

**PARENTAL ENGAGEMENT AND ROLE CONSTRUCTION IN THE
IMPLEMENTATION OF THE COMPETENCY-BASED EDUCATION IN
SELECTED PUBLIC PRIMARY SCHOOLS, IN NAKURU
COUNTY, KENYA.**

BY

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**A THESIS SUBMITTED TO THE SCHOOL OF EDUCATION,
DEPARTMENT OF EDUCATIONAL MANAGEMENT AND POLICY
STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN
EDUCATIONAL RESEARCH AND EVALUATION.**

MOI UNIVERSITY

2025

DECLARATION

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DEDICATION

I dedicate this work to my parents, Mr. Peter and Mrs. Nancy Ranji, whose unwavering love and support have been a constant source of strength. To my beloved wife, Deborah Karanja, and our daughters, Taureen and Naydene Karanja—thank you for your love, patience, understanding, and encouragement throughout the demanding phases of this research journey.

Finally, I extend my heartfelt gratitude to DAAD and CERMESA for believing in me and supporting this academic pursuit.

ACKNOWLEDGEMENT

This journey would not have been possible without the unwavering support of many. First and foremost, I am profoundly grateful to The Almighty God for granting me strength, peace, and good health to see this work through.

I extend my heartfelt appreciation to DAAD and CERM-ESA for their generous scholarship, which has been instrumental in shaping my academic and professional growth.

To the Department of Educational Management and Policy Studies at Moi University, thank you for your continuous support. My deepest gratitude goes to my exceptional supervisors, Prof. Sammy Chumba, Prof. Susan Kurgat (Moi University), and Dr. Malve von Mollendorff (Oldenburg University), whose patience, wisdom, and guidance have been the backbone of this research.

Special thanks to Prof. John Boit and Prof. Sammy Chumba for sharpening my quantitative analysis skills, and to Prof. Karsten Speck and Dr. Malve von Mollendorff for refining my qualitative research approach. Their expertise played a pivotal role in shaping this study.

I am also deeply indebted to Prof. John Chang'ach, Prof. Susan Kurgat, and Dr. Malve von Mollendorff for their mentorship through the CERM-ESA DAAD centers. I will always carry Prof. Chang'ach's powerful words with me: "The academic path can be isolating; work as a team, but above all, run your race and finish in style."

Finally, to my colleagues, friends, and family, your unwavering encouragement, belief in me, and constant support made this journey lighter. Special thanks to Mr. Kenneth Muthomi for his support. I am forever grateful. May God bless you all abundantly.

ABSTRACT

Driven by the need to equip learners with practical skills and nurture talent, Kenya introduced the Competency-Based Education (CBE) in 2018, aligning with Vision 2030 and SDG Goal 4. While global evidence highlights the critical role of parental engagement in curriculum success, Kenya's (CBE) faces challenges due to insufficient and inconsistent parental involvement. This creates skepticism and a significant gap between the participatory expectations of CBE and actual participation, especially in public primary schools, thereby undermining its intended outcomes. This study aimed to examine the influence of parental engagement and role construction on CBE implementation in selected public primary schools in Nakuru County, Kenya, providing empirical evidence for interventions and policies to boost involvement and improve CBE outcomes. Specifically, the study objectives were: to assess the effect of parental engagement in participatory decision-making on CBE implementation; to investigate the effect of parental engagement in resourcing, volunteering, and linkages on CBE implementation; to examine the effect of parental engagement in school-home-based learning and development process on CBE implementation; to analyze the mediating effect of parental role construction on the relationship between parental engagement and CBE implementation; and to explore teachers' and parents' perceptions and experiences regarding parental engagement and their roles in CBE implementation. Guided by Epstein's Parent Involvement model and Hoover-Dempsey and Sandler's Parent Involvement Model, the study employed a convergent mixed-methods design within a pragmatic paradigm. The research involved 688 parents, 86 teachers, and 86 PTA members. Using a multi-stage sampling strategy, 248 parents were selected through stratified random sampling, while 13 teachers and 10 PTA members were chosen via purposive and convenience sampling, respectively. Data collection methods included surveys, interviews, and focus group discussions. Quantitative results revealed a significant positive effect of parental engagement on CBE implementation across all dimensions measured: participatory decision-making ($F(4, 210) = 8.918, p < 0.05, \beta = .359$), resourcing, volunteering, and linkage activities ($F(4, 210) = 6.215, p < 0.05, \beta = .299$), and school-home-based learning and development ($F(4, 210) = 8.768, p < 0.05, \beta = .360$). Additionally, the findings showed that parental role construction partially mediated the relationship between parental engagement and CBE implementation. Qualitative results indicated that, despite active support for home-based learning, parental engagement in decision-making, resource mobilization, and external partnerships remains moderate, often due to financial constraints and limited structured opportunities. The study concluded that parental role construction partially mediates the relationship between parental engagement and CBE implementation. This research makes a significant contribution by providing localized empirical evidence on parental involvement within Kenya's CBE framework, particularly emphasizing the mediating role of parental role construction. The findings offer a new perspective on how parents' understanding of their roles influences their engagement. The study recommends strengthening parental role construction through targeted policy interventions, such as integrating parental role sensitization into teacher training programs and developing school-led awareness campaigns through workshops and accessible informational materials, to enhance effective CBE implementation. Furthermore, it suggests exploring flexible resourcing models to overcome financial barriers that limit broader parental participation.

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ABBREVIATIONS AND ACRONYMS

AACSB	Association of Advanced Collegiate Schools of Business
BECF	Basic Education Curriculum Framework
CBE	Competency-Based Education
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KICD	Kenya Institute of Curriculum Development
KNEC	Kenya National Examination Council
MOE	Ministry of Education
NACOSTI	National Commission for Science and Technological Innovations
OECD	Organization for Economic Co-operation and Development
PTA	Parents' Teachers' Association
PTOs	Parent-Teacher Organizations
SEDL	Southwest Educational Development Laboratory
SPSS	Statistical Package for the Social Sciences
TSC	Teachers Service Commission
UNICEF	United Nations International Children's Emergency Fund

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

The successful implementation of any educational reform depends on the collaboration of multiple stakeholders, with parents playing a crucial role. In Kenya, the Competency-Based Education (CBE) was introduced to make education more practical, skill-based, and learner-centered. A key pillar of this curriculum is parental empowerment and engagement, which recognizes parents not as passive onlookers but as active participants in their children's learning journey. However, the reality on the ground presents a different picture, with many parents unsure of their role, while others face various challenges that hinder their engagement. As a result, the extent of parental participation in CBE implementation and the factors influencing their engagement remain areas of concern. This study, therefore, investigates how parents' perceptions of their role influence the relationship between their engagement in school-related activities and the implementation of the Competency-Based Education (CBE) in public primary schools in Nakuru County, Kenya.

This chapter provides the contextual background for the study, presenting an overview of relevant global and local perspectives. Subsequently, it outlines the problem statement, followed by a delineation of the purpose of the study, the objectives, the hypotheses, and the research questions. This chapter also highlights the justification, significance, scope, limitations, and assumptions of the study. In conclusion, theoretical and conceptual frameworks underpinning the investigation are presented, further providing the operational definitions of key terms employed throughout the study.

1.2 Background of the Study

Education globally stands as a cornerstone for societal development, with ongoing reforms driven by an imperative to enhance its accessibility, quality, and relevance for all. This aligns with global commitments such as Sustainable Development Goal 4 (SDG 4), which advocates for inclusive and equitable quality education and lifelong learning opportunities. A prominent global trend in these reforms is the widespread shift towards Competency-Based Education (CBE), aiming to equip learners with essential 21st-century capabilities like critical thinking, problem-solving, and collaboration. Alongside this, the integration of digital technologies and a strong focus on inclusive education to address barriers faced by marginalized groups are central to improving learning outcomes and ensuring equitable access worldwide. Kenya's educational reforms similarly underscore improving access, retention, equity, quality, and relevance, aligning with the national Vision 2030 to develop critical human capital for sustainable national transformation. These reform efforts, including the implementation of CBE, reflect a global and national commitment to prepare citizens for the challenges of the modern world and foster socio-economic development (Presidential Working Party on Education Reform, 2023).

Curriculum implementation is a critical process involving the translation of designed objectives, materials, and strategies into effective teaching and learning (Piliyesi, Ogada, & Ochieng, 2020). Its success hinges on proper planning and delivery, with effective implementation requiring organized support for teachers at the classroom level (Bediako, 2021). The Competency-Based Education (CBE) in Kenya, like any other educational reform, critically depends on its successful implementation (Mulenga & Kabombwe, 2019). This necessitates careful consideration of various influencing factors, including infrastructural facilities, policy support, and crucially, family and

community involvement (Madondo, 2021). Effective curriculum implementation is inherently learner-centric, aiming to equip learners with essential knowledge, skills, attitudes, and experiences for effective functioning (Bediako, 2021). This underscores the fundamental need for all stakeholders, particularly school staff and parents, to collaborate for effective curriculum implementation.

Globally, the importance of stakeholder involvement throughout curriculum development and management phases is well-established (Pavlicevic et al., 2015; Khan & Law, 2015). Curriculum management, encompassing the development, design, and implementation of educational programs, necessitates faculty engagement and ownership (AACSB International, 2020). Research consistently highlights the significance of various stakeholder groups in this process, emphasizing the need to map appropriate stakeholders to each phase, as different knowledge domains may require diverse groups with multiple agendas (Matkovic, Tumbas, & Sakal, 2014; Wagner, Hassanein, & Head, 2008 ; Lagoke, Adesola, & Soname, 2020). This global perspective strongly advocates for school-family collaborations as a vital mechanism for bringing these diverse stakeholders together to participate effectively in curriculum development, implementation, and overall educational advancement.

School-family collaborative partnerships, often conceptualized as parental engagement, have long been a focal point of research, policy, and practice. Antony-Newman (2019) characterizes parental engagement as the ability of parents to cooperate with educational institutions to promote a child's comprehensive development. Recognizing parents as a child's first teachers, this responsibility extends throughout their educational journey. Empirical evidence consistently demonstrates that parental engagement in children's education, through collaborative partnerships with schools, positively impacts school-related outcomes for children (Kalayci & Oz, 2018). Beyond

direct academic benefits, these partnerships contribute to improved school programs and climate, enhanced family services and support, increased parental skills and leadership, stronger community connections, and valuable assistance for teachers (Kabir & Akter, 2014). The close cooperation between schools and families, as noted by Sheridan and Wheeler (2017), supports academic work, promotes shared decision-making, and fosters teacher accountability. The multiplicity of contexts within family-school partnerships significantly contributes to children's development, enriching their growth (Patrikakou, 2016).

Specific to curriculum implementation, parental engagement is associated with improved learner performance, more consistent school attendance, better adaptation, and a greater sense of personal efficacy (Tuli & Tarekegne, 2019). Involving parents in curriculum-related matters enhances learner achievement and reduces barriers to learning (Averill, Metson, & Bailey, 2016). For children facing academic and social challenges, parental involvement is particularly crucial in mitigating long-term negative effects (Herman & Reinke, 2017). Effective communication and mutual trust are foundational to strong family-school partnerships, necessitating shared expertise and open dialogue to stimulate student success (Paulynice, 2020). Parents further support their children's educational expectations by assisting with homework and ensuring a conducive home learning environment (Averill et al., 2016).

Within the Kenyan educational landscape, the Competency-Based Education (CBE) places foundational importance on parental empowerment and engagement (PE&E), considering it a vital principle for effective execution. This emphasis stems from the profound understanding that parents are not merely peripheral supporters but essential stakeholders whose active involvement profoundly shapes learning outcomes and facilitates the holistic development of the learner across cognitive, social, spiritual, and

emotional dimensions. As co-educators, parents share responsibility with schools for cultivating supportive, motivating, and resourceful environments where learners can genuinely thrive (KICD, 2019; Mulenga & Kabombwe, 2019a).

Despite the acknowledged benefits, a persistent gap exists between the support educators expect from parents and the actual parental response (Paulynice, 2020). International comparisons, such as between Finland and Sweden, illustrate how policy emphasis on parental engagement can influence involvement rates (Uusimäki, Yngvesson, Garvis, & Harju-Luukkainen, 2019). The implementation phase of a curriculum is often the most challenging, demanding caution and a deep understanding of factors that either enhance or derail meaningful partnerships between parents and schools (Olibie, 2014). Without addressing these motivators and limitations, curriculum implementation success is jeopardized.

Parents' decisions regarding engagement are complex, extending beyond basic activities like homework assistance or school visits (Posey-Maddox, 2021). Gonzalez-DeHass et al. (2022) posit that parental engagement choices are shaped by personal ideas and experiences, alongside environmental demands and opportunities. Hornby (2011) and Hornby and Lafael (2011) identify four key influencing factors: individual parent and family factors (including parental beliefs), child factors, parent-teacher factors, and societal factors. Crucially, the Hoover-Dempsey and Sandler (2005) revised model of parent involvement highlights parental motivational beliefs, specifically parental role construction and parental self-efficacy, as the most significant variables determining parents' general decision to be involved in their children's education.

Parental role construction refers to the parents' understanding and beliefs about the range of activities they consider important and critical to undertake on behalf of their child (Hoover-Dempsey et al., 2005). These roles are constructed based on personal expectations and those of their social environment, including teachers and peers. For instance, in the U.S., many parents view supporting cognitive, verbal, and educational development as critical to their role, alongside physical and social competence. While variation exists, parental role construction (and self-efficacy) has been consistently established as a critical predictor of parental engagement (Hoover-Dempsey et al., 2005; Walker et al., 2011).

Parental role construction, defined as parents' beliefs about their responsibilities concerning their child's education, is a critical predictor of parental engagement. This construct significantly influences whether, how, and when parents choose to become involved. Parents must first believe they should be involved before they will choose to engage. This belief system, therefore, directly shapes the intensity and nature of engagement behaviors, such as communication with teachers or frequency of school visits, making it a key factor in their motivation to participate in their children's education. Furthermore, parental role construction is correlated with both school-based engagement and cognitive engagement between parents and children, and has been linked to higher teacher ratings of students' adaptive abilities and reduced problematic behaviors (Hoover-Dempsey et al., 2005; Walker et al., 2011). Thus, a strong, active parental role construction is foundational to fostering meaningful parental engagement and, by extension, effective CBE implementation.

Challenging simplistic assumptions, McWayne, Melzi, and Mistry (2022) and Yamamoto, Li, and Bempechat, (2022) demonstrate that dominant school-based role constructions for parents often reflect a single cultural script, failing to capture the

diverse ways families, particularly those from culturally distinct backgrounds (e.g., Chinese immigrant, Latinx), perceive and enact their involvement. These families often deeply respect teachers and uphold boundaries between home and school, construing their role more broadly to include character development and a focus on learning improvement rather than solely school-based achievement (Yamamoto et al., 2022; McWayne et al., 2022). A broader, more dynamic perspective on parents' roles is essential to understand how these roles evolve across developmental stages and settings (Hill, 2022). Aligning family and school perspectives necessitates understanding their respective assumptions, particularly regarding what constitutes 'parental involvement in education,' as parenting and academic achievement are deeply intertwined (Hill & Wang, 2015). This nuanced understanding of parental role construction is crucial for fostering effective partnerships.

In South Africa, parental involvement is legally recognized, and studies have linked parental engagement in homework and study programs to children's academic success (Singh, Mbokodi & Msila, 2004). Similarly, in rural Uganda, parental involvement, as framed by Epstein's framework, significantly increased children's numeracy and literacy scores (Mahuro & Hungi, 2016). However, the experience of Tanzania with CBE, introduced in 2005, reveals challenges in implementation due to a lack of stakeholder understanding, limited parental and community awareness, and resource constraints (Mulenga & Kabombwe, 2019a; Nkya & Huang, 2019). These regional experiences underscore the complex interplay of factors influencing curriculum implementation and parental involvement.

In Kenya, the Competency-Based Education (CBE) was implemented by the government in 2016, with its foundational principle being parental empowerment and engagement (Republic of Kenya, 2017). The Kenya Institute of Curriculum

Development (KICD, 2019) defines parental empowerment as the cultivation of knowledge, skills, attitudes, and practices to develop a learner's capabilities, accomplished through methods such as training, advocacy, and resource provision. Parental engagement, conversely, involves providing activities and opportunities that foster positive parent-learner connections, thereby enhancing learner competencies through participatory decision-making, communication, collaboration, and resourcing (KICD, 2019). The Basic Education Curriculum Framework (BECF) further mandates shared responsibility between parents and schools to create enabling learning environments (KICD, 2019). Heavy parental involvement in learning activities, complementing teacher efforts for successful implementation, is explicitly expected (Amunga et al., 2020). This highlights the acknowledged need for family-school partnerships to strengthen school programs and student outcomes in Kenya (KICD, 2019; Mulenga & Kabombwe, 2019a).

The CBE framework explicitly expands the parental role, tasking education officers and school heads with supporting parents to assume co-teaching responsibilities and actively participate in their children's learning. KICD (2019) guidelines stipulate key parental roles, including providing basic needs, actively engaging in school activities, serving as role models, and fostering a conducive home learning environment (KICD, 2019). This crucial co-parenting role extends to liaising with teachers to perfect the child's learning experience, identifying talents and difficulties, and actively participating in school planning and decision-making.

However, reports indicate a significant setback in CBE implementation in Kenya due to the initial exclusion of parents and the public in the curriculum reform process (Sifuna & Obonyo, 2019). This lack of early involvement has resulted in ineffective partnerships, with parents often unsure of their precise role in the implementation

process (Amunga, Were, & Ashioya, 2020). Despite the expectation for parents to act as co-educators and provide learning materials, ineffective communication between parents and schools, and even within the Ministry, has hampered the relationship (Sifuna & Obonyo, 2019). Further challenges include inadequate induction of parents on their CBE roles and untimely communication regarding involvement opportunities and material requirements (Mwarari, Githui, & Mwenje, 2020). While parents acknowledge the need for collaboration, reluctance stemming from a perception that it is solely the teachers' responsibility suggests a mindset shift is needed (Amunga et al., 2020). Recommendations emphasize investment in teacher training and their involvement in reforms to positively influence attitudes (Wambua, 2019), and parental training on their roles and responsibilities (KICD, 2019). Stakeholder perceptions, awareness, and understanding of the innovation are crucial for full support (Syomwene, 2017).

Globally, despite widespread recognition of the importance of school-family partnerships, significant challenges persist in fostering effective collaborations. Issues such as inadequate teacher preparedness in communicating with parents, lack of clear guidelines for active engagement, and parents feeling excluded from curriculum decisions have been observed in countries like the United States, China, South Africa, and Rwanda (Hyassat et al., 2024; Cook, 2024). These findings underscore that perceived lack of involvement is often a result of systemic and contextual barriers, rather than a deficit in parental willingness.

In Kenya, while the critical role of parental engagement is acknowledged, challenges persist, including some parents expressing that it is not their responsibility to complement a teacher's work outside the classroom. This signals a resistance to the expanded co-educator role and highlights the need for widespread sensitization

campaigns through media and community forums to inform parents about their new roles (Amunga et al., 2020).

Specifically, within Nakuru County, the Annual Development Plan (2022-2023) has highlighted distinct challenges in implementing the Competency-Based Education (CBE) due to limited stakeholder engagement. This local report explicitly recommended improving involvement among various stakeholders, including parents, community members, and education staff, to enhance the overall quality of education, particularly in the context of CBE implementation (Nakuru County Government, 2022). The selection of Nakuru Town East and Bahati sub-counties, characterized by their large number of public schools and diverse urban-rural settings, provides a rich local context to assess how parental engagement, and crucially, how parental roles are constructed across varied parental groups.

Despite extensive research on parental involvement and teacher-parent partnerships, a critical concern remains regarding what truly constitutes effective parental engagement and empowerment, and what specifically motivates or impedes stakeholders' involvement (Đurišić & Bunijevac, 2017). Internationally comparable data on parental involvement and its impact on education, particularly concerning the formation of strong partnerships, remains extremely limited (Brossard, Cardoso, Kamei, Mishra, Mizunoya, & Reuge, 2020). The gap between expected and actual parental responses, even after engagement efforts, persists (Paulynice, 2020). This points to an urgent need to delve into the psychological constructs that motivate parents' decisions to engage, moving beyond deficit-based views of families from culturally distinctive and low socioeconomic backgrounds ((Ishimaru, Torres, Salvador, Lott, Williams, & Tran, 2016; Goodall et al., 2022; Francis, Regester, & Reed, 2019).

More precisely, although the significance of parental engagement in Kenya's CBE implementation is evident, and even with policies promoting parental empowerment, a considerable void persists in comprehending the exact influence of parental role construction on parental engagement within collaborative partnerships, and consequently, on CBE implementation itself. Current academic discourse often highlights a general ambiguity regarding parental responsibilities and the inefficiency of existing partnerships

While several studies in Kenya have highlighted the critical role of parental involvement in children's education, these were predominantly based on the former 8-4-4 education system. Since the introduction of CBE and the development of parental empowerment guidelines in 2019, there remains a notable lack of empirical research examining parental involvement specifically under this new curriculum framework. This gap necessitates investigation into the current status of parental engagement guideline implementation, and how parents and teachers perceive and experience their collaborative roles in CBE implementation. This study directly addresses this pressing need, aiming to strengthen the tripartite relationship between teachers, learners, and parents for the successful rollout of competency-based education in Kenya.

Therefore, this study aims to explore the mediating effect of parental role construction on the relationship between parental engagement in CBE collaborative partnerships and CBE implementation among stakeholders in Kenya, offering a nuanced understanding beyond general involvement trends.

1.3 Statement of the Problem

To better align its educational system with the global needs of the 21st century, Kenya adopted the Competency-Based Education (CBE) in place of the 8-4-4 system, with a

greater focus on fostering practical skills and competencies among its citizens (PWPER, 2023; Mulenga & Kabombwe, 2019). Central to CBE's success is Parental Empowerment and Engagement (PE&E), which enables parents to significantly impact their children's learning outcomes as co-educators (KICD, 2019; Piliyesi, Ogada & Ochieng, 2020). In line with this commitment, the Kenyan government, through KICD (2019), has developed various strategies to promote PE&E, such as stakeholder training, advocacy, and resource allocation.

Even with these sustained efforts, recent academic investigations have revealed an ongoing disconnect between the expected and observed levels of parental engagement within the CBE framework (Mwarari & MweEje, 2020; Wairimu, 2022; Njeru, 2023). Such a disparity critically jeopardizes student learning outcomes, undermines the vital school-family partnership envisioned by the curriculum, and leads to missed educational opportunities for learners. Factors such as the slow adoption of PE&E guidelines, limited parental knowledge of CBE, socio-economic diversity, communication barriers, and negative parental attitudes contribute to this gap (Dingili & Yungungu, 2023). These challenges have created ongoing uncertainty among parents regarding their expected roles within the CBE, resulting in low engagement in school activities and limited support for learning at home (PWPER, 2023).

Furthermore, previous research on parental engagement has primarily focused on middle-class and affluent families, leading to the perception that parents from low socio-economic backgrounds are minimally engaged (Averill et al., 2016; Hill, 2022; Tuli & Tarekegne, 2019). This perspective often attributes the blame for low achievement to these families, disregarding their strengths and overlooking other barriers to their engagement and student success (Ishimaru et al., 2016; Goodall et al.,

2022). As a consequence, existing school-family partnerships are undermined, further hindering effective CBE implementation.

Building on the recognized limitations of prior research that often overlooked diverse socio-economic contexts, a more proactive and context-sensitive approach is therefore required to understand the nuances of parental role construction and how parents perceive and enact their responsibilities within the CBE framework. Gaining deeper insights into the factors that shape parental engagement decisions is critical for the successful implementation of the curriculum. In many schools, a key challenge is that unclear role expectations among parents have led to diminished engagement, which in turn may result in suboptimal learning outcomes and missed educational opportunities for learners. Furthermore, when parents are disengaged, they may struggle to support their children's academic progress or advocate effectively for their educational needs, thereby weakening the vital partnership between family and school. By investigating parental role perceptions and engagement practices within the CBE, this study offers valuable opportunities to inform inclusive strategies that strengthen this partnership, enhance educational equity and quality of learning outcomes, and contribute to the broader educational goals of Sustainable Development Goal 4 and Kenya's Vision 2030.

This study addresses this gap by examining how parental role construction influences parental engagement in the implementation of CBE in public primary schools in Nakuru County, Kenya. Using a convergent mixed-methods approach and mediation analysis, the study explores this relationship from the perspectives of parents, teachers, and PTA representatives. By focusing on this relatively underexplored aspect, the study aims to inform inclusive strategies that empower parents and strengthen family-school collaboration for improved curriculum implementation and learner outcomes.

1.4 Purpose of the Study

The purpose of this study was to examine the influence of Parental Engagement and Parental Role Construction on the implementation of the Competency-Based Education, among selected Public Primary Schools, in Nakuru County, Kenya.

1.5 Objectives of the Study

- i. To assess the effect of parental engagement in participatory decision-making on the Competency-Based Education Implementation in public primary schools, in Nakuru County, Kenya.
- ii. To investigate the effect of parental engagement in resourcing, volunteering, and linkages on the Competency-Based Education Implementation in public primary schools, in Nakuru County, Kenya.
- iii. To examine the effect of parental engagement in the school-home-based learning and development process on the Competency-Based Education Implementation in public primary schools, in Nakuru County, Kenya.
- iv. To analyze the mediating effect of Parental Role Construction on the relationship between Parental Engagement and Competency-Based Education Implementation in public primary schools, in Nakuru County, Kenya.
- v. To explore teachers' and parents' perceptions and experiences regarding parental engagement and role in the implementation of the Competency-Based Education public primary schools in Nakuru County, Kenya.

1.6 Research Hypothesis

In this study, the following null hypotheses were tested at $\alpha=0.05$ level of significance, while controlling for the confounding effects of parents' level of education, age, and gender covariates.

H01: There is no statistically significant relationship between Parental Engagement in participatory decision-making and Competency-Based Education Implementation in public primary schools.

H02: There is no statistically significant relationship between Parental Engagement in resourcing, volunteering, and linkages and Competency-Based Education Implementation in public primary schools.

H03: There is no statistically significant relationship between Parental Engagement in the school-home-based learning and development process and Competency-Based Education Implementation in public primary schools.

H04: Parental Role Construction does not significantly mediate the relationship between Parental Engagement and Competency-Based Education Implementation in public primary schools in Nakuru County, Kenya.

1.7 Research Question:

- i. What are the teachers' and parents' perceptions and experiences regarding parental engagement and role in the context of Competency-Based Education Implementation in public primary schools, in Nakuru County, Kenya?

1.8 Justification of the Study

Kenya's significant shift to a learner-centered education system with a Competency-Based Education (CBE) prioritizes 21st-century skills and competencies (KICD, 2019). Effective curriculum implementation necessitates a thorough understanding of the factors influencing its success, including parental engagement. Research underscores that active engagement by parents enhances learner outcomes (Antony-Newman, 2019; Kalaycı & Öz, 2018), enriches schools, and strengthens communities (Kabir & Akter,

2014). The CBE specifically benefits from active parental participation, which is linked to improved school attendance and adjustment, student performance, and well-being (Tuli & Tarekegne, 2019). The KICD emphasizes parent-teacher cooperation as essential for achieving curriculum goals (KICD, 2019).

However, the CBE's rollout has faced challenges, notably the limited involvement of both parents and teachers in its early stages, hindering school-parent partnerships (Sifuna & Obonyo, 2019). Consequently, parents have been uncertain about their roles in the implementation process (Amunga, Were, & Ashioya, 2020). Furthermore, inadequate communication between parents, schools, and the Ministry of Education has strained these relationships (Mwarari, Githui, & Mwenje, 2020). Many parents are unfamiliar with curriculum issues, and schools struggle to provide the necessary leadership to inspire parental engagement (Olibie, 2014).

Therefore, there is a pressing need to examine how parents perceive their educational roles and how these perceptions influence their engagement decisions. Research suggests that various intricate factors influence parents' decisions regarding their engagement in their children's education beyond just helping with homework or attending school meetings (Posey-Maddox, De Royston, Holman, Rall, & Johnson, 2021). Parents from different backgrounds, including marginalized or low-income groups, may confront unique challenges and experiences in their interactions with schools (Ladson-Billings, 2021). Understanding how parents perceive their roles and empowering them to engage actively in educational activities is crucial for supporting children's learning, combating marginalization, and addressing discrimination (Marchand, Vassar, Diemer, & Rowley, 2019).

This study, therefore, addresses a critical knowledge gap by investigating the role of parents in the implementation of the Competency-Based Education (CBE), with

particular attention to the mediating influence of parental role construction on parental engagement. By adopting a convergent mixed-methods design, the study combines quantitative mediation analysis with qualitative insights to offer a comprehensive understanding of how parents conceptualize, build, and perform their roles within the CBE framework. Moreover, while the quantitative strand examines the structural relationship between parental role construction and engagement, the qualitative component explores the lived experiences and perceptions of both parents and teachers, thereby capturing the contextual complexities that influence parental involvement. Through this integrated approach, the study contributes to a deeper understanding of how parental roles can enable or hinder CBE implementation and offers evidence to inform inclusive, context-responsive strategies for strengthening school–family partnerships.

Ultimately, this study offers crucial insights for policymakers, educators, and schools in Kenya by exploring how parental role construction mediates parental engagement in the CBE implementation. The findings can shape policies at both school and national levels, supporting family involvement in education in line with Kenya's Vision 2030. By enhancing the understanding of parental engagement through role construction, this research provides practical strategies to boost CBE success and improve educational outcomes, advancing both theory and practice while laying a foundation for future research in Kenya.

1.9 Significance of the Study

This study examined the interplay between parental role construction and parental engagement in the implementation of the Competency-Based Education (CBE) in selected public primary schools. By exploring the complex dynamics between parental engagement and educational practices, this study aimed to provide valuable insights

needed in making sound evidence-based decisions to enhance parental engagement, optimize CBC implementation and ultimately, improve educational outcomes. More precisely, the findings of this study hold significant implications for a wide range of stakeholders, including parents, teachers, schools, the government, policymakers (KICD, MOE), researchers, and learners.

The study emphasizes the crucial role that parents play in supporting the CBE. By understanding how parents perceive their roles and the factors influencing their engagement, this study looks for strategies to equip parents to proactively contribute to their children's learning and development, hence creating a supportive home learning environment that complements school efforts. This increased engagement benefits not only the learners but also strengthens the educational community.

The study findings are equally significant for teachers, as they highlight the vital role parents play in the implementation of the CBE. By gaining a deeper understanding of how parental constructions of their roles influence their engagement decisions, teachers can foster improved collaboration and communication with parents, thereby creating a more supportive and inclusive educational environment. The study findings will also inform teacher education programs on the need to incorporate strategies that foster and sustain parental engagement. Additionally, schools can use the findings to strengthen school-family partnerships by identifying gaps in parental engagement practices and implement targeted interventions.

Furthermore, the study offers evidence-based insights for policymakers to develop policies promoting parental engagement in education, particularly within the CBE context. By informing resource allocation and policy frameworks, the government can better support family involvement and enhance CBE implementation.

For policymakers, the study provides a foundation for developing comprehensive policies that promote a comprehensive approach to CBE implementation that prioritize parents as key stakeholders. By employing the study's findings, policymakers can refine educational policies to align with the diverse needs of all stakeholders.

Furthermore, the study's insights are geared toward enhancing learner outcomes. By encouraging greater parental engagement and bolstering effective CBE implementation, learners reap the benefits of a more comprehensive and supportive educational experience. The harmonious and enriched experience supported both at home and at school, leads to a more balanced and well-rounded education that equips learners with the skills and knowledge they need to succeed in an ever-changing world and overcome future challenges.

Ultimately, the study contributes to a deeper understanding of parental engagement and role construction within the context of Competency-Based Education. It lays the basis for future research, identifies research gaps, and provides a blueprint for analyzing similar issues in alternative contexts. By highlighting the mediating role of parental role construction, the study advances the field of educational research.

1.10 Assumptions of the Study

This study was based on the following assumptions:

- i. The study participants, including parents and teachers, have a clear understanding of the CBE approach and its implementation and willingly provided honest and accurate responses during surveys, interviews, and focus group discussions.

- ii. Parental role construction significantly influences the level and quality of parental engagement, which in turn directly affects the successful implementation of the CBE in schools.
- iii. The data collected from the selected public primary schools in Nakuru Town East and Nakuru North sub-counties exhibited a normal distribution and can be generalized to other areas within Nakuru County and potentially to similar contexts in the country.
- iv. The study's sample accurately represented the targeted population and was adequate for analysis and interpretation, thereby enhancing the validity and reliability of the research findings.

1.11 Scope of the Study

The scope of this investigation was delimited by its specific content, timeframe, and geographical focus (Rule & John, 2011). It examined the influence of parental engagement and parental role construction on the implementation of the Competency-Based Education (CBE) in public primary schools in Nakuru County, Kenya. Specifically, it focused on three key interconnected variables: parental engagement, parental role construction, and CBE implementation. Understanding the relationships between these variables is crucial, as parental engagement has been identified as a critical factor in the successful implementation of educational reforms like the CBE.

In terms of methodology, a mixed-methods approach with a convergent design was utilized for the collection and analysis of both quantitative and qualitative data. For the quantitative component, standardized questionnaires were administered to parents with children in grades 1-8 enrolled under the CBE to quantify levels of parental engagement, role construction, and perceptions of CBE implementation. For the

qualitative component, semi-structured individual interviews were conducted with teachers to gather detailed insights into their experiences and perspectives on parental engagement, role constructions, and CBE implementation. Additionally, a focus group discussion was held with selected parent representatives to explore their views on parental engagement, role construction, and CBE implementation both at home and in school.

To test the study's hypotheses, a hierarchical regression model was utilized, specifically applying Hayes's (2018) Model 4 for mediation analysis to ascertain how parental role construction mediates parental engagement in CBE implementation. For the qualitative data, thematic analysis was conducted, adhering to the systematic procedures detailed by Creswell (2012) and Braun and Clarke (2006) to identify prominent themes and recurrent patterns.

Geographically, the study was confined to selected public primary schools in Nakuru County, Kenya, specifically within the two sub-counties of Nakuru Town East and Nakuru North. Nakuru County is a diverse region with a mix of urban and rural communities, and the selected sub-counties represent a range of socio-economic backgrounds. The study was conducted from January 2024 to August 2025, which aligns with the ongoing implementation timeline of the CBE in the region, providing a comprehensive timeframe for data collection, analysis, and reporting.

1.12 Limitations of the Study

Limitations are influences, shortcomings, or conditions that are beyond the researcher's control and that place restrictions on the methodology to be used and conclusions made (Dubey & Kothari, 2022). The following were the study limitations:

- i. The study relied on self-reported questionnaire data from parents to examine the mediating effect of parental role construction on the relationship between parental engagement and the implementation of the Competency-Based Education (CBE). A potential limitation of this approach is that some parents may have misinterpreted certain questionnaire items or found them insufficient to capture all aspects of their engagement or role construction. To address this, the study employed methodological triangulation by incorporating interviews with teachers and focus group discussions (FGDs) with Parent-Teacher Association (PTA) representatives. This mixed-methods approach helped enrich and validate the findings by capturing multiple perspectives.
- ii. The study adopted a cross-sectional design, providing a snapshot of parental engagement, parental role construction, and CBE implementation at a single point in time. While informative, this design limited the ability to track changes over time. Additionally, a methodological limitation arose from collecting different types of data from distinct participant groups, quantitative data from parents, interviews from teachers, and focus group discussions with PTA representatives. Although this multi-perspective approach enriched the findings, it posed challenges for direct comparison and integration, as the data reflected varied viewpoints rather than in-depth insights from a single, cohesive group. To address these limitations, the study enhanced the rigor of each data strand, where qualitative data were subjected to trustworthiness measures, including credibility, dependability, confirmability, and transferability, while the questionnaire was rigorously validated using Exploratory Factor Analysis (EFA) and tested for internal consistency through Cronbach's alpha reliability coefficient, thereby strengthening the overall robustness of the findings.

- iii. The study was conducted in two sub-counties in Nakuru County, which may limit the generalizability of the findings beyond this specific context. To enhance the transferability of the results, a comprehensive description of the research methodology was furnished by the researcher, encompassing data collection and analysis procedures, thereby enabling future studies to replicate or compare findings in different settings.

1.13 Theoretical Framework

Varpio, Paradis, Uijtdehaage, and Young (2020) describe a theory as an abstract description of the relationships between ideas, statements, and concepts that help us understand the world. They further explain that the theories underpinning a study form a researcher-constructed structure, known as the theoretical framework, which clarifies these concepts and premises. This theoretical framework is a structured approach that holds the relevant theory or set of theories and uses them to explain the rationale and context for the research problem being investigated (Yamauchi, Ponte Velón, Ratliffe, & Traynor, 2017).

The theoretical framework for this study is anchored in two well-established models of parental involvement: Epstein's Parent Involvement Model (1997) and Hoover-Dempsey and Sandler's Parent Involvement Model (2005). These complementary frameworks provide a comprehensive understanding of the mechanisms through which parental engagement influences curriculum implementation and learners' educational outcomes. This theoretical grounding was deemed key to examining the mediating effect of parental role construction on parental engagement in the implementation of the Competency-Based Education (CBE).

The rationale behind using the two theoretical models in this study is twofold. First, while Epstein's (2002) framework offers valuable insights into the educator's role in

promoting parental engagement, acting more as a practitioner manual, it tends to overlook the critical perspective of the parent, a primary actor in this process. However, parents' decisions, perceptions, and beliefs about their engagement are key factors that cannot be ignored, given their critical role as co-educators in their child's education under the CBE (KICD,2019).

Secondly, many existing parental involvement models have underestimated the significant influence of psychological and demographic factors on parents' decisions to engage in their children's education. In contrast, Hoover-Dempsey and Sandler's model (2005) specifically centers on understanding these underlying motivations and mechanisms. This complementary theoretical lens is vital for analyzing the mediating effect of parental role construction on engagement in curriculum implementation.

In summary, by combining these two models, the study benefited from a dual perspective: Epstein's model offered a structured approach to the identification and implementation of the specific types of parental engagement, while Hoover-Dempsey and Sandler's model was used to analyze the motivational factors that influence these engagement practices among parents. This approach provided a more comprehensive and robust theoretical foundation for understanding and enhancing parental engagement in CBE implementation, accounting for both the educator's and the parent's perspectives hence generating meaningful insights into the research problem. The theoretical models are discussed below:

1.13.1 Epstein's Typology of Parental Involvement (1997)

First developed by Joyce Epstein and collaborators in the early 1990s, the Framework of Six Types of Involvement, sometimes called the School-Family-Community Partnership Model, has undergone revisions in the intervening years, though the foundational elements of the framework have remained consistent. The theoretical

model recognizes the essence of home, school, and community, as interconnected contexts that collaboratively support student learning and successful curriculum implementation (Ngozwana, Machobane, Chauke & Lepholletse, 2024; Semke & Sheridan, 2012; Epstein, 2007). Paulynice (2020) also emphasizes that strong partnerships among schools, families, and communities can drive educational reforms by connecting policy and practice, ultimately enhancing learner achievements and fostering successful curriculum implementation.

Within the model, Epstein (1997) presented parental involvement as six distinct categories of collaborative partnerships that schools and families can cultivate to benefit children. Sheldon and Epstein (2005) advocated for the integration of these six involvement types into a comprehensive program for school, family, and community partnerships. These six aspects include parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community:

Parenting (classified as Type 1 involvement) is evident when family routines and home settings support children in their student role, and when schools, in turn, gain insight into their students' families. This type focuses on equipping parents with the necessary knowledge and skills to help all families establish home environments conducive to learning. Practical examples encompass recommendations for home conditions that foster improved learning, initiatives for parental education, and various family support programs. For children, this involvement typically leads to better attendance, an appreciation for the value of schooling, and deference towards parents (Epstein, 2007). Đurišić and Bunijevac (2017) underscore this, observing that the parenting dimension of involvement sees parents upholding an enduring commitment to their children by providing secure and healthy home surroundings, alongside nurturing positive attitudes towards learning, crucial for children's success.

Communicating (Type 2 involvement) occurs when educators, learners, and families collaboratively design effective forms of school-to-home and home-to-school communications. This establishes effective two-way communication that fosters the exchange of vital information about school programs and children's academic progress (Epstein,1995). Regular parent-teacher meetings, receiving clear information on school policies and programs, and phone calls are some examples of this kind of communication. Some of the benefits for children are awareness of their progress, understanding school policies, and improving communication skills (Epstein et al, 2007). Additionally, the two-way communication between schools and families helps to build trust and understanding between educators and families, leading to effective collaboration and support for student learning (Ngozwana et al.,2024).

Volunteering (Type 3 involvement) occurs when educators, learners, and families recruit and organize parent help and support and count parents as an audience for learner activities. Parents offering help with school maintenance via volunteering for the safety and operations of schools, assisting educators, and helping other parents are examples of this type of involvement. Children can improve communication skills with adults and increase their learning skills from tutoring through these volunteering activities (Epstein et al, 2007). In addition, by sufficiently involving parents in school-planned activities like sports and learning activities, mobilizing funds, school cleaning, and the school feeding programs, they become active participants in their children's education hence contributing meaningful ideas about what happens in schools (Ngozwana et al,2024; Nthontho, 2017).

Learning at home (Type 4 involvement) occurs when schools provide parents with information, ideas, or training, on what children are doing at school and how they can help the children at home with homework and other curriculum-related activities,

decisions, and planning (Đurišić & Bunijevac, 2017; Epstein, 1997). This involvement calls for parents to be involved in curriculum-related activities occurring at home like assisting with homework, discussing books with their child, or brainstorming ideas for school projects (Epstein, 1997). Since the parents play more of a supportive and monitoring role, teachers should discuss with parents and share information on homework policies and how to monitor and discuss take-home activities with children (Ngozwana et al,2024). Results for children contain higher homework completion rates, increased view of parents as more similar to teachers, and enhanced self-concept as learners (Epstein et al, 2007).

Decision-making (Type 5 involvement) occurs when schools include parents in school decisions and develop parent leaders and representatives. It involves having parents serve as representatives and leaders on school committees and as part of every decision made concerning the child's learning and well-being as set out by school and government policies (Ngozwana et al, 2024). PTA organizations and networks to link all parents are examples of this type. Awareness of the representation of families and understanding that children's rights are protected are some of the outcomes for children (Epstein et al, 2007). The expectation under this form of involvement is that all stakeholders, regardless of their status or level, should share equal decision-making powers related to children's education (Childs & Grooms, 2022).

Lastly, collaborating with the Community (Type 6 involvement) occurs when community services, resources, and partners are identified and integrated into the educational process to strengthen school programs, family practices, and student learning and development. Information on community activities and services that link to learning skills, participation of alumni in school, and service integration through partnerships with organizations such as civic, cultural, and health agencies in the

community are considered sample practices of this type of involvement. Through collaborations, different types of community organizations contribute to schools, students, and families. Increased skills and talents, and specific benefits linked to community programs are some of the results for children (Epstein, 2007).

Epstein's model is hence invaluable for this study due its comprehensive approach, which covers various aspects of parental involvement and how they influence school programs and student learning outcomes. It is particularly useful in this study to help in identifying and building on the types of engagement that schools can initiate to foster parental engagement in CBE implementation as further outlined by the KICD (2019). This study specifically builds on three types of parental engagement namely: participatory decision-making, volunteering, resourcing and linkages, and school-home-based learning and development process, and how they influence the implementation of the CBE.

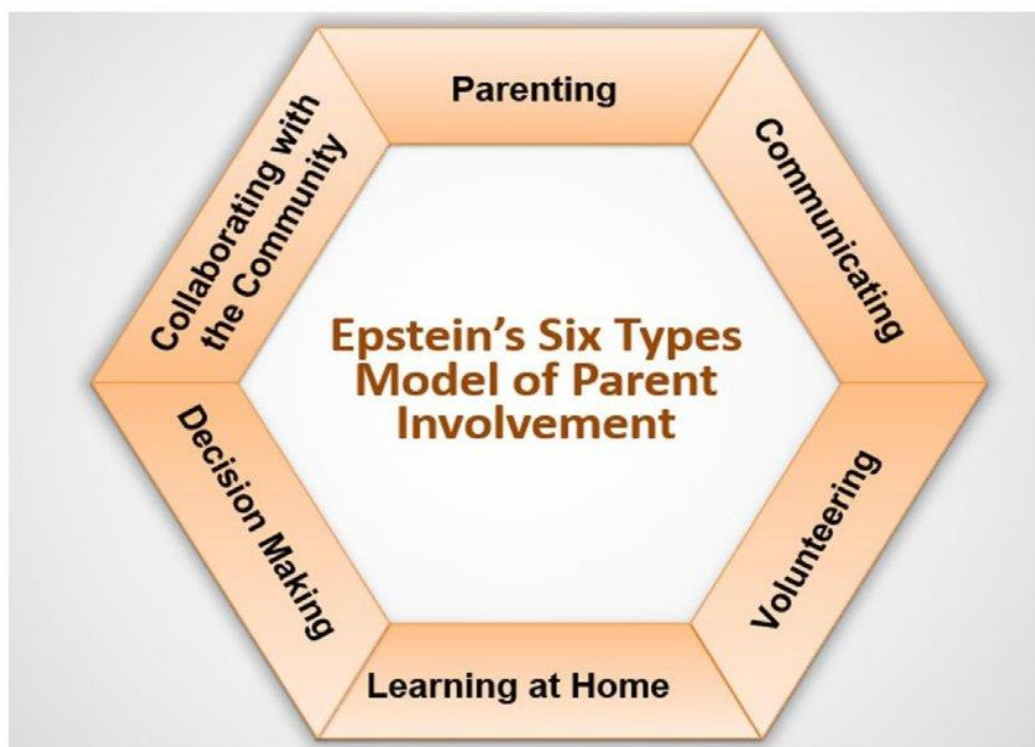


Figure 1: Epstein's Six Types Model of Parental Involvement.

Source: Adopted from Epstein et al. (1997).

However, while the model effectively outlines the "how" of parental involvement from an institutional perspective, it is less focused on understanding the parents' motivations behind their involvement. Critics argue that it prioritizes the school's perspective, often relegating the parent's role to a secondary position, which can lead to parents underestimating their importance in the involvement process (Auerbach, 2007, Tekin, 2011). The model tends to focus heavily on school-initiated activities, overlooking the diverse social and cultural contexts that shape parental engagement (Jeynes, 2010). Furthermore, while Epstein's model encourages schools to consider parents' backgrounds and community contexts, it often fails to delve deeply into the psychological and demographic factors that influence parents' decisions to participate in their children's education (Epstein & Connors, 1995; 2018; Munje & Mncube, 2018). Given these limitations, a more nuanced approach is needed—one that better captures the parents' perspectives and the factors driving their involvement decisions. This is where the Hoover-Dempsey and Sandler model (2005) becomes valuable:

1.13.2 Hoover-Dempsey and Sandler's (2005) Theoretical Model of the Parental Involvement Process

Social learning theories, including social cognitive theory (Bandura, 1986) and sociocultural theory (Rogoff, 1990; Vygotsky, 1978), propose that parental beliefs and social contexts influence parental engagement decisions and their impact on student learning outcomes (Ice & Hoover-Dempsey, 2011). Building on these broad theories, Hoover-Dempsey and Sandler's Model of the Parent Involvement Process (Hoover-Dempsey et al., 2005; Hoover-Dempsey & Sandler, 1995, 1997, 2005) offers a detailed theoretical framework for examining predictors of parental engagement to explain the engagement process and its influence on learner outcomes, ultimately enhancing school-family partnerships (Ice & Hoover-Dempsey, 2011).

The Hoover-Dempsey and Sandler model of parental involvement process, initially developed in 1995 and 1997, has undergone several revisions over the years. Notably, this study adopted the revised Hoover-Dempsey & Sandler model (2005) as outlined in Walker, Wilkins, Dallaire, Sandler & Hoover-Dempsey (2005). According Sheldon and Turner-Vorbeck (2019) this model focuses on the process of parental engagement, rather than just its outcomes. It delineates family engagement as a multi-phased process, beginning with parental motivations and culminating in student outcomes through specific parental actions. This underscores the significance of understanding parents' perceptions of education and their role within it. As revealed by research, parents who perceive schooling to be a collaborative effort between home and school, are more likely to be involved than those who perceive education as solely the school's responsibility (Sheldon & Turner-Vorbeck, 2019).

The model identifies three major sources of motivation for parents' engagement in their children's education: First, parental role construction and parental self-efficacy are grouped under a broader construct termed parents' motivational belief (personal motivation). Second, parents' perceptions of general invitations for involvement from the school (previously categorized under Level 1) and specific invitations from the child and the child's teacher (formerly at Level 2) are now combined into a second overarching construct called parents' perceptions of invitations for involvement from others (invitations). Third, two constructs initially classified at Level 2—parents' perceptions of their available time and energy, as well as specific skills and knowledge for involvement—are now integrated into a third broad concept at Level 1: parents' perceived life context (life context) (Walker et al., 2005). Green and Hoover-Dempsey (2007) found that all these domains were positively correlated with one another and served as significant motivators for parental engagement in their children's education.

This study focused exclusively on parental motivational beliefs, specifically parental role construction, as a predictor of parental engagement in the implementation of the CBE.

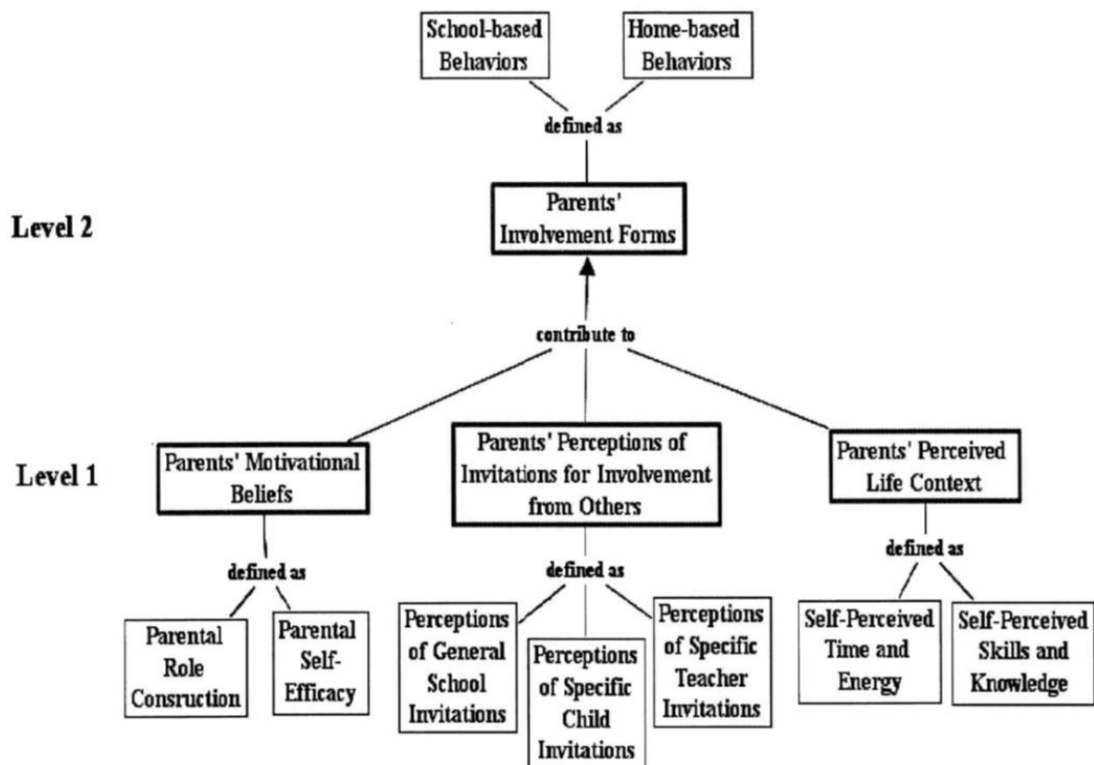


Figure 2: Levels 1 and 2 of Hoovey-Dempsey and Sandler's Theoretical Model of the Parental Involvement Process.

Source: Walker, Wilkins, Dallaire, Sandler & Hoover-Dempsey (2005)

Parental role construction involves parents' beliefs about their responsibilities regarding their child's education, a driving force for parental engagement that shapes parents' understanding of how they should react to activities that contribute to their child's academic success (Walker et al., 2005). Consequently, it impacts student outcomes by determining the scope of activities parents consider essential, appropriate, and relevant for supporting their child's educational efforts both at home and within the school environment (Hoover-Dempsey & Sandler, 1997). Hoover-Dempsey and Sandler (2005) conceptualized role construction as comprising role activity beliefs and role valence. Role activity beliefs pertain to parents' perceived level of engagement in

their child's education, while role valence reflects parents' attitudes toward schools and their emotional orientation toward engagement as shaped by their experiences with the schools (Ice & Hoover-Dempsey, 2011). Both dimensions were considered in this study.

Moreover, the revised model encompasses diverse activities that serve as foundational indicators of parental engagement including parent-child communication about schoolwork (Walker, Hoover-Dempsey, Whetsel, & Green, 2004), homework supervision, educational aspirations, school participation, resource provision, parent-teacher conferences, classroom volunteering, home tutoring, and implementation of teacher-designed home instruction programs (Green & Hoover-Dempsey, 2007; Hoover-Dempsey, Bassler, & Brissie, 1987).

By adopting and presenting a multidimensional view, the model provided a comprehensive yet parsimonious structure for the researcher to investigate parental role construction and its mediating influence on parental engagement, specifically under the CBE context. Its clarity and comprehensiveness facilitated its use in hypothesis testing.

However, while the Hoover-Demsey and Sandler model provides a valuable theoretical framework for evaluating existing family involvement initiatives, it may not offer concrete guidance for establishing new programs. Nevertheless, when combined with more action-oriented frameworks like Epstein et al.'s (2009) work, the model can broaden the understanding of family involvement and its expected outcomes when families actively participate in their children's learning (Sheldon & Turner-Vorbeck, 2019). It is for this reason that this study adopted the model together with the Epsteins (1997) to offer a comprehensive theoretical grounding for the study.

1.14 Conceptual Framework

A conceptual framework is a visual representation of the relationship between the variables of the study. Figure 1.3, below illustrates the connections between parental engagement (independent variable), parental role construction (mediating variable), and CBE implementation (dependent variable). In this study, CBE implementation which is the dependent variable (DV), was characterized by key expected outcomes of effective implementation, including regular school attendance and retention among learners, active learner participation in classroom and home-based learning activities, improved school climate and programs, and consistent, informative two-way communication and collaborative decision-making.

Parental engagement, the independent variable (IV) in the study, was conceptualized through several distinct forms of engagement, including participatory decision-making, resourcing, volunteering, and networking, and both school-based and home-based learning and development strategies. The study's mediating variable (M), parental role construction, reflected parents' perceptions and their adoption of engagement roles within CBE implementation both at home and school.

Lastly, the parents' level of education, gender, and age were considered as the covariates in the study, with their potential confounding effects controlled for during analysis.

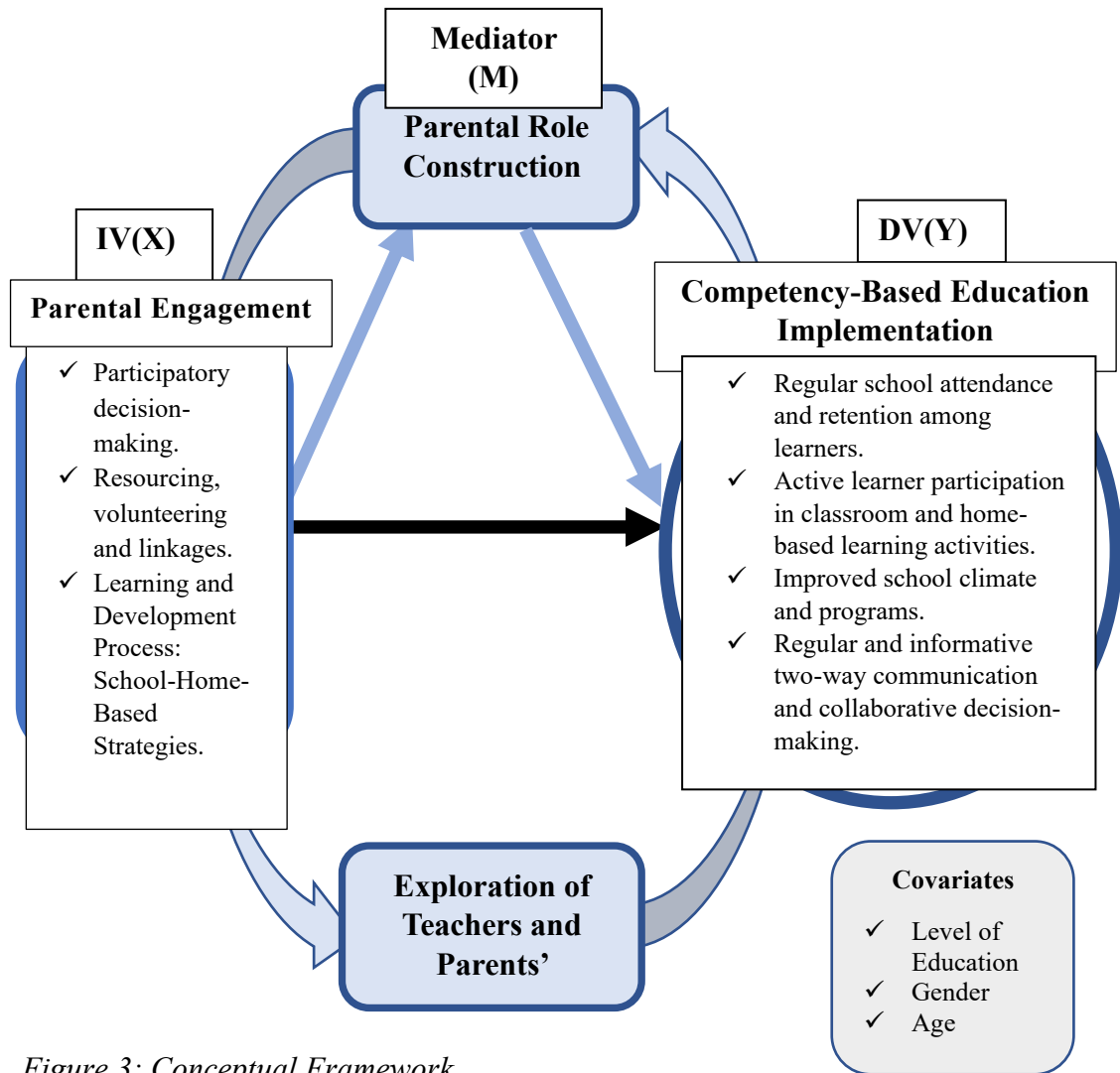


Figure 3: Conceptual Framework.

Source: Hayes (2018) Model 4 with modifications by Researcher (2024)

1.15 Operational Definition of Key Terms

Competency-Based Education, as used in this study, is an educational framework that prioritizes the development of specific competencies, knowledge, skills, and attitudes over the mere acquisition of content. It emphasizes learner-centered approaches where students apply what they learn to real-life contexts, fostering problem-solving and practical application skills.

CBE Implementation: operationalized as the process through which the CBC is adopted and executed in the classroom, including teaching practices, resource allocation, and policy adherence.

Parental Engagement- involves the provision of activities and opportunities that foster positive parent-teacher and parent-learner connections, thereby enhancing learners' competencies. In this study, engagement is seen as doing with, and argued that in that sense engagement could play a more effective role in the formulation of meaningful collaborative partnerships among parents and schools for effective implementation of the CBC.

Parental motivational beliefs: In this context, it refers to factors that influence parents' basic involvement decisions, as primarily influenced by what they believe they should and can do in the context of their child's education. These beliefs were reflected by two constructs: parental role construction for involvement and parental self-efficacy for helping the child succeed in school.

Parental role construction: Parent role construction as a construct in this study illustrates the psychological and socio-economic processes and contexts that parents navigate in deciding when, how, and at what level of engagement they will maintain as part of their responsibility in their child's education and holistic development.

Participatory Decision-Making: In this study, it refers to involving parents in formulating decisions that affect learners' overall well-being, both within and outside the school, thereby fostering parental ownership and commitment to education .

Resourcing, Volunteering, and Linkages: In this study, it refers to how parents support schools by volunteering time, providing resources, and creating useful connections with other stakeholders to improve school functioning and access to essential services.

School-Home Based Learning and Development Process: In this study, it refers to the collaborative effort of parents and teachers, both at home and in school, to support learners' holistic growth: physical, social, intellectual, emotional, moral, and spiritual. This partnership involves actively monitoring developmental milestones and providing the necessary support to help children realize their full potential.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter undertakes a review of the current academic literature on parental engagement and its influence on the Competency-Based Curriculum (CBE) implementation within Kenya. Utilizing a range of sources, including journal articles, book chapters, government reports, legal documents, and sessional papers, this review investigates theoretical frameworks and empirical research related to parental engagement in school decision-making, resource mobilization, home-based learning support, and the development of parental roles. It critically discusses the extended role of the parent under the concept of parental empowerment and engagement (PE&E), analyzing these from global and local perspectives. Furthermore, the chapter explores the formation and sustainability of collaborative partnerships among schools, parents, and learners, with a special focus on parental role construction as a mediating variable influencing engagement. Organized around the study's specific objectives, the review synthesizes current findings, identifies agreements, contradictions, and unaddressed gaps, and establishes a conceptual framework to guide the investigation. Ultimately, it aims to contextualize parental engagement within CBE implementation and inform future research and educational practices.

2.2 The Concept and Implementation of the Competency-Based Education (CBE) in Kenya.

The adoption of the Competency-Based Education (CBE) in Kenya represents a pivotal shift in the nation's educational landscape, fundamentally driven by the Vision 2030 blueprint. This national strategy aims to transform Kenya into an industrialized, middle-income economy, necessitating an education system that directly addresses labor

market needs by fostering practical skills and competencies among learners (Mulenga & Kabombwe, 2019). The Ministry of Education (MOE, 2022) further clarifies that CBE was introduced as a direct response to the limitations of the 8-4-4 education system, which, after more than three decades, was deemed insufficient in preparing learners for the demands of the 21st century.

Essentially, the Competency-Based Education (CBE), represents a pedagogical approach aimed at fostering self-reliant learners capable of utilizing their learned abilities and aptitudes in practical situations and real-world contexts (Ashioya et al., 2020). It emphasizes active learner involvement (Kenya, Vision 2030) and aligns with global educational trends, mirroring similar reforms implemented in other African nations such as South Africa, Rwanda, Zambia, and Tanzania (Karani, Miriam, & Mironga, 2021; Masika, 2020). The implementation of CBE is inherently linked to the broader national goal of providing free primary and secondary education, as well as vocational training, to equip Kenyans with essential skills for economic development (Akala, 2021). It is posited that CBE will not only enhance the competitiveness of Kenyan students in national and global markets but also foster innovation and facilitate the acquisition of crucial 21st-century skills (KICD, 2019). This continuous curriculum review process is vital for any education system to keep pace with dynamic economic, social, and technological advancements (Momanyi & Rop, 2020).

The conceptualization of Kenya's CBE stems from the National Educational Needs Assessment Report I of 2009. Its phased rollout began in 2017, introducing a new 2-6-6-3 education structure (Masika, 2020). The curriculum is underpinned by seven core competencies: communication and collaboration, critical thinking and problem-solving, creativity and imagination, citizenship, learning to learn, self-efficacy, and digital literacy. These competencies are designed to empower every Kenyan student to

become a productive citizen (Basic Education Curriculum Framework, 2017). The curriculum aims to impart knowledge while developing essential skills for the technological era, enabling graduates to compete effectively in the job market and drive societal change (Wambua, 2019; Masika, 2020). Distinctively, the Kenyan CBE emphasizes nurturing students' critical thinking, passions, and talents (Cheptoo & Ramsden, 2020), valuing and addressing the diverse needs and interests of learners through collaborative efforts between schools and parents (Masika, 2020).

A key shift under CBE is in learner assessment. The curriculum moves away from an exam-oriented approach towards competency-based assessments (Amutabi, 2019). Learners' skills are continuously measured, with assessments in English activities, Mathematics activities, and Integrated Learning Areas supervised by the grade teacher and uploaded to the KNEC portal (Basic Education Curriculum Framework, 2017). This ongoing assessment system replaces the traditional Kenya Certificate of Primary Education (KCPE) exam with five national assessments in primary school, and the Kenya Certificate of Secondary Education (KCSE) exam with eight national assessments in junior and senior high school (Basic Education Curriculum Framework, 2017). However, challenges in assessment conceptualization and realization are not unique to Kenya; similar issues have been observed in other CBE-implementing countries like Zambia (Mulenga & Kabombwe, 2019; Momanyi & Rop, 2019).

Despite its ambitious goals, the implementation of CBE in Kenya has encountered significant hurdles, primarily concerning teacher preparedness, resource allocation, and stakeholder involvement. Early Childhood Development Education (ECDE) centers, the initial point of contact for learners in the new 2-6-6-3 structure, were ill-prepared for CBE, lacking guiding frameworks and sufficient learning materials (Kaviti, 2018; Kilile, Mwalw'a & Nduku, 2019). Research consistently indicates that teachers'

knowledge of CBE is often vague, and they are inadequately prepared to teach and evaluate the new curriculum (Momanyi & Rop, 2020; Koskei & Chepchumba, 2020). Waweru (2018) highlighted teachers' complaints regarding a lack of knowledge on designing essential CBE worksheets and the increased workload from lesson planning, which encroaches on instructional time (Koskei & Chepchumba, 2020). This unpreparedness hinders teachers from fully adopting the new pedagogies central to CBE (Momanyi & Rop, 2019). Therefore, ongoing and comprehensive training through institutions like the Kenya Institute for Curriculum Development (KICD) is crucial to adequately equip teachers in pedagogy, assessment, and document preparation (Momanyi & Rop, 2020; Koskei & Chepchumba, 2020).

Beyond training, under-resourcing and a shortage of quality teaching materials in most schools further complicate implementation (Mutisya, 2019). There is an urgent call for the national government to provide necessary resources, including technological tools, to improve pedagogical practices and access to online resources, thereby mitigating under-achievement stemming from poor learning environments (Mutisya, 2019). Moreover, experience from other CBE-implementing countries shows that teachers may lack a thorough understanding of curriculum requirements, leading to competencies being reduced to mere checklists rather than holistic development (Mulenga & Kabombwe, 2019). Kaviti (2018) also criticizes the hurried implementation of CBC, questioning whether it adequately addressed the gaps of the previous 8-4-4 system given these persistent challenges.

Crucially, the lack of sufficient teacher involvement in the crafting and initial implementation of CBE has fostered reluctance among some educators (Ngwacho, 2019). Despite being the primary implementers, teachers often felt excluded from the decision-making processes regarding CBE's adoption, planning, needs assessments,

and evaluation. This exclusion has resulted in implementation hitches as teachers do not feel a sense of ownership, which is vital for any successful educational reform (Ngwacho, 2019; Simões, Santos, Lebre, Daniel, Branquinho, Gaspar, & Matos, 2021). Effective curriculum development is a continuous, dynamic process that demands broad stakeholder involvement at all stages to ensure its relevance, adaptability, and long-term success (Khan & Law, 2015; Simões et al., 2021)).

In the Kenyan context, the implementation of CBE inherently involves a broad spectrum of stakeholders, including parents, teachers, learners, and governmental and non-governmental actors (Gedi & Kamai, 2023; KICD, 2019). While the Cabinet Secretary for Education provides central leadership, education officers and school heads are specifically tasked with supporting parents to assume co-teaching responsibilities and actively participate in their children's learning (Sifuna & Obonyo, 2019). A distinguishing aspect of the CBE model is its explicit focus on parental engagement and empowerment as essential components for successful implementation (Njeru & Kirimi, 2023). This expanded role requires not only informing parents about the curriculum's structure and expectations but also equipping them with digital literacy skills and fostering positive attitudes to support home-based learning (KICD, 2019; MOE, 2022). Parents, serving as their children's initial educators, are tasked with mentoring, guiding, and fostering significant learning opportunities. Nevertheless, this pivotal change prompts a crucial inquiry from the Ministry of Education and other concerned parties: Are parents in Kenya sufficiently equipped to assume this broadened responsibility in the implementation of the CBE? (Republic of Kenya, 2018). Addressing this concern is vital to realizing the curriculum's goals of holistic, inclusive, and competency-driven education.

2.3 Parental Empowerment and Engagement as a Guiding Principle of CBE Implementation in Kenya

The Competency-Based Education (CBE) in Kenya fundamentally recognizes parental empowerment and engagement as an indispensable guiding principle (KICD, 2019; Njeru & Kirimi, 2023). This emphasis stems from a profound recognition: parents are not merely peripheral supporters but essential stakeholders whose active involvement profoundly shapes learning outcomes. As co-educators, parents share responsibility with schools for cultivating supportive, motivating, and resourceful environments where learners can genuinely thrive (Ondimu, 2018).

The CBE framework proactively encourages schools to empower parents and facilitate their active involvement across all stages and levels of basic education, from Early Childhood Development Education (ECDE) to Junior Secondary. This crucial engagement extends beyond traditional school attendance or meetings to encompass collaborative roles in decision-making, resource provision, monitoring learning progress, and supporting holistic child development (KICD, 2019). Understanding how parents interpret and fulfill these expanded roles is therefore critical to the successful implementation of CBE. The following discussion delves into the concept of parental empowerment, its interpretation within the CBE policy, and its foundational role in fostering effective parental engagement.

2.3.1 Parental Empowerment

According to the Kenya Institute for Curriculum Development (KICD, 2019), empowerment signifies the enhancement of an individual's or group's knowledge, skills, attitudes, and practices toward achieving a shared goal, fostering greater confidence and capability in fulfilling responsibilities. Within the educational context of CBE, parental empowerment is precisely the process of strengthening parents' capacity to

actively support and nurture their children's learning both within and beyond the school environment.

The CBE framework notably champions the application of adult learning principles, andragogy, to effectively engage parents. This approach respects the unique characteristics of adult learners, seeking to heighten their awareness through targeted advocacy, dialogue, and training. By deepening parents' understanding of their roles and responsibilities in the learning process, these empowerment strategies aim to build the competencies essential for supporting holistic learner development within a safe and supportive environment (KICD, 2019). The curriculum policy distinctly outlines three key strategies for operationalizing parental empowerment: training, advocacy, and resourcing. These pillars are designed to equip parents with the necessary tools, knowledge, and confidence to become proactive partners in their children's education.

2.3.1.1 Training

Training within the CBE framework refers to a structured process designed to enhance the knowledge, attitudes, and skills of individuals including parents, teachers, and other school stakeholders to improve performance and achieve shared educational goals (KICD, 2019). As a cornerstone of parental empowerment, training is pivotal for equipping all parties with the competencies required to support learners' holistic development.

To ensure the effectiveness of this approach, the CBE policy specifies several targeted training activities. These include orienting Boards of Management (BoM) and school management on the vital importance of parental engagement and their roles in implementing CBE guidelines. Additionally, parental associations are to receive training in facilitation skills for engagement and empowerment at both school and

county levels. The policy also recommends direct training for parents on their specific roles and responsibilities in supporting their children's learning and boosting desired outcomes. Complementary to this, teachers and support staff are to be sensitized on the critical need for robust teacher-parent partnerships to enhance learning attainment (KICD, 2019).

2.3.1.2 Advocacy

Advocacy, as a strategy for parental empowerment, centers on supporting parents to champion safe, inclusive, and supportive learning environments within schools. Its overarching aim is to foster systemic awareness and mobilization regarding the profound value of parental involvement in education. According to KICD (2019), expected outcomes from advocacy initiatives are multifaceted: increased parental awareness of participation's importance, improved learner enrollment, retention, and transition rates, expanded resource bases for learning, stronger pro-education family support systems, and enhanced communication among all stakeholders.

To realize these outcomes, the CBE policy recommends a range of school and community-based activities. These include establishing advocacy committees to address education-related issues at the school level and mobilizing parent associations to lobby for resources from relevant stakeholders in support of school improvement plans. Parents are also encouraged to engage with government agencies to advocate for pro-family legislation and policy reforms that enhance educational access and equity. Further strategies involve organizing parental empowerment and engagement conferences at local, county, and national levels to bolster collaboration among key stakeholders. Additionally, schools are encouraged to establish dedicated communication offices or centers to facilitate regular stakeholder engagement, feedback collection, and dialogue concerning CBE implementation (KICD, 2019).

Through these comprehensive advocacy efforts, parents are not only equipped to directly support their children but also empowered to influence the broader structural and policy environments that shape educational outcomes.

2.3.1.3 Resourcing

Resourcing refers to the processes and actions geared towards ensuring the availability of essential facilities, materials, finances, human resources, and other assets vital for effective teaching and learning (KICD, 2019). Within the CBE framework, this strategy specifically seeks to augment parental involvement in resource mobilization, thereby expanding the resource base at the school level and promoting transparency and accountability in the utilization of school resources.

The CBE implementation guidelines propose several key activities to achieve these outcomes. These include mobilizing communities to pool resources for shared use within learning institutions and conducting thorough resource gap analyses to inform the development of practical action plans. Moreover, schools are encouraged to forge robust linkages, partnerships, and referral systems to access external support when necessary. To ensure efficiency and accountability in this process, the framework strongly emphasizes the continuous monitoring of resource utilization and management within the school community (KICD, 2019). Through such collaborative efforts, parents and communities are positioned not only as contributors to the educational process but also as active, invested partners in cultivating sustainable, well-resourced learning environments.

2.4 Parental Engagement in the Competency-Based Curriculum (CBC)

2.4.1 Conceptualizing Parental Engagement: Definitions and Benefits

Promoting parental engagement in children's education has become a paramount goal for policymakers and educators globally (Yamamoto, Holloway & Suzuki, 2016). This emphasis stems from the understanding that parental involvement directly influences children's holistic development (Berk & Meyers, 2016) and serves as a vital bridge between the home and school environments (Echaune, Ndiku & Sang, 2015).

Various definitions consistently underscore the collaborative and reciprocal nature of parental engagement. The Early Childhood National Centers (2018) characterize it as a process where schools, parents/caregivers, and learners collaboratively work towards shared goals, emphasizing mutual accountability. Gonzalez-Mena (2011) describes it as a combination of parental commitment and active involvement in assisting both the educational institution and the child. Fundamentally, engagement entails acknowledging parents as active collaborators in their children's schooling, ensuring they are kept abreast of school-related experiences, and offering avenues for significant interaction (Anyikwa & Obidike, 2012).

Crucially, parental engagement distinguishes itself from mere parental involvement by emphasizing shared responsibility and ownership (Goodall & Montgomery, 2014; Emerson, Fear, Fox & Sanders, 2012). Goodall and Montgomery (2014) notably suggest viewing school-home relationships on a continuum. involvement is typically school-oriented which entails parents responding to school-initiated activities, while engagement is more parent-oriented, implying parents taking greater responsibility and feeling more ownership of their child's education. This transition towards engagement signifies a shared responsibility between families, schools, and communities, where a child's learning becomes a truly collaborative endeavor (Goodall & Montgomery,

2014; Ferlazzo, 2011). Zhang (2015) further refines this, proposing that parent involvement becomes meaningful or truly engagement when it is desirable, practical, and effective, prompting parents and teachers to ask these three critical questions about participation tasks. This broader approach allows for a dynamic conceptualization of roles and relationships, fostering new and varied actions tailored to specific educational contexts (Christenson & Reschly, 2010). Hasnat (2017) reinforces this, highlighting that engagement extends beyond school-based activities, necessitating greater attention to teaching and learning within the home environment.

The benefits of robust parental engagement are extensive and empirically supported. Research consistently demonstrates a positive association between parental engagement and academic achievement (Pérez Sánchez, Betancort Montesinos & Cabrera Rodríguez, 2013; Tárraga García, García Fernández, & Ruiz-Gallardo, 2018), including improved children's self-esteem (Garbacz, Herman, Thompson, & Reinke, 2017), school retention and attendance (Ross, 2016), and positive school attachment and climate (Haboush & Alyan, 2015). Beyond academics, parental engagement contributes to parents' personal growth, including leadership skill development and parenting satisfaction, while simultaneously strengthening family connections and improving school climate and programs (Hindin & Mueller, 2016). Ultimately, it fosters a lifelong love of learning (Waterford.Org, 2018). Engaged parents actively monitor their children's academic performance and study behavior (Harwood, Knight, Thrower, & Berrow, 2019), communicate frequently to identify problems promptly, and provide materials and learning activities that support academic and holistic development (Benner et al., 2016). Yang, Chen, Wang, Li, Zhang, and Huang (2023) effectively summarize parental engagement as parents' expectations and behaviors that promote children's academic achievement and psychological well-being.

2.4.2 Global Perspectives on Parental Engagement: School-Family Collaborative Partnerships.

The recognition of the importance of school-family collaboration is not new and spans diverse international contexts, often codified in policy and practice. Historically, legislations supporting parental involvement in education date back to as early as 1642 in the Massachusetts colony, which mandated parental engagement to address poor performance (Pulliam & Patten, 2007). European findings similarly indicate that parental collaboration with teachers is crucial for children's school success, with parents actively embracing their roles as co-educators (Ule, Zivoder & du Bois-Reymond, 2015).

Despite this global recognition, significant challenges in fostering effective collaborations persist. In the United States, national goals have called for increased parent engagement since 1994, yet teacher education programs have largely failed to adequately prepare pre-service teachers to communicate effectively with communities and parents (Dotger, 2010). This gap means that while teachers have frequent access to the public, they often lack the training to serve as effective advocates and communicators for school-community partnerships (Gisewhite, Jeanfreau & Holden, 2019). Similarly, in Australia, while various frameworks and initiatives like the Family-School Partnerships Framework (Department of Education, Employment and Workplace Relations, Australia, 2017) and the Parent and Community Engagement Framework in Queensland (Department of Education (DoE), 2018) aim to develop effective communication and quality partnerships, these often arose from identified needs, such as better collaboration with parents of students with disabilities (Deloitte Access Economics, 2017).

Other countries also highlight both policy emphasis and practical shortcomings. The Netherlands and Norway have increasingly encouraged and institutionalized teacher-parent collaboration in educational policy due to growing evidence of its benefits (Neuenschwander, 2020; Baeck, 2015). However, in China, parents often lack sufficient sensitization on how to contribute to curriculum development and implementation, frequently being expected to conform to top-down decisions without their concerns being addressed (Kong & Wang, 2021; Simões et al., 2021). A qualitative study in Hong Kong revealed that despite policy recognition, "micro-politics" among parents, teachers, and principals, coupled with teacher bias in encouraging participation, led to a lack of mutual trust and distanced parental involvement (Ng & Yuen, 2015). This study concluded that meaningful parental involvement requires addressing teacher attitudes, viewing parents as resources, and integrating parents into school governance through adequate training for all stakeholders. In South Africa, while parental involvement is legally legitimized by the South African Schools Act, a phenomenological study found a disconnect: the true meaning of parental involvement was often not understood, and partnerships were not meaningful, with parents primarily reacting to school-initiated activities rather than proactively engaging (Xaba, 2015). Barriers included a lack of clear guidelines and knowledge on active engagement. Even in Tanzania, challenges related to teacher preparedness and involvement in curriculum formulation hindered effective implementation of CBE (Makunja, 2016). In Rwanda, despite parents' moderate efforts to be involved, vulnerable families faced overwhelming challenges, underscoring the need for schools to identify and mitigate barriers to involvement and sensitize parents on their roles (Tabaro & Uwamahoro, 2020). These global insights demonstrate that while the imperative for school-family

partnerships is widely accepted, their effective realization depends heavily on contextual factors, clear policy, adequate training, and mutual understanding.

2.4.3 Parental Engagement in the Kenyan CBE Context

In the Kenyan context, specifically concerning the CBE, parental engagement is defined by the KICD (2019) as the active participation of parents as co-educators in their children's learning and holistic development, in genuine collaboration with teachers, learners, and other stakeholders. The Ministry of Education (2019) reiterates that parental empowerment and engagement are paramount for the holistic development of the learner, encompassing cognitive, social, spiritual, and emotional dimensions (de Oliveira Lima & Kuusisto, 2020). KICD (2019) has developed clear guidelines stipulating the roles of various stakeholders, including parents, in CBE implementation. Parents' key roles are highlighted as: providing basic needs, actively engaging in school activities, serving as role models, and fostering a conducive home learning environment (KICD, 2019).

Mwarari et al. (2020) further emphasize that under CBE, parental obligation as co-educators are central to children's learning activities. This co-parenting role extends to providing necessities, instilling moral values, teaching responsible resource use, and collaborating with teachers to intensify learners' achievements. Parents are also expected to liaise with teachers to perfect the child's learning experience, identify any signs of disability for early intervention, recognize learners' natural talents, and actively participate in school planning, decision-making, and activity development (KICD, 2019; Mwarari et al., 2020). Moreover, parents are required to provide necessary aids and materials for practical activities, collect and submit evidence of children's completed tasks (Njeru & Kirimi, 2023), and ensure accurate biodata capture in the Kenya Early Years Assessment (KEYA) database. This demonstrates that the nurturing

and competency-building, which are at the heart of CBE, are significantly reliant on parents.

While the critical role of parental engagement is acknowledged, challenges persist in Kenya. Mogambi (2017) and Mwarari et al. (2020) identified a continuous lack of parental knowledge in talent identification. Furthermore, some parents expressed that it is not their responsibility to complement and complete a teacher's work outside the classroom (Njeru and Kirimi, 2017), signaling a resistance to the expanded co-educator role. The traditional dynamic, where the teacher was the sole authority, is no longer viable with CBE, necessitating a shift towards greater parental participation (KICD, 2019). Effective communication channels between educators and parents are crucial for this shift, ensuring parents are regularly informed through newsletters and performance reports (KICD, 2019).

To enhance parental involvement in CBE implementation, the government is advised to conduct widespread sensitization campaigns through media and community forums to inform parents about their new roles (Owala, 2021). This will foster collaboration and encourage parents to embrace their co-educator responsibilities. Individual schools can also host Parents' Day meetings to directly communicate the benefits of CBE and outline parents' essential roles in their children's educational success. Ultimately, the successful implementation of CBE necessitates the empowerment and capacity building of all stakeholders including parents, teachers, Boards of Management, school management, and the wider community, to foster active parental involvement in nurturing learners' potential both within and outside school (KICD, 2019).

Building on this foundational understanding, parental engagement under CBC is strategically enhanced through specific avenues: participatory decision-making,

communication and collaboration, school-home-based learning and development, and resourcing, volunteering, and linkages.

2.4.4 Avenues of Parental Engagement in CBE.

The KICD (2019) guidelines delineate specific avenues through which parental engagement is operationalized to support the CBE's goals. These strategic areas are designed to ensure holistic involvement and shared responsibility.

2.4.4.1 Participatory Decision-Making

Parents are expected to be actively involved in the formulation of decisions affecting their children's overall well-being, both within and outside the school environment. This involvement is intended to foster enhanced parental participation and a greater sense of ownership over decisions concerning their children's education (KICD, 2019).

Key activities facilitating participatory decision-making include parents' engagement in Boards of Management (BoM) and Parent Association (PA) forums, attending meetings, offering their candidature for leadership roles, voting, and contributing ideas for school development. Parents are encouraged to participate in discussions concerning their children's observed behavior, which is crucial for identifying natural abilities, academic capabilities, and guiding career choices. Furthermore, parental participation extends to monitoring children's growth and development, identifying learning difficulties or disabilities, and proactively contributing to decisions regarding their children's general well-being in and out of school (KICD, 2019).

2.4.4.2 Communication and Collaboration

Communication refers to open discussions between parent and child on academic and non-academic matters, alongside a clear display of parents' interest in a child's general and academic well-being (OECD, 2012). As emphasized by Manzon, Miller, Hong, and

Khong (2015), this form of communication is vital for parents to stay informed about their children's progress and adjust their support accordingly. Effective communication methods can range from face-to-face interactions and intensive individual coaching (Sheridan, Knoche, Kupzyk, Edwards, & Marvin, 2011; Landry, Smith, Swank, Zucker, Crawford, & Solari, 2012) to regular parenting groups (Mendez, 2010).

Timely and effective communication enables parents to collaborate with the school, leading to improved child well-being. Parents should be regularly updated and given opportunities to provide feedback on learning and broader educational issues. This fosters mutual understanding and prompt action, contributing to better performance and the learner's overall well-being (KICD, 2019). KICD (2019) specifically outlines activities to enhance communication and collaboration: teacher-parent collaboration to develop individualized action plans for learners, prompt and coordinated action on issues like discipline or emerging concerns (e.g., illnesses), peaceful resolution of conflicts, and timely sharing of Ministry of Education and school calendars to encourage parental involvement. Parents are also expected to engage with their children on school assignments, including homework and projects.

2.4.4.3 School-Home Based Learning and Development Process

Quality learning under CBE aims to facilitate holistic growth and development, encompassing physical, social, intellectual, emotional, moral, and spiritual dimensions (KICD, 2019). Parents are therefore expected to be actively involved in monitoring and supporting their children through these developmental milestones. For example, adolescents require continuous parental love and support throughout their schooling. Parents are tasked with creating enabling home environments that nurture values and develop character in their children. Enhanced parental engagement, in partnership with

teachers, in the child's developmental and learning process is critical for realizing their full potential.

To achieve desired outcomes in the development and learning process, KICD (2019) outlines specific activities: introducing and nurturing values to facilitate moral and social development; involving children in play and age-appropriate chores for their physical, intellectual, spiritual, social, and emotional development; and actively participating in school activities and meetings such as academic clinics, music and drama festivals, symposiums, and sports. Parents are also encouraged to take children to places of worship and promote sharing of learned experiences with teachers, alongside providing continuous moral and spiritual guidance. Teachers and parents share the responsibility for providing sufficient resources and a conducive environment that allows children to develop, learn, acquire life skills and self-skills appropriate for their age, and participate in secure, age-suitable family and community activities that foster learning (KICD, 2019).

2.4.4.4 Resourcing, Volunteering, and Linkages

Schools require various types of resources: human, physical, and financial, to function effectively (KICD, 2019). Parents are identified as a vital resource that schools should leverage to improve the well-being of the school community. They can support school activities and development through volunteerism, provision of personal resources, and fostering relevant linkages and networking for the school. The expected outcome is cost-effective access to goods and services through enhanced connections with parents and other service/resource providers.

To attain these results, KICD (2019) proposes multiple strategies: involving parents in the identification, assessment, and prioritization of school resource requirements,

encompassing both monetary and non-monetary contributions; promoting and enabling children's suitable volunteer participation in organized school activities; offering parents avenues to offer their services and resources to schools; establishing beneficial connections with pertinent governmental and non-governmental bodies for external resource acquisition; engaging in fundraising initiatives to enhance school infrastructure and services; and supplying children with basic classroom aids or materials upon teacher request.

While several studies conducted in Kenya have highlighted the critical role of parental involvement in children's education (Kibaara & Ndirangu, 2014; Koskei, 2014; Njeru, 2015; Wanyera, 2014), these were based on the former 8-4-4 education system. Since the CBC's introduction and the subsequent development of parental empowerment guidelines in 2019 (KICD, 2019), there is a notable lack of empirical research examining parental involvement under this new curriculum framework, indicating a pressing need to investigate the current status of guideline implementation.

This study addresses that gap by exploring how parents and teachers perceive and experience their collaborative roles in CBE implementation. In doing so, it highlights the need to strengthen the tripartite relationship between teachers, learners, and parents as a foundation for the successful rollout of competency-based education in Kenya.

2.5 Parental Role Construction as the Mediator

Parental role construction describes the convictions parents hold regarding their responsibilities concerning their child's education (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). As cited by Hill (2022), Hoover-Dempsey and Sandler (1997) define this concept as parents' perceptions of their appropriate involvement in their children's schooling, which frequently dictates the methods and timing of their

participation. Within the framework of parental engagement, this term denotes parents' beliefs about their activity roles, specifically, their perceived obligations concerning their children's learning (Langputeh, Embong & Mansor, 2023).

Parental role construction has been significantly correlated with both school-based engagement and cognitive engagement between parents and children (Yamamoto, Holloway & Suzuki, 2016). Parental role construction is also linked with higher teacher ratings of students' adaptive abilities in school and lower ratings of problematic student behaviours (Kim, Sheridan, Kwon, & Koziol, 2013). However, as Langputeh et al. (2023) observed, parents who embrace a proactive role construction tend to be more engaged in their children's educational journey compared to those with less active role perceptions. This stems from the premise that parents must first believe in their obligation to participate in their children's education before they will opt to become involved.

Parental role construction is further seen as the activity parents consider important to undertake on behalf of their children and function as a key factor in parents' motivation to be involved in their children's education (Gonzalez-DeHass et al., 2022). Further, as noted by Gonzalez-DeHass (2022), in the parental engagement process, parents' choices and decisions to action are based on several constructs drawn from their own ideas and experiences as well as on other constructs growing out of environmental demands and opportunities. Parents' constructions of their role may also vary across cultural and socio-economic groups, where some families may see their role primarily in supporting children's learning while at home (Whitaker & Hoover-Dempsey, 2013). Parents may be more likely to become involved at home when they perceive that their home-based involvement is meaningful and will have beneficial outcomes for student learning (Williams & Williams, 2021).

Integral to the definition of parental role construction, is the concept of agency and how parents evaluate their resources to determine when and how they can participate. The intensity in the level of engagement is often guided by how parents view their role in supporting their children's academic endeavors. How much parents communicate with teachers or how frequently parents visit schools or assist with homework are some parental engagement behaviors that are largely driven by parent's role construction (Williams-Johnson & Gonzalez-DeHass, 2022).

Role construction for parents can also extend beyond the schooling years for their children. As an identity concept, the behaviors of parenting are consistently evolving throughout an individual's lifetime (Hill et al., 2018). However, unlike other identity formation roles, parental role construction is not solely based on personal growth because it also evolves as the child grows and develops. Parents continue to be largely influential in their children's major life decisions concerning employment and family decisions (Williams-Johnson & Gonzalez-DeHass, 2022). Specific to their children's academic pursuits, parents begin their journey by academically socializing their child's development and crafting parental roles that would lead toward later self-sufficiency (Hill et al. 2018).

Teachers seek to develop strong connections and partnerships between home and school and expect parents' cooperation and support in classrooms and the school as a way of community building and enhancing children's education (Smith & Sheridan, 2019).

According to Yamamoto, Li and Bempechat (2022), School-based engagement in the U.S. generally represents practices on the part of parents that require their making actual contact with schools. These practices include parent participation in events, attendance at parent-teacher meetings, taking initiative to communicate with teachers, volunteering at school, and engaging in parent-teacher organizations (PTOs) and school decision-

making processes (Epstein & Sanders, 2002; Hoover-Dempsey et al., 2005). Research has also captured processes of parental advocacy directed at teachers and schools, through which they advocate and intervene in their children's educational processes (Yamamoto et al., 2022). Several analyses demonstrate that school-based engagement is less common among Chinese immigrant or Chinese American parents than European American. However, in-depth, within-group research reveals that Chinese immigrant parents do engage in several domains of school-based involvement, suggesting the importance of examining more nuanced dimensions of their school-based engagement.

Chinese immigrant parents tend to exhibit a keen sense of responsibility to assist and guide their children's education, regardless of their social economic status hence their beliefs support the notion of active role construction (Yamamoto et al. 2021). Chinese culture often emphasizes parents as rightful authority figures by highlighting their responsibilities and duties for intellectual, social, and moral teaching (Yamamoto et al., 2021). Parents are believed to be especially indispensable in children's learning and education.

In general, children's academic achievement brings high honor to their families, extended kin, and community (Ng & Wei, 2020). Therefore, guiding children 'learning and training them, especially in the domain of academic development, is considered a parental duty and responsibility (Ng & Wei, 2020; Yamamoto et al., 2016). These beliefs charge parents to be involved in their children's education and to dedicate themselves to the process, sometimes by sacrificing their own needs (Ng & Wei, 2020). Importantly, studies demonstrate that Chinese parents' intensive home-based involvement is an expression of care and support.

However, a predominant Chinese view also emphasizes teachers as educational experts, hence they tend to respect teachers for their wisdom, experiences, and moral guidance

and believe that teachers should direct instruction at school (Kim, 2019). They tend to consider that supporting and following teachers' and schools' decisions is a way of building trustful relationships with teachers. Chinese and Chinese immigrant parents also tend to believe that schools and families hold distinct roles with a clear boundary between the two (Zhou & Zhong, 2018). Given the belief that schools are primarily responsible for children's education while children are at school, parents tend to leave school-related decisions to teachers and schools (Zhou & Zhong, 2018). Studies reveal the common view shared by Chinese immigrant families, especially low-SES families: it is the school's responsibility to make decisions on school-related issues (Zhou & Zhong, 2018).

Thus, it is a misnomer to characterize Chinese immigrant parents as passive in their role. By respecting the boundary between home and school, parents may actively choose not to interfere with school operations unless teachers invite them. Instead, parents usually respond to institutional needs cooperatively by supporting their children's education at home (Kim, 2019).

In summary, the review by Yamamoto, Li and Bempechat (2022) on Chinese immigrant parents' school-based and home-based engagement in their children's education in the USA, suggested the importance of examining variations within immigrant and ethnic minority groups. In studies examining the role of SES in parental involvement, disadvantages such as limited resources, social capital, and skills that hinder lower-SES parents' involvement have been highlighted (Qin & Han, 2014). Given that family social economic status has been found to play a weaker role in the achievement of Asian American students (Li, Sun, Wang, Li, Ding, & Xie, 2023), investigating low-SES families could yield further valuable insight into parental engagement.

According to Park and Holloway (2018), previous research on parental engagement has emphasized the notion that parents' beliefs about what they can and should do for their children is shaped by external factors including messages from the school. According to theoretical formulations in this area, role-related expectations are communicated by those with social status to those with less power, thus creating a system of norms that guide behavior (Park & Holloway, 2018). Indeed, empirical evidence confirms that parents pick up cues from the school which guide their choices about how to become involved in their children's schooling (Kim et al., 2013).

However, it is also crucial to recognize the agency of parents in this role construction process. Far from being passive receptacles of messages from the school, parents also evaluate their own resources in order to identify how and when to become involved (Hoover-Dempsey & Sandler, 1997). Parents construct their own involvement strategy based on these perceptions and judgments as they engage in transactions over time with school staff. While empirical verification has been obtained of the relation between messages from the school and parental engagement, the mediating role of parent role construction has rarely been tested. In one of the few tests of this notion, a recent empirical study demonstrated that parental perceptions of school expectations for involvement and school climate predicted parental role beliefs about their own involvement at home and school at the elementary school level (Whitaker & Hoover-Dempsey, 2013).

An examination of parenting role construction among marginalized racial groups suggests that additional factors in parents' decision-making are currently excluded in psychological models (Roberts, Rosborough, Freire, & Wimmer, 2024). Role-constructing processes for parents of marginalized groups are routinely balanced advocacy for their child's uniqueness and battling conformity as they assertively act to

address school interactions. Marchand, Vassar, Diemer, and Rowley (2019) identified the process of critical action among parents to move beyond words and exchanges within schools and actively engage in activities that illustrate agency to combat marginalization and discrimination.

Having established the theoretical and conceptual foundations of parental empowerment, parental engagement, and the mediating role of parental role construction, the following section critically reviews existing empirical literature. This review synthesizes findings from various studies that have investigated these constructs and their relationships, particularly within the context of curriculum implementation and educational outcomes.

2.6 Empirical Review of Parental Engagement, Parental Role Construction, and Competency-Based Education Implementation.

2.6.1 Parental Engagement in Education and Competency-Based Education (CBE) Implementation.

Parental engagement is a multifaceted construct, encompassing various forms of involvement that significantly influence children's educational experiences and the successful implementation of educational reforms like the Competency-Based Education (CBE). This section synthesizes empirical studies examining parental engagement through the lens of participatory decision-making, resourcing and volunteering, and home-based learning, particularly as they relate to educational outcomes and curriculum implementation in contexts relevant to Kenya's educational landscape:

2.6.1.1 Parental Engagement in Participatory Decision-Making.

Empirical findings on parental engagement in participatory decision-making highlight its critical role in fostering shared ownership and influencing educational responsiveness, particularly for curriculum reforms like the CBE. Studies consistently indicate that when parents are genuinely involved in decisions, it can lead to more tailored and effective educational strategies. However, robust participation necessitates both effective communication channels and structured opportunities, which are often lacking.

Makena (2023) investigated participatory communication in CBE reforms in private schools in Kasarani Sub-County, Kenya, finding that while some efforts were made, overall participation remained low due to inconsistent communication, limited stakeholder training, and a lack of accountability. Similarly, Dingili and Yungungu (2023) in Vihiga County, Kenya, revealed communication breakdowns between teachers and parents in CBE implementation. Despite various channels including SMS, WhatsApp, and face-to-face communication, their independent operation led to inefficiency, hindering parental involvement in collaborative decision-making. Teachers expressed frustration over unacknowledged messages, while parents cited unclear or delayed school communication, underscoring systemic barriers.

Moreover, several studies reveal that parental involvement in school governance and strategic curriculum decisions often falls short of robust participation, especially within the context of a new curriculum. Wairimu (2020) in Lang'ata Sub County, Nairobi, found that while public primary schools had Parent Associations, independent advocacy groups or sufficient networks to link families with parents' representatives were often absent. This limited parents' collective voice in decision-making, including those related to CBE implementation. Similarly, Adhiambo (2020) in Nairobi highlighted that

parents had no clear vision of the role they should play in CBE implementation beyond financial obligations, implying a lack of inclusion in the decision-making process that shaped these roles.

Nyamai (2021) conceptually emphasized the importance of parents as key stakeholders in curriculum development for responsive and democratic educational programs, noting that parents contribute critical contextual knowledge and support. However, this study also identified significant hurdles, particularly a lack of sensitization, awareness, and structural mechanisms for parental involvement, which prevent effective participation in curriculum design and implementation decisions. Zhu, Cheong, Wang, and Tong (2023), while focused on parenting styles in China, also noted that parents are often not adequately sensitized on how they can contribute to curriculum development and implementation, and are instead expected to conform to top-down decisions made by policymakers. These findings collectively suggest that while the CBE theoretically expanded parents' roles, practical mechanisms for their meaningful inclusion in school and curriculum-related decision-making often remain inadequate, limiting the potential for a truly collaborative implementation.

2.6.1.2 Parental Engagement in Resourcing, Volunteering, and Linkages.

Parental engagement through resourcing, volunteering, and establishing linkages involves the tangible contributions parents make to schools, which are particularly crucial in resource-constrained public primary school settings in Kenya for supplementing provisions and enriching CBE learning opportunities. Empirical evidence consistently shows the significance of these contributions.

The provision of essential resources by parents plays a significant, though sometimes burdensome, role in supporting educational initiatives, particularly for curricula like the

CBE that often require diverse learning materials. Adhiambo (2020) in Nairobi highlighted that CBE implementation calls for additional financial and availability stretch to the parents, including demands for technology gadgets and extra learning items, often with limited school support. This indicates a reliance on parental resourcing as a critical, albeit unplanned, component of CBE delivery. Piliyesi, Ogada, and Ochieng (2020) in Kenya similarly found that parents contribute by providing essential learning materials, recognizing their indispensable role beyond teachers in curriculum implementation. Kadau (2023) in Tanga, Tanzania, identified that many parents were unaware of their roles beyond providing school supplies, yet conflicting work schedules and economic constraints often limited even this basic form of resourcing.

Volunteering by parents, in terms of their time and effort directly contributes to the operational capacity and community spirit of schools, particularly beneficial for the hands-on nature of CBE. Jeruto, Kisilu, and Kabesa (2024), in a study on pre-primary schools in Kakamega County, Kenya, found a significant positive relationship between parental engagement in volunteering (e.g., participating in school activities, providing infrastructure support) and learners' academic performance. While this study focused on pre-primary, it provides strong evidence of the value of parental volunteerism. Magara (2023), in a baseline study across Kenya, Uganda, and Tanzania, revealed that over 65% of parents reported participation in volunteering and school development activities, although schools often lacked structured systems for mapping and integrating these community contributions. This points to a potential for greater leveraging of parental volunteerism if properly organized. Natasha (2024) in Likuyani Sub-County, Kenya, also found that parental involvement in school-based activities boosted student engagement in CBE, although time constraints and low CBE awareness limited participation.

Furthermore, the establishment of linkages, connections between the school, parents, and wider community networks, can greatly enhance the resources and opportunities available to students and support CBE implementation. The Magara (2023) study highlighted that while schools engaged community-based organizations, there were limited two-way communication and poor feedback mechanisms, suggesting that effective linkages are often not fully realized. Brown, Graves, and Burke (2022), in an urban U.S. school district, identified Community as a distinct dimension of parental participation, representing the sense of shared identity and trust among parents, which can be a valuable strategy to improve student outcomes. While not directly focused on CBE, this highlights the importance of fostering broader community connections through parental engagement to support educational goals. Overall, these studies collectively underscore that while parental resourcing and volunteering are often direct contributions, the broader impact comes from the established linkages that create a supportive ecosystem around the school, crucial for the diverse needs of CBE.

2.6.1.3 Parental Engagement in the School-Home-Based Learning and Development Process.

Parental engagement in the school-home-based learning and development process refers to the direct support and guidance parents provide to their children's learning at home, which directly complements school-based instruction and is particularly vital for the success of curricula like the CBE that emphasize practical, experiential, and inquiry-based learning.

Empirical evidence consistently demonstrates the profound effect of home-based parental involvement on children's academic outcomes and holistic development, though challenges persist, especially with new curriculum demands. Gedi and Kamau (2023) in Tarbaj Sub-County, Wajir County, Kenya, found that low involvement of

parents/guardians as co-educators translated to low success rates in the adoption of CBE model of education, emphasizing the need for interventions to empower parents in their co-educator roles. Amunga, Were, and Ashioya (2020) in Kenya revealed that parents were expected to work as co-educators and provide learning materials for CBE's practical sessions but were often reluctant to do this and viewed their children's education as entirely the responsibility of the teacher. This highlights a significant disconnect in perceived responsibilities for home-based learning under CBE. Mwenje, Githui, and Mwarari (2020) further supported this, indicating that while parents acknowledged the importance of home-school collaboration for CBE, a major challenge was their inadequate skills and knowledge to assist children with the curriculum's demands. Adhiambo (2020) also noted that parents were not prepared to handle the task they have to deal with in the new syllabus in terms of active participation in home-based assignments, which often required providing technology and other items.

Conversely, when parents are effectively engaged in home-based learning, the benefits are clear. Kim (2022), in a large meta-analysis, confirmed a consistent positive association between parental involvement (PI) and student academic achievement, noting that parental expectations and aspirations emerged as the most influential factor. While homework involvement showed mixed results, the overarching positive association indicates the general benefit of home-based support. Hill, Witherspoon, and Bartz (2018) highlighted that academic socialization, such as discussing educational goals, consistently and positively predicted both academic performance and engagement, making it a highly beneficial form of home-based involvement. However, they also cautioned that extensive home-based involvement, particularly homework help, were negatively associated with academic outcomes, possibly reflecting parental responses to academic struggles rather than proactive support.

The nature of home-based involvement, particularly concerning homework and assignments under CBE, presents specific challenges. Dingili and Yungungu (2023) conducted a study in Vihiga County, Kenya, that particularly investigated the extent of parental engagement in the take-home assignments of Grade Four learners within the CBE framework. They found that while parents engaged through supervision and resource provision, time constraints, lack of instructional resources, limited understanding of CBE, and poor communication hindered participation. Rural parents faced digital illiteracy and poor network coverage, while urban parents struggled with work-life balance. Wang and Li (2024), in a large-scale international study, differentiated between types of homework involvement, finding that asking whether children had done their homework was positively associated with academic achievement, but helping and checking were negatively related to performance. This nuanced finding suggests that autonomy-supportive behaviors, like showing interest, are more effective than direct interference, a crucial consideration for guiding parents in supporting CBEs inquiry-based assignments. Jeruto, Kisilu, and Kabesa (2024), focusing on pre-primary, found that parents who engaged in home-based support enhanced pupils' literacy, numeracy, and creative skills, directly aligning with CBE's emphasis on core competencies.

Furthermore, the broad concept of development process extends beyond academics to include values and holistic growth. Yungungu and Rodgers (2022) in Vihiga County, Kenya, found that parents played a significant role in shaping children's values through activities like assigning duties, role modeling, and moral conversations, highlighting the integration of values development within the home learning environment, which is also a component of CBC. Natasha (2024) also concluded that home-based support

improved learning outcomes, though socioeconomic challenges and lack of resources hindered effectiveness.

In conclusion, these empirical studies collectively illustrate that parental engagement across participatory decision-making, resourcing, and volunteering, and home-based learning has a substantial impact on children's educational experiences and CBE implementation. While the positive potential of involved parents is evident, particularly in academic socialization, resourcing, and home-based learning support, pervasive challenges, including communication gaps, lack of parental awareness and skills, socioeconomic constraints, and insufficient structured support from schools, often limit full engagement. For the successful implementation of the Competency-Based Education in public primary schools in Nakuru County, it is imperative to address these barriers through targeted sensitization, capacity-building programs for both parents and teachers, and the development of robust, inclusive strategies that truly empower parents as co-educators and partners in the evolving educational landscape.

2.6.2 Parental Role Construction and Engagement in Children's Education (PRC as a mediator)

Empirical studies on parental role construction in education highlight its multifaceted nature and significant impact on parental engagement and, consequently, children's educational outcomes across diverse cultural and socioeconomic contexts. The role parents construct for themselves is shaped by a variety of psychological, cultural, and contextual factors and serves as a critical determinant of their involvement in their children's education. The Hoover-Dempsey and Sandler model of parental involvement (2005) frequently guides such research, positing parental role construction as a central motivational belief that mediates the impact of other factors like invitations from school and parents' self-efficacy on actual parental engagement behaviors.

Cross-cultural comparisons reveal significant differences in parental engagement attributable to these motivational beliefs. For instance, a study by Yamamoto, Holloway, and Suzuki (2016) comparing parental engagement in Japan and the U.S. found that variations in maternal involvement could largely be explained by these three psychological factors. Specifically, 116 Japanese mothers exhibited less involvement in homework and cognitive activities compared to 121 U.S. mothers, a difference attributed to their lower sense of responsibility, lower parenting self-efficacy, and perceived limited teacher invitations. This suggests that cultural norms and school expectations play a substantial role in shaping how parents define their educational responsibilities.

Several studies in the U.S. further underscore the importance of parental role construction and related motivational factors. Sira Park and Susan Holloway (2018) investigated parental involvement in adolescents' education using a nationally representative dataset of 3,248 participants. Their findings indicated that parents became involved in response to inclusive school practices and to compensate for perceived student deficits, with economically disadvantaged parents particularly likely to engage when dissatisfied with the school. Similarly, Levine (2018), in a study of 202 parents of elementary school children in a suburban U.S. setting, revealed that parents who strongly identified as key contributors to their children's education and expressed higher confidence in their ability to support learning were more engaged in both home- and school-based activities. Reinforcing this, Brown (2016), with data from 107 parents, showed that higher parental education was linked to stronger role construction and self-efficacy, which in turn significantly predicted increased involvement in both home and school settings. Moreover, Kempen (2024), through a transcendental phenomenological study of 25 parents in a K-5 foreign language immersion program,

highlighted that while parents generally viewed their role as essential and expressed high confidence, barriers such as limited time and unfamiliarity with the foreign language could hinder their engagement.

The influence of parental role construction extends beyond Western contexts, with studies in Africa providing valuable insights. In Tanzania, Kigobe, Ghesquiere, Ngu'mbi, and Leeuwen (2018) surveyed 580 parents of Grade 2 children and found that parents' expectations for children's school success predicted home involvement, while perceived time and energy, and school and child invitations predicted school involvement. Their mediation analysis indicated that role construction indirectly influenced school involvement through child and school invitations and perceived time and energy. In Rwanda, it was observed by Tabaro and Uwamahoro (2020) that despite challenges, a significant number of parents from vulnerable families engaged at a moderate level, underscoring the need for continued support and awareness. Furthermore, Jeruto, Kisilu, and Kabesa (2024) in Kakamega County, Kenya, examined parental roles in pre-primary schools, concluding a statistically significant positive relationship between parental roles—specifically in caregiving, parent-child interaction, provision of resources, and homework supervision—and pupils' academic performance. Parental roles alone accounted for 31.8% of the variance in academic performance, highlighting their profound impact.

Qualitative research offers deeper insights into the nuances of parental role construction across diverse communities. Williams-Johnson and Gonzalez-DeHass (2022) conducted a qualitative case study with parents from culturally distinct elementary schools in South Florida. Their thematic analysis revealed that parents' sense of responsibility, school outreach efforts, and cultural expectations significantly influenced the nature and extent of their involvement, emphasizing the critical need for

culturally responsive school practices. Building on this, Hill (2022) argued that parents' understanding of their role is shaped by a complex interplay of cultural, social, and developmental factors, and that schools often overlook these diverse perspectives. Hill advocated for inclusive school policies that actively engage parents as key partners, moving beyond narrow, school-based conceptualizations of involvement to embrace a broader, family-based lens that values parents' efforts to promote lifelong learning and socioemotional growth. Similarly, Schörghofer-Queiroz (2022) explored parental engagement and identity construction among multilingual migrant families in Austria, noting that despite systemic barriers, these parents actively invest in their children's education and strive for recognition within school communities, advocating for inclusive policies that value diverse parental experiences.

Finally, the scope of parental involvement is expanding to include contemporary aspects of children's lives, particularly in the digital realm. In this context, parental role construction evolves to encompass guiding children's internet use. Gruchel, Kurock, Bonanati, and Buhl (2022) in Germany, for example, examined how parents define their involvement in children's internet activities. They found that children's perception of parental instruction was positively related to their practical and school-related internet use. Significantly, the study noted that parents' motivational factors, including how they construct their role in digital guidance, were the strongest predictors of their perceived parental instruction, emphasizing the growing need for active parental support and defined roles in fostering digital literacy

In summary, these empirical evidences consistently demonstrate that parental role construction is a dynamic and pivotal factor in parental engagement. It is influenced by a combination of internal beliefs such as self-efficacy and responsibility, external invitations from schools and children, and broader cultural and socioeconomic contexts.

The synthesis of these studies strongly suggests that fostering positive parental motivational beliefs, providing targeted support, and adopting inclusive, culturally responsive approaches to parental involvement are essential strategies for enhancing parental engagement and ultimately improving curriculum implementation and children's educational outcomes.

2.6.3 Parental Role Construction: Perceptions and Experiences of Teachers and Parents in Educational Engagement.

Exploring the perceptions and experiences of both teachers and parents is crucial for understanding the complexities of parental engagement in education, particularly in the context of curriculum implementation. Research from diverse global settings highlights common themes, including communication, trust, role definitions, and the persistent barriers that often impede effective home-school partnerships.

A significant body of literature emphasizes the critical role of communication and professional conduct from teachers in fostering parental engagement. Levinthal, Kuusisto, and Tirri (2021) conducted a qualitative study with 19 Finnish and Portuguese parents, revealing three main themes in parents' narratives regarding teachers' support: communication, professionalism, and invitations to active parental participation. While Finnish parents valued consistent online communication and trust in teacher professionalism, Portuguese parents preferred more frequent face-to-face contact. Both groups, however, underscored the importance of two-way dialogue and being well-informed. Similarly, Mujtaba, Kigobe, and Van Leeuwen (2024) in Tanzania found that a teacher capacity-building program significantly improved teachers' beliefs about parental involvement and, for pre-service teachers, led to an actual increase in inviting parents to participate, underscoring the impact of teacher training on communication strategies. Paulynice (2020), in a comparative study in Florida, USA, also emphasized

communication and the need for more meaningful and engaging parental programs to increase involvement, suggesting that current efforts often fall short of engaging parents effectively.

Despite the recognized importance of parental involvement, studies frequently reveal discrepancies in perceptions and persistent barriers to engagement. Sibanda and Netshitangani (2021) conducted a qualitative case study in a township primary school in Johannesburg, South Africa, guided by Epstein's model. The findings revealed a largely dysfunctional partnership where teachers perceived parents as disengaged, while parents cited low education levels, demanding work schedules, and a lack of teaching skills, often expressing feelings of inadequacy ("I am not a teacher"). This study also highlighted mutual blame between teachers and parents for poor academic performance, indicating a significant communication and understanding gap. In the same vein, Gomba and Msezane (2024), examining teachers' views in Limpopo, South Africa, found that while teachers valued engaged parents, they noted inconsistent participation due to socioeconomic constraints, language barriers, and cultural differences. Teachers in this study also observed that disciplinary issues and academic struggles were more common among students whose parents were less involved. Ikechukwu (2017) in a low-income school community in the Western Cape, South Africa, further revealed that teachers often had a limited understanding of parental involvement, perceiving it mainly as school-based activities like fundraising rather than broader educational support, and often lacked training on how to involve parents effectively.

Parents themselves often express a strong desire to be involved but face significant practical and systemic challenges. Ngozwana, Machobane, Chauke, and Lepholletse (2024) explored parents' perceptions in rural-based schools in Giyani Municipality,

Limpopo Province, South Africa. Parents viewed their involvement as essential for collaborating with schools, assisting with homework, providing career guidance, and offering emotional support. However, they cited curriculum changes, low literacy levels, socioeconomic difficulties, and ineffective communication with schools as major hindrances. This echoes the findings of Mwenje, Githui, and Mwarari (2020) in Kenya, where parents acknowledged the importance of home-school collaboration but faced challenges such as lack of time, inadequate skills and knowledge related to the Competency-Based Education (CBE), and insufficient resources. Adhiambo (2020) in Nairobi, Kenya, specifically focusing on the CBE, found that parents felt unprepared for their expanded role, which often involved additional financial and time burdens, and lacked a clear vision of their responsibilities, particularly for illiterate and marginalized parents. Appiah-Kubi and Amoako (2020) in Ghana identified similar barriers, including the high cost of living, low self-esteem among illiterate parents, and poor school coordination, with some parents perceiving their role as limited to financial support.

Beyond direct communication and perceived barriers, the literature also highlights the importance of trust, inclusive practices, and cultural understanding in shaping perceptions of engagement. Kely and Wakabayashi (2020) conducted a qualitative study across diverse school settings in the Midwestern U.S., involving 99 participants. Their findings emphasized the central role of trusting relationships, the need for inclusive and culturally responsive strategies, and the importance of two-way communication. They also identified barriers such as judgmental attitudes from school staff and a lack of culturally appropriate materials. Mote (2023) in East Texas, USA, similarly found that parental engagement was shaped by communication, trust in school leadership, and relationship building, noting that inconsistencies in outreach and a lack

of confidence among some parents created barriers. Furthermore, studies like Grace and Gerdes (2019), examining Latino families, and Jahreie (2022), exploring immigrant parents in Denmark and Norway, both highlighted how differing cultural definitions of education, language barriers, and systemic issues can create tensions between teachers' expectations and parents' culturally shaped roles, despite parents' strong commitment to their children's education. These studies collectively advocate for culturally responsive policies and practices that acknowledge diverse parental perspectives.

Finally, the readiness of key stakeholders, particularly teachers, for new curriculum implementations profoundly impacts perceptions of parental engagement. Chu, Nnam, and Falzefu (2018) in Cameroon, focusing on CBE implementation, found that a large number of teachers struggled to understand and effectively implement the new curriculum. This highlights a critical need for adequate teacher training and orientation, as teachers are central to inducting parents and fostering the collaborative partnerships necessary for successful curriculum implementation. Hyassat et al. (2024) in Jordan, studying special education teachers, found parents were only moderately involved, particularly in educational planning, with teachers rating their own role in fostering involvement highly. This suggests a disconnect where teachers believe they are doing their part, but parental involvement remains suboptimal due to factors like financial burdens and parents' lack of awareness. Cook (2024) at Eagle's Remedial School also identified a gap between stakeholders' perceptions of parental involvement and the actual strategies in place, recommending targeted workshops to align these views.

In essence, these studies reveal that while both parents and teachers generally value parental engagement, their perceptions of its nature, extent, and effective strategies often differ significantly. Challenges rooted in communication gaps, socioeconomic realities, cultural differences, lack of training, and evolving curriculum demands

consistently impede meaningful partnerships. Addressing these discrepancies through intentional communication, culturally sensitive approaches, targeted support, and comprehensive training for all stakeholders is crucial for enhancing parental involvement and achieving educational objectives, especially in the context of new curriculum reforms like the CBE.

2.7 Summary of Literature and Research Gaps

This chapter reviewed theoretical, policy, and empirical literature on parental engagement, empowerment, and role construction within the framework of Kenya's Competency-Based Curriculum (CBE). The literature affirms that the effective implementation of CBE depends significantly on active and empowered parental engagement across several domains, including participatory decision-making, resource mobilization, school-home-based support, and collaboration. Central to this engagement is parental role construction, which emerges as a critical mediating factor, shaping how and why parents choose to become involved in their children's education. Global and regional perspectives further underscore the importance of context-sensitive, culturally responsive, and structurally supported school-family partnerships in advancing inclusive educational reforms.

The chapter began by establishing the conceptual foundations of CBE in Kenya, followed by a detailed examination of parental empowerment and engagement, both globally and locally. It explored the dynamics of collaborative partnerships between parents and schools, and analyzed empirical studies addressing the study's core constructs. The review generated valuable insights but also exposed several critical knowledge gaps.

Despite the wide consensus on the importance of parental engagement for successful curriculum reforms like CBE, significant conceptual, contextual, theoretical, and methodological gaps persist. Conceptually, there is scarcity of research exploring the expanded parental role envisioned by CBE policy guidelines. Contextually, much of the existing Kenyan literature remains anchored in the now-outdated 8-4-4 system and does not fully reflect the expectations of the CBE framework. Theoretically, while parental role construction is widely recognized as a motivational driver of engagement, few studies have empirically tested its mediating role between parental engagement and CBE implementation. Methodologically, most studies either focus solely on parents or teachers and often rely on single-method designs, leaving a gap in understanding the integrated perspectives of both stakeholders.

This study seeks to fill these gaps by investigating how parental role construction mediates the relationship between parental engagement and CBE implementation. It also explores the perceptions and experiences of both parents and teachers, using a convergent mixed-methods design guided by the Hoover-Dempsey and Sandler model of parental involvement and Epstein's framework. In doing so, the study aims to generate contextualized insights and practical recommendations for strengthening school-family collaboration in the implementation of CBE within Kenya's evolving educational landscape. **Table 2.1** provides a synthesized summary of the reviewed literature, key findings, and the knowledge gaps addressed in this study. The next chapter outlines the methodology adopted for data collection and analysis.

Table 2.1: *A summary of the literature reviewed, the main findings and gaps revealed. (Author 2025)*

Theme (Based on Study Objective)	Literature	Findings	Gap
1. Parental engagement in participatory decision-making	Makena (2023); Dingili & Yungungu (2023); Wairimu (2020); Adhiambo (2020); Nyamai (2021); Zhu et al. (2023)	Parental participation in CBE decision-making is weak due to unclear communication, lack of sensitization, limited advocacy networks, and structural exclusion.	<p>Knowledge Gap: How parents' beliefs (role construction) influence their participation in CBE decision-making is underexplