activities ( $r = .860, p < .001$ ), and parental involvement in decision-making ( $r = .864, p < .001$ ). These findings indicate that increased parental engagement in these areas is closely associated with better learning outcomes for learners with hearing impairments.

**Table 12: Correlations between Variables.**

		Parental communication with teachers	Parental participation in school activities	Parental involvement in decision making
parental communication with teachers	Pearson Correlation	1	.897**	.863**
	Sig. (2-tailed)		.000	.000
	N	221	221	221
parental participation in school activities	Pearson Correlation	.897**	1	.858**
	Sig. (2-tailed)	.000		.000
	N	221	221	221

parental involvement in decision making	Pearson	.863**	.858**	1
	Correlation			
	Sig. (2-tailed)	.000	.000	
	N	221	221	221
parents KSL skills	Pearson	.863**	.860**	.864**
	Correlation			
	Sig. (2-tailed)	.000	.000	.000
	N	221	221	221

#### 4.7.2 Reliability

Table 13 demonstrates the reliability of the measurement instrument used in the study, as indicated by a Cronbach Alpha of .961 and a standardized Cronbach's Alpha of .963 for the four items assessed. These high values suggest a very strong internal consistency, meaning that the items used to measure various dimensions of parental involvement-such as communication with teachers, participation in school activities, involvement in decision-making, and KSL skills-are highly correlated and consistently reflect the same underlying construct. Therefore, the instrument is considered reliable, ensuring that the data collected is consistent and dependable for analyzing the influence of parental involvement on learning outcomes of learners with hearing impairments.

**Table 13: Reliability**

Reliability Statistics	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
	.961	.963	4

#### 4.7.3 ANOVA with Friedman's Test

Table 14 presents the results of the ANOVA with Friedman's Test, highlighting the analysis of variance within and between subjects. The Friedman's Chi-Square value of 217.188 with a significance level (Sig) of .000 indicates a highly significant difference among the items assessed, implying that the variations in parental involvement

dimensions are statistically significant. The Kendall's coefficient of concordance ( $W = .049$ ) suggests a low but non-random agreement among the rankings of these items. The Grand Mean of 30.1256 summarizes the average score across all items and participants, providing an overall measure of parental involvement. This significant result underscores the importance of considering different aspects of parental involvement as they each uniquely contribute to learning outcomes for learners with hearing impairments.

**Table 14: ANOVA with Friedman's Test**

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People		62543.812	220	284.290		
Within People	Between Items	3564.528 <sup>a</sup>	3	1188.176	217.188	.000
	Residual	7316.722	660	11.086		
	Total	10881.250	663	16.412		
Total		73425.062	883	83.154		
Grand Mean = 30.1256						
a. Kendall's coefficient of concordance $W = .049$ .						

## 4.8 Discussion of findings

### 4.8.1 Influence of parental communication with teachers on learners with hearing impairment

The study's findings on the influence of parental communication with teachers on learning outcomes for learners with hearing impairments in Kisumu County, Kenya, align with and expand on existing literature from diverse contexts, such as Israel and Nigeria. For instance, Cohen (2020) emphasizes the importance of collaborative partnerships between parents and teachers, which supports this study's finding that active parental participation in school events positively impacts learning outcomes (mean = 3.2986, SD = 1.24369), with parental attendance further enhancing students' performance (mean = 3.2534, SD = 1.27174). However, while Cohen discusses partnership generally, this study

specifies how attendance at events can directly enhance learning outcomes for students with hearing impairments, a distinction that emphasizes the unique needs of this group.

Additionally, Levy et al. (2019) emphasize technology-assisted communication's role in fostering parent-teacher engagement, aligning with this study's finding that communication about school events (mean = 3.4253, SD = 1.28632) and school-facilitated parental participation (mean = 3.4434, SD = 1.29780) significantly influence learning outcomes. Yet, while Levy et al. focus on technology in general contexts, this study highlights that consistent information on school events, regardless of the medium, critically impacts hearing-impaired students' outcomes, potentially suggesting that content is as vital as delivery mode for these learners.

Moreover, Avrahami et al. (2021) underscore the importance of culturally aware parental involvement, which this study supports by showing positive correlations between learner outcomes and encouragement of extracurricular engagement (mean = 3.2805, SD = 1.28028) and parental organization of these activities (mean = 3.3439, SD = 1.28251). This study, however, provides specific insights into parental organization's role in fostering inclusion, contrasting with Avrahami et al. (2021) broader approach to cultural considerations.

Similarly, Feldman and Shemesh (2022) emphasize the impact of parental awareness of extracurricular options on learning, aligning with this study's finding that knowledge of available activities (mean = 3.5068, SD = 1.29552) positively influences learner outcomes. While Feldman and Shemesh focus on general student populations, this study's emphasis on hearing-impaired students offers a nuanced perspective, suggesting that heightened awareness among parents of children with hearing impairments could be particularly beneficial.

In Nigeria, studies by Adeyemo and Adeyemo (2020) and Okoli and Chukwuebuka (2019) similarly highlight parent-teacher communication's impact on academic performance. This study aligns with their findings by showing that effective parent-teacher communication (mean = 3.4932, SD = 1.30251) and support for school programs (mean = 2.8054, SD = 1.32568) significantly enhance learning outcomes. However, while Adeyemo and Adeyemo focus on general academic development, this study's specific emphasis on the hearing-impaired suggests that tailored communication strategies may be necessary for this population.

Research by Odhiambo, Omondi, and Omolo (2023) on Kenyan learners with hearing impairments also supports these findings, as their study demonstrated a positive link between parental communication and academic achievement. This study, however, adds to their work by quantifying how specific types of communication, such as event updates and school involvement, contribute directly to learning outcomes, highlighting the need for proactive communication strategies.

Qualitative data from this study further illustrate the importance of tailored communication strategies. Interviews with parents and teachers indicated that regular and clear channels, like text messages or home visits, foster stronger relationships and increase student engagement. Teachers emphasized culturally sensitive communication, noting that language barriers or unfamiliarity with the education system could impede collaboration. Parents, in turn, reported feeling empowered by their involvement, suggesting that active participation enhances both their sense of belonging and their children's educational experiences. These qualitative insights affirm that culturally aware, proactive parental engagement is essential for improving outcomes among

learners with hearing impairments, contributing to a more inclusive educational environment.

#### **4.8.2 Influence of Parental Participation in School Activities on Learners with Hearing Impairment**

The current study findings on influence of parental participation on the learning outcomes of learners with hearing impairments in Kisumu County, Kenya, reflect both consistencies and contrasts with recent studies conducted in China and Uganda. Research by Wang et al. (2020) established a positive link between parental engagement in school activities and academic achievement among learners with hearing impairments, aligning with this study's findings, which showed a significant impact of active parental involvement in school events (mean = 3.1991, SD = 1.27785) and attendance (mean = 3.1267, SD = 1.40203) on learning outcomes. This reinforces the role of parental participation in building a supportive educational environment and enhancing parent-teacher communication.

Li et al. (2019) underscored the benefits of collaborative efforts in extracurricular activities for learners with hearing impairments, which resonates with this study's finding that encouragement in such activities (mean = 3.3258, SD = 1.28017) positively affects learning outcomes. Li(2019) study highlights improved self-esteem and social connections as benefits of extracurricular involvement, paralleling this study's observation of increased academic engagement and confidence among learners when parents are involved.

However, findings from Akellot and Bangirana's (2019) study in Uganda diverge, as they reported no direct link between parental involvement in school activities and academic achievement for learners with hearing impairments. Instead, their findings

indicated benefits such as better attendance, behavior, and self-confidence, contrasting with this study's results, which demonstrate a positive impact on academic performance linked to parental support for school programs (mean = 3.4389, SD = 1.21061) and communication regarding school activities (mean = 3.2489, SD = 1.29915). This contrast underscores potential contextual factors that may shape parental involvement's outcomes across different settings.

Addressing challenges faced by parents, Akellot and Bangirana (2019) suggest that schools provide transportation, financial support, and raise awareness about the importance of parental engagement. These recommendations align with the current study's finding that school facilitation of parental involvement (mean = 3.3710, SD = 1.30310) and satisfaction with participation opportunities (mean = 3.3665, SD = 1.29564) contribute to improved learning outcomes. Qualitative insights from interviews and focus groups support these findings, with parents reporting increased confidence in their children's abilities, better communication, and enhanced academic motivation when involved in school activities. Despite these benefits, parents cited time and financial constraints as barriers to full participation, advocating for school-based solutions to mitigate these challenges.

#### **4.8.3 Influence of Parental Involvement in Decision-Making Processes on Learners with Hearing Impairment**

The findings from this study, examining how parental involvement in decision-making impacts academic outcomes for learners with hearing impairment in Kisumu County, Kenya, align with research in both the United Kingdom and Tanzania, emphasizing that parental engagement plays a key role in fostering student success. Notably, Lindsay (2019) found that while parents in the UK encounter challenges in making educational decisions for children with hearing impairments, their involvement in processes such as

Individualized Education Plans (IEPs) positively affects academic achievement. This study similarly reports that parental engagement in IEP meetings (mean = 3.1493, SD = 1.35860) supports learning outcomes, underscoring the value of parental input in guiding educational planning and goal-setting. However, unlike Lindsay's findings, this study reveals a more pronounced emphasis on the need for effective communication channels between schools and parents to address challenges like limited information and misconceptions about hearing impairment.

Furthermore, Lindsay (2019) advocacy for increased collaboration between parents and teachers finds resonance in the current study's findings, where parents' feedback in IEP meetings (mean = 3.1176, SD = 1.39958) and timely communication about these meetings (mean = 3.1538, SD = 1.38625) both correlate with improved student progress. However, contrasting findings from this study suggest that, in Kisumu County, logistical barriers and limited resources often impede regular parent-teacher communication, a less prominent issue in Lindsay's UK-based research, which focuses more on collaborative strategies. The study also parallels findings from Tobias (2022) in Tanzania, who highlights the impact of parental education, cultural beliefs, and financial means on decision-making in special education. Similarly, this study's results (mean = 2.7828, SD = 1.35441) suggest that parental satisfaction with school engagement is influenced by broader socio-economic factors. However, this study diverges from Tobias's work by identifying specific barriers unique to the Kenyan context, such as limited access to information on hearing impairment, which affects the depth of parental engagement. Qualitative insights from interviews and focus groups further reveal that parents see participation in IEP meetings as an opportunity to advocate for their children's needs. These findings, like those in Tobias (2022), highlight that parents in lower-resource settings often face financial and informational barriers. However, unlike prior studies,

the current findings underscore a pressing need for accessible support services to bridge these gaps, reinforcing the importance of tailored communication strategies to enhance parental involvement and ultimately support academic success.

#### **4.8.4 Influence of parent's KSL skills on learning outcomes for learners with hearing impairment**

The study established a significant correlation between parents' proficiency in Kenyan Sign Language (KSL) and the academic performance of learners with hearing impairment in Kisumu County. The findings indicate that higher KSL skills among parents positively influence their children's learning outcomes (mean = 3.2851, SD = 1.40299). This highlights the critical need for a linguistically supportive environment, similar to findings by Lindsay (2019), who noted that effective communication between parents and educators is vital for student success. However, while Lindsay(2019) focused on the challenges parents face in mastering sign language, this study provides specific metrics showing how proficiency directly enhances academic achievement, bridging a gap in understanding the practical implications of KSL skills.

Additionally, the study found that the accuracy of KSL handshapes (mean = 3.4434, SD = 1.33917) and correct movements (mean = 3.6380, SD = 1.28105) contribute to improved learning outcomes. This aligns with Tobias's (2022) research, which emphasized the importance of support services for enhancing parental KSL skills. However, while Tobias identified broader factors affecting parental involvement, this study specifically ties KSL proficiency to measurable academic performance, providing a more focused perspective on language use in education.

Qualitative insights indicated that improved KSL abilities facilitated better communication with educators, fostering collaboration. This supports findings from

previous studies, yet contrasts with some literature that suggests cultural attitudes and financial barriers predominantly hinder parental engagement. Participants in this study expressed the need for additional support to master KSL, highlighting a recurring theme in both Tobias (2022) and Lindsay (2019), where access to resources is pivotal for effective parental involvement. This research emphasizes the significant role of KSL proficiency in promoting educational success for learners with hearing impairments. Targeted interventions aimed at improving parental KSL skills could lead to better academic outcomes, addressing a critical need identified across multiple studies.



## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.0 Introduction**

This chapter consist of summary, conclusions and recommendations for further studies guided by the four objectives of the study.

### **5.1 Summary of Findings**

#### **5.1.1 Summary on Influence of Parental Communication with Teachers on Learners with Hearing Impairment**

The study investigated the influence of parental communication with teachers on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya. The findings revealed significant correlations between various aspects of parental communication with teachers and learners' academic achievement. Parents active participation in school events positively influenced learning outcomes, emphasizing the importance of parental engagement in school activities (mean = 3.1991, SD = 1.27785). Additionally, parental attendance at school events enhanced the connection between learning outcomes and parental involvement (mean = 3.1267, SD = 1.40203). Furthermore, encouraging learners' engagement in extracurricular activities impacted learning outcomes positively (mean = 3.3258, SD = 1.28017), highlighting the role of parental support in extracurricular involvement. Effective communication about upcoming school activities also influenced learning outcomes (mean = 3.2489, SD = 1.29915), emphasizing the importance of clear communication channels between parents and teachers. Overall, the findings emphasized the significant role of parental communication with teachers in shaping the academic success of learners with hearing impairment, emphasizing the need for collaborative partnerships between parents and educators to support the educational needs of these learners.

### **5.1.2 Summary on Influence of Parental Participation in School Activities on Learners with Hearing Impairment**

The study aimed to determine the influence of parental participation in school activities on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya. The findings indicated significant correlations between parental participation in school activities and learners' academic achievement. Parents active involvement in school events positively influenced learning outcomes, suggesting that parental engagement in such activities enhances students' educational experiences (mean = 3.1267, SD = 1.40203). Additionally, parental attendance at school events was found to strengthen the connection between learning outcomes and parental involvement (mean = 3.1991, SD = 1.27785). Furthermore, encouraging learners' engagement in extracurricular activities positively impacted learning outcomes (mean = 3.3258, SD = 1.28017), highlighting the role of parental support in extracurricular involvement. Effective communication about upcoming school activities also influenced learning outcomes positively (mean = 3.2489, SD = 1.29915), emphasizing the importance of clear communication channels between parents and teachers. Overall, the findings highlighted the significant role of parental participation in school activities in promoting the academic success of learners with hearing impairment, highlighting the need for collaborative partnerships between parents and educators to support these learners' educational needs.

### **5.1.3 Summary on Influence of Parental Involvement in Decision-Making Processes on Learners with Hearing Impairment**

The study sought to identify the influence of parental involvement in decision-making processes on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya. The findings revealed significant correlations between parental involvement in decision-making processes and learners' academic

achievement. Parents active participation in meetings regarding students' Individualized Education Plan (IEP) positively influenced learning outcomes, highlighting the importance of parental input in educational decision-making (mean = 3.1493, SD = 1.35860). Valuable insights from parents during IEP meetings were also found to influence learners' achievement progress positively (mean = 3.1176, SD = 1.39958), emphasizing the significance of collaborative decision-making between parents and educators. Timely communication about upcoming IEP plan meetings was associated with improved learning achievement (mean = 3.1538, SD = 1.38625), underlining the importance of transparent communication channels. Furthermore, serious consideration of parental input in school policy discussions correlated with enhanced learning outcomes (mean = 3.2941, SD = 1.38479), highlighting the value of parental perspectives in shaping educational policies. These findings emphasized the crucial role of parental involvement in decision-making processes in promoting the academic success of learners with hearing impairment, emphasizing the need for inclusive partnerships between parents and educators to support these learners' educational journey.

#### **5.1.4 Summary on Influence of Parent's KSL Skills on Learners with Hearing Impairment**

The study investigated the influence of parent's Kenyan Sign Language (KSL) skills on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya. The findings revealed significant correlations between parental proficiency in KSL and learners' academic achievement. Parents' proficiency in KSL was found to positively influence their children's learning achievement (mean = 3.2851, SD = 1.40299), highlighting the importance of creating a linguistically rich environment for learners with hearing impairment. Effective communication between parents and their child through KSL skills was associated with

improved learning achievement (mean = 3.4118, SD = 1.34423), emphasizing the significance of clear communication channels. Additionally, accurate production of correct handshapes in KSL by parents was linked to enhanced learning achievement (mean = 3.4434, SD = 1.33917), highlighting the importance of precise sign language skills. Moreover, parents accurate KSL movements, such as signs and gestures, were associated with improved learning outcomes (mean = 3.6380, SD = 1.28105), underlining the value of fluent sign language usage. These findings underlined the crucial role of parental proficiency in KSL in promoting the academic success of learners with hearing impairment, emphasizing the need for supportive measures to enhance parental sign language skills and create an inclusive learning environment for these learners.

## **5.2 Conclusions of the Study**

Based on the objectives outlined in the study, the following conclusions were drawn:

1. The study emphasizes that active parental involvement in school events significantly enhances learning outcomes for learners with hearing impairment. Increased parental attendance not only boosts academic performance but also strengthens the connection between school activities and student success. Additionally, effective communication about upcoming events is critical for facilitating this engagement. Thus, establishing collaborative partnerships between parents and teachers is vital for fostering an educational environment conducive to success for these learners.
2. Findings from the study indicate that parental participation in school activities positively influences the academic achievements of learners with hearing impairment. Active engagement in both school events and extracurricular activities correlates with improved learning outcomes. Furthermore, timely

communication regarding school activities enhances this relationship. These insights highlight the importance of encouraging parental involvement to cultivate a supportive educational atmosphere for students with hearing impairments.

3. The study emphasizes the essential role of parental involvement in decision-making processes, particularly concerning the learning outcomes of learners with hearing impairment. Active participation in Individualized Education Plan (IEP) meetings and school policy discussions correlates with higher academic achievement. Effective communication regarding these meetings and valuing parental input are also linked to improved outcomes. Therefore, fostering inclusive partnerships between parents and educators in decision-making is crucial for supporting the academic success of these learners.
4. The research highlights the critical impact of parental proficiency in Kenyan Sign Language (KSL) on the learning outcomes of students with hearing impairment. Parents' KSL skills are positively associated with their children's academic success, emphasizing the need for a linguistically rich environment. Effective communication through KSL, including accurate handshape production and fluent signing, directly contributes to better learning outcomes. Consequently, supporting parents in developing their KSL abilities is essential for creating an inclusive and effective learning environment for learners with hearing impairment.

### **5.3 Recommendations to the Study**

1. The study recommends that the Ministry of Education enhance communication protocols between parents and teachers by developing clear guidelines that include diverse channels such as written communication, email, phone calls, and

face-to-face meetings. This will ensure accessibility for all parents, including those with hearing impairments. Additionally, organizing workshops to improve communication skills and understanding is advised, alongside the implementation of technology-based platforms like messaging apps and online portals for continuous engagement and feedback.

2. To enhance parental participation, the study advises the Ministry of Education to foster a supportive school environment through information sessions that highlight the benefits of engaging in school activities. Providing flexible scheduling and transportation assistance can better accommodate all parents. The establishment of parent-led committees or volunteer groups can further promote community involvement and strengthen engagement.
3. The study suggests enhancing decision-making processes in special schools by involving all parents, including those with hearing impairments. This includes offering training and resources to empower effective advocacy and participation. Creating a respectful environment where parents' perspectives are valued, along with implementing ongoing communication channels for feedback, will further strengthen this involvement.
4. The study recommends enhancing parents' proficiency in Kenyan Sign Language (KSL) by offering specialized classes or workshops. Providing online tutorials and instructional videos can support at-home practice. Additionally, creating peer support networks among parents and collaborating with community organizations and sign language experts will further improve KSL skills and overall parental support for learners with hearing impairment.

#### **5.4 Recommendations for further Study**

To enhance inclusive practices, future research should focus on strategies that accommodate diverse communication needs and promote collaboration between parents and educators. Implementing targeted training for educators on effective communication methods, including Kenyan Sign Language, is crucial for fostering a supportive learning environment. Additionally, developing inclusive policies that actively involve parents in the educational process can lead to improved academic outcomes for learners with hearing impairments.



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## APPENDICES

### Appendix I: Consent Form

I am **Catherine Obwaka**, a postgraduate student pursuing a Master's degree in Special Needs Education at Mount Kenya University. You are invited to participate in a research study about the "Influence of Parental Involvement on Learning Outcomes of Learners with Hearing Impairment in Public Special Primary Schools in Kisumu County, Kenya."

To maintain privacy and confidentiality, unique identification numbers were assigned to the participants in the study instead of using their names. This precautionary measure is implemented to protect the participants' data and guarantee their safety throughout the research endeavour. Before seeking your cooperation, I genuinely request your acknowledgement and consent to participate in this study.

I am currently interested in your involvement, but please be aware that I retain the right to alter your decision regarding participation in the study at a later stage.

Respondent (coded)

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

Principal investigator

Name: **Catherine Obwaka**

Signature.....

For complains or clarification, please contact.

Research Office,

Mount Kenya University,

P.O. Box 342-01000,

**Thika, Kenya**

**Appendix II: Consent Form for Minor Participants**

I, Catherine Obwaka, a postgraduate student pursuing a Master's degree in Special Needs Education at Mount Kenya University, I am seeking your consent for your son/daughter's participation in a research study on the "Influence of Parental Involvement on Learning Outcomes of Learners with Hearing Impairment in Public Special Primary Schools in Kisumu County, Kenya." Please confirm your understanding of the study details and provide consent for your child's voluntary participation by signing below. You acknowledge their right to withdraw without explanation. Privacy is safeguarded through unique identification numbers, and collected data remains confidential for research purposes. Safety measures are in place for their well-being, and participation holds no negative consequences. Your decision is significant, and we appreciate your consideration

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Assent:**

I, the undersigned parent /guardian, confirm my understanding of the study's purpose and my child's role. I willingly agree to their voluntary participation.

Child's Name (coded): \_\_\_\_\_ Date: \_\_\_\_\_

Principal investigator

Name: **Catherine Obwaka**

Signature.....

For complains or clarification, please contact.

Research Office,  
Mount Kenya University,  
P.O. Box 342-01000,  
**Thika, Kenya**

### **Appendix III: Questionnaire for Teachers**

#### **Introduction:**

This questionnaire aims to gather comprehensive insights on influence of parental involvement on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County . Please provide your perspectives on how parental communication, parental participation in school activities, involvement in decision-making processes and proficiency in Kenyan Sign Language (KSL) collectively contribute to the educational experiences of these learners in the provided sections.

#### **SECTION 1: DEMOGRAPHIC INFORMATION**

- 1) Gender: Male  Female
- 2) Age bracket: 20-30  31-40  41-50  51 and above
- 3) Academic qualification: P1certificate  b. Diploma  c. Degree  d. Masters
- 4) Responsibility: a) Senior teacher  b) Games teacher  c) Class teacher
- d) Any other  Specify.....

#### **SECTION 2: Influence of Parental Communication with Teachers on Learning Outcomes of Learners with Hearing Impairment.**

**Instructions:** Kindly express your agreement with the provided statements by selecting the corresponding number on the Likert scale. (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

No	Statement	1	2	3	4	5
5	Regular attendance of Parent-Teacher Meetings impacts students' learning outcomes					
6	Teachers find Parent-Teacher Meetings beneficial for gauging students' learning outcomes					
7	Parent-Teacher Meetings assist in recognizing areas for learning achievement					
8	Learners learning outcomes is influenced by the frequency of Parent-Teacher Meetings.					
9	Clear feedback from teachers impacts learners learning outcomes.					
10	Timely responses to communications affect learners' academic progress.					
11	Open communication with teachers influences learners learning outcomes.					
12	Providing multiple communication channels enhances parental involvement and learners learning outcomes.					
13	Clear awareness of communication channels impacts learners learning outcomes					
14	Effective communication about academic performance expectations influences students' progress.					

**SECTION 3: Influence of Parental Participation in School Activities on Learning Outcomes of Learners with Hearing Impairment.**

**Instructions:** Kindly express your agreement with the provided statements by selecting the corresponding number on the Likert scale . (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

No	Statement	1	2	3	4	5
15	Active participation in school events positively influences learners learning outcomes.					
16	Parental attendance at school events enhances the connection between learners learning outcomes and parents.					
17	Encouraging students' engagement in extracurricular activities impacts their learners' learning outcomes.					
18	Personal involvement in organizing extracurricular activities correlates with learners' learning outcomes					
19	Awareness of available extracurricular activities affects learners' learning outcomes.					
20	Parental involvement contributes to a more conducive environment for learners' learning outcomes					
21	Support for school programs enhances learners' learning outcomes.					
22	Effective communication about upcoming school activities influences learners' learning outcomes.					
23	School facilitation of parental participation impacts learners' learning outcomes					
24	Parental satisfaction with involvement opportunities contributes to learners' learning academic success.					

**SECTION 4: Influence of Parental Involvement in Decision-Making Processes on Learning Outcomes of Learners with Hearing Impairment.**

**Instructions:** Kindly express your agreement with the provided statements by selecting the corresponding number on the Likert scale . (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

No	Statement	1	2	3	4	5
25	Parental involvement in meetings regarding students' Individualized Education Plan (IEP) impacts their learning achievement					
26	Valuable insights from parents during IEP meetings influence learners' achievement progress.					
27	Timely communication about upcoming IEP plan meetings affects learners' achievement progress					
28	Serious consideration of parental input in school policy discussions correlates with learners' learning outcomes					
29	Seeking parental input for important policy decisions impacts learners' learning outcomes .					
30	Comfortable expression of parental opinions on school policies contributes to learners' learning outcomes					

31	Collaboration opportunities with school administration influence learners' learning outcomes.					
32	Positive changes resulting from collaboration with parents and school administration enhance learners' learning achievement.					
33	Clear channels for parental participation in decision-making processes impact learners' learning outcomes					
34	Satisfaction with the level of parental involvement in school decision-making relates to learners' learning outcomes.					

**SECTION 5: Influence of Parent's KSL Skills on Learning Outcomes of Learners with Hearing Impairment.**

**Instructions:** Kindly express your agreement with the provided statements by selecting the corresponding number on the Likert scale . (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

No	Statemen	1	2	3	4	5
35	Parents' proficiency in KSL influences their children's learning achievement					
36	Effective communication between parents and their child through KSL skills influences the child's learning achievement					

37	Accurate production of correct handshapes in KSL by parents influences their child's learning achievement					
38	Parents' accurate KSL movements, such as signs and gestures, influences their child's learning achievement					
39	Appropriate use of facial expressions while signing in KSL by parents contributes to their child's learning achievement					
40	Creative use of KSL by parents for storytelling or sharing poems influences their child's learning achievement					
41	Parents' confidence in signing effectively in various situations correlates with their child's learning achievement					
42	Continuous improvement of parents' KSL skills through practice influences their child's learning achievement					

**Thank you for your valuable input. Your contributions are essential to the success of this research.**

#### **Appendix IV: Interview Guide for Headteachers**

This interview guide aims to gather comprehensive insights on influence of parental involvement on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County . Please provide your perspectives on how parental communication, parental participation in school activities, involvement in decision-making processes and proficiency in Kenyan Sign Language (KSL) collectively contribute to the educational experiences of these learners

1. In your experience, how does regular communication between parents and teachers influence the learning outcomes of learners with hearing impairment?

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2. How actively involved are parents of learners with hearing impairment in school activities?

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3. Have you noticed any correlation between the level of parental participation in school activities and the learning outcomes of learners with hearing impairment?

.....  
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.....

4. How are parents actively engaged in decisions related to the educational placement, communication methods, assistive technologies, individualized education plans (IEPs), and extracurricular activities for students with hearing impairment within the school?

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.....

5. How has parental involvement in decision-making impacted the learning outcomes and overall educational experience of these learners?

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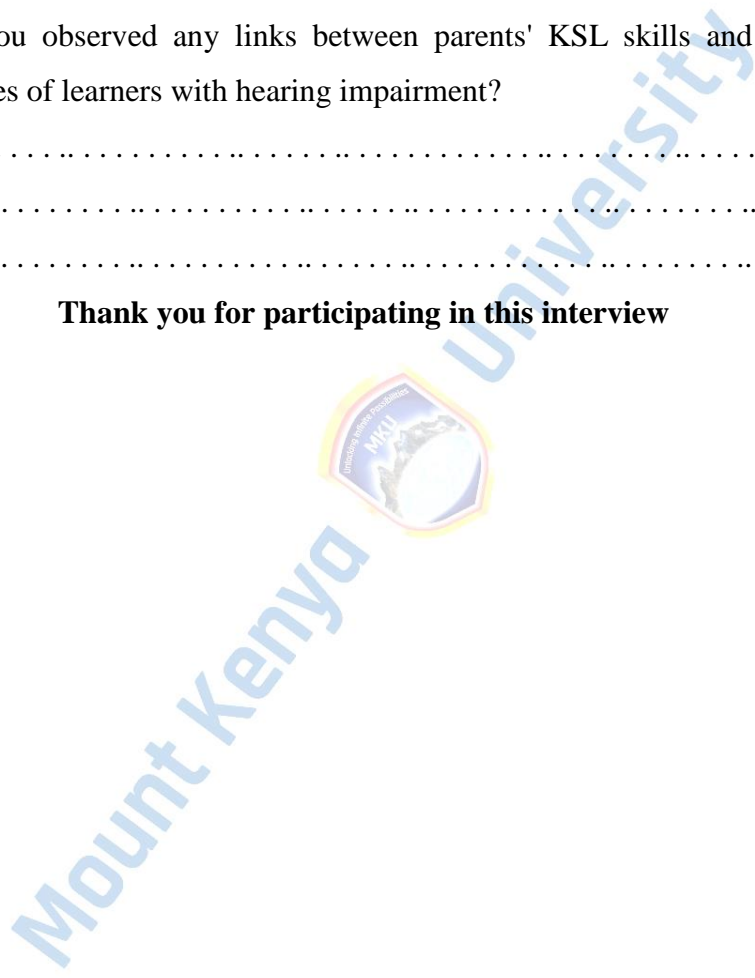
6. How do parents' proficiency in KSL influence their ability to communicate and engage with their children who have hearing impairment?

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7. Have you observed any links between parents' KSL skills and the learning outcomes of learners with hearing impairment?

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.....

**Thank you for participating in this interview**



## Appendix V: Interview Guide for PTA Executive Members

This interview guide aims to gather comprehensive insights on influence of parental involvement on the learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County . Please provide your perspectives on how parental communication, parental participation in school activities, involvement in decision-making processes and proficiency in Kenyan Sign Language (KSL) collectively contribute to the educational experiences of these learners

1. Can you briefly introduce yourself and your role within the Parents Teachers Association (PTA)?

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2. What do you consider to be the main goals or objectives of the PTA in supporting learners' education?

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3. In your experience, how important is teachers' response time when parents reach out to them? How does this contribute to learners' learning outcomes?

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4. Could you discuss the various communication channels the PTA promotes between parents and teachers? How do these channels influence learners' learning outcomes?

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.....

5. How does the PTA facilitate parental attendance in school events? How does such participation connect with learners' learning outcomes?

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6. Can you elaborate on the PTA’s role in encouraging parents to engage in extracurricular activities? How does this involvement affect learners' learning experience?

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.....

7. In what ways does the PTA support school programs and initiatives? How do these contributions impact learners' learning outcomes?

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.....

8. How does the PTA promote parents' involvement in Individualized Education Plan (IEP) meetings? How does this influence learners' learning outcomes?

.....  
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9. Could you elaborate on how the PTA encourages parents' engagement in discussions about school policies? How does this involvement relate to learners' learning outcomes?

.....  
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.....

10. In what capacity does the PTA facilitate collaboration between parents and school administration? How have such collaborations led to positive changes benefiting learners' learning progress?

.....  
.....

11. How does the PTA support parents’ in improving their KSL proficiency levels? How does this proficiency impact communication with teachers and learners and subsequently, learning outcomes?

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12. Could you discuss the PTA's role in promoting accurate KSL handshapes, movements, and facial expressions among parents? How does this accuracy influence learners' learning experience?

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13. In what creative ways does the PTA encourage parents to use KSL for storytelling or artistic expression? How does this creativity contribute to learners' learning progress?

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14. Based on your insights, how do you perceive the overall relationship between parental involvement, facilitated by the PTA and learners' learning outcomes?

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15. In your opinion, how could the PTA further enhance its efforts to support learning outcomes through effective parental involvement?

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.....

**Thank you for participating in this interview**

**Appendix VI: Focus Group Discussion Guide**

The intention of this guide is to gather your perspectives on **“Influence of Parental Involvement on Learning Outcomes of Learners with Hearing Impairment in Public Special Primary Schools in Kisumu County, Kenya”**. Please provide your perspectives on how parental communication, parental participation in school activities, involvement in decision-making processes and proficiency in Kenyan Sign Language (KSL) collectively contribute to the educational experiences of these learners

Date of the focus group meeting: \_\_\_\_\_

Location of the focus group meeting: \_\_\_\_\_

Group name: \_\_\_\_\_

Participants' genders and age range: \_\_\_\_\_

**Influence of Parental Communication with Teachers on Learning Outcomes**

1. How do you perceive the influence of regular communication between parents and teachers on the learning outcomes of learners with hearing impairment?

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.....

2. In what ways do effective channels of communication between parents and teachers contribute to a positive learning environment for students with hearing impairment?

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**Influence of Parental Participation in School Activities on Learning Outcomes**

1. From your perspective, how does parental involvement in school activities enhance the overall educational experience for learners with hearing impairment?

.....  
.....

2. Can you share specific examples of school activities where parental participation has positively influenced the learning outcomes of students with hearing impairment?

.....  
.....

**Influence of Parental Involvement in Decision-Making Processes on Learning Outcomes**

1. In your experience, how have parents been involved in decision-making processes within the school, and how do you believe this impacts the education of learners with hearing impairment?

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.....

2. What, in your opinion, are the key decisions that parents should actively participate in to better support the learning outcomes of students with hearing impairment?

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**Influence of Parent’s KSL Skills on Learning Outcomes**

1. How do parents possessing Kenyan Sign Language (KSL) skills contribute to the effective communication and understanding of learners with hearing impairment?

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2. How can parents who are proficient in KSL actively participate in their child's education to enhance learning outcomes in a special primary school environment?

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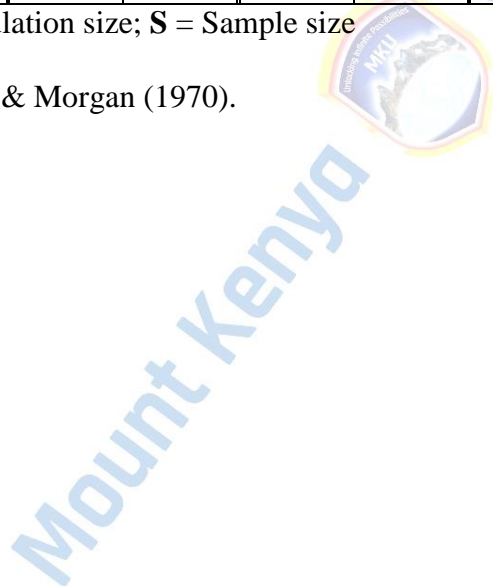
**Thank you for participating in this focus group discussion.**

**Appendix VII: Table for Determining Sample Size from a Given Population**


<b>N</b>	<b>S</b>	<b>N</b>	<b>S</b>	<b>N</b>	<b>S</b>	<b>N</b>	<b>S</b>	<b>N</b>	<b>S</b>
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: **N** = Population size; **S** = Sample size

**Source:** Krejci & Morgan (1970).



## Appendix VIII: ERC Certificate



# Mount Kenya University

REF: MKU/ISERC/3597  
TO: CATHERINE ATIENO OBWAKA  
REG: MEDSNE/2019/41055

Date: 11 April 2024

Dear Sir/Madam,

**RE: INFLUENCE OF PARENTAL INVOLVEMENT ON LEARNING OUTCOMES OF LEARNERS WITH HEARING IMPAIRMENT IN PUBLIC SPECIAL PRIMARY SCHOOLS IN KISUMU COUNTY, KENYA**

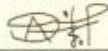
This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **2641**. The approval period is **11/04/2024 - 10/04/2025**.

This approval is subject to compliance with the following requirements;

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

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

Yours sincerely,




**Dr. Alfred Owino, PhD**  
Chairman, Mount Kenya University ISERC

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

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Main Campus, General Kago Road, P.O. Box 342-01000 Thika.  
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Email: [info@mku.ac.ke](mailto:info@mku.ac.ke), Web: [www.mku.ac.ke](http://www.mku.ac.ke)  
Chartered and ISO 9001 : 2015 Certified Institution.  
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## Appendix IX: Introduction Letter from MKU

  
**Mount Kenya University**

**DIRECTORATE OF GRADUATE STUDIES**

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MEDSNE/2019/41055

11<sup>th</sup> April, 2024

*National Commission for Science Technology & Innovation (NACOSTI)*  
*Off Waiyaki, Upper Kabete*  
*P.O Box 30623- 00100*  
*NAIROBI, KENYA*

Dear Sir/Madam,


**RE: CATHERINE ATIENO OBWAKA - REGISTRATION NO. MEDSNE/2019/41055**

The purpose of this letter is to introduce the above named student who is pursuing **Master of Education in Special Needs** in the Department of Special Needs Education in the School of Education.

The title of the research is **"Influence of Parental Involvement on Learning Outcomes of Learners with Hearing Impairment in Public Special Primary Schools in Kisumu County, Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **April, 2024 and June, 2024.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

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

---


Main Campus, General Kago Road, P.O. Box 342-01000 Thika.  
Cell: +254 709 153 000 | +254 709 153 200  
Email: info@mku.ac.ke, Web: www.mku.ac.ke  
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**Appendix X: Approval Letter from NACOSTI**

Republic of Kenya  
National Commission for Science, Technology and Innovation

**Ref No: 972251**

**RESEARCH LICENSE**




**This is to Certify that Ms., CATHERINE ATIENO OBWAKA of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kisumu on the topic: INFLUENCE OF PARENTAL INVOLVEMENT ON LEARNING OUTCOMES OF LEARNERS WITH HEARING IMPAIRMENT IN PUBLIC SPECIAL PRIMARY SCHOOLS IN KISUMU COUNTY, KENYA for the period ending : 19/April/2025.**

**License No: NACOSTI/P/24/34811**

**Applicant Identification Number: 972251**

**Director General**  
*Walter Wambui*  
**NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION**

**Verification QR Code**



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**See overleaf for conditions**

**Appendix XI: Approval letter from Ministry of Interior and National Administration**



**OFFICE OF THE PRESIDENT**

**MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION  
STATE DEPARTMENT FOR INTERNAL SECURITY AND NATIONAL ADMINISTRATION**

Telephone: Kisumu 2022219/Fax: 2022219  
Email: ckisumucounty@gmail.com

**COUNTY COMMISSIONER  
KISUMU COUNTY  
P.O. BOX 1912-40100  
KISUMU**

Ref: CC/KC/RES/1/3/VOL.6/08

24<sup>th</sup> April, 2024

**ALL DEPUTY COUNTY COMMISSIONER  
KISUMU COUNTY**

**RE: RESEARCH AUTHORIZATION: MISS. CATHERINE ATIENO OBWAKA.**

Reference is made to a letter from the National Commission for Science, Technology and Innovation No. NACOSTI/P/24/34811 of 19<sup>th</sup> April, 2024 on the above subject matter.

The above named is from Mount Kenya University. She has been authorized to carry out a research on "*Influence of parental involvement on learning outcomes of learners with hearing impairment in public special primary schools in Kisumu County, Kenya*". The research period ends on 19<sup>th</sup> April, 2025.

Kindly accord her any assistance that she may need.

**BENSON LEPARMORIJO  
COUNTY COMMISSIONER  
KISUMU COUNTY**

Copy to: Miss. Catherine Atieno Obwaka  
Mount Kenya University

## Appendix XII: Approval letter from Ministry of Education



REPUBLIC OF KENYA

### MINISTRY OF EDUCATION State Department for Basic Education

Telegrams: "schooling", Kisumu  
Telephone: Kisumu 057 - 2024599  
Email: countyeducation.kisumu@gmail.com

COUNTY DIRECTOR OF EDUCATION  
KISUMU COUNTY  
PROVINCIAL HEADQUARTERS NYANZA  
3<sup>RD</sup> FLOOR  
P.O. BOX 575 - 40100  
KISUMU

When replying please quote

REF: CDE/KSM/GA/3/24/ VOL.VI/23


23<sup>rd</sup> April, 2024

#### TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION  
Ms. CATHERINE ATIENO OBWAKA - NACOSTI/P/24/34811

This is to confirm that Ms. Catherine Atieno Obwaka has been given approval by NACOSTI under License No. NACOSTI/P/24/34811 to conduct research on the topic *"Influence of Parental involvement on Learning outcomes of learners with Hearing Impairment in Public Special Primary schools in Kisumu County, Kenya"* for the period ending **19<sup>th</sup> April, 2025**.

Any assistance accorded to her to accomplish the assignment will be highly appreciated.

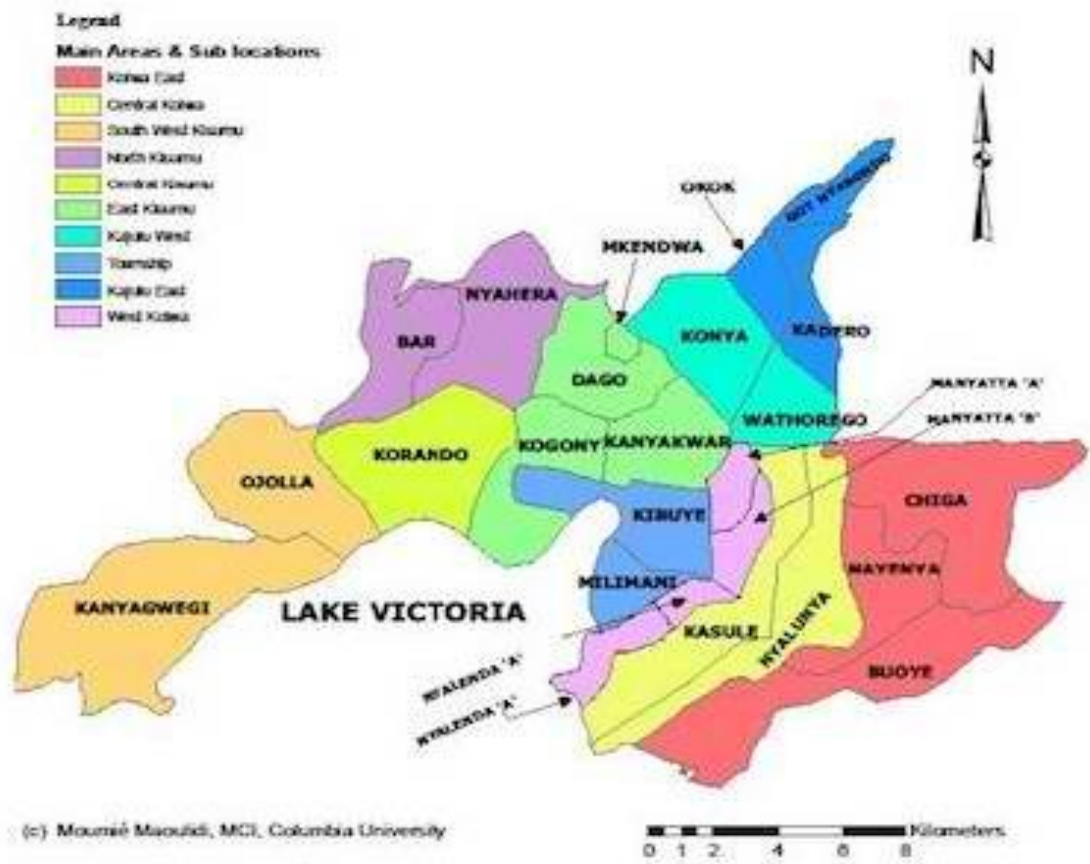
  
ENOCH S. OKWEMBA  
For: COUNTY DIRECTOR OF EDUCATION  
KISUMU COUNTY

For: County Director of Education  
Kisumu County  
P. O Box 575 - 40100,  
KISUMU.

**Appendix XIII: Approval letter from County Government of Kisumu**



**Appendix XIV: Map of Kisumu County**



Source:Millenium cities initiative(2019)

Mount Kenya

## Appendix XIV: Similarity Index

### INFLUENCE OF PARENTAL INVOLVEMENT ON LEARNING OUTCOMES OF LEARNERS WITH HEARING IMPAIRMENT IN PUBLIC SPECIAL PRIMARY SCHOOLS IN KISUMU COUNTY, KENYA

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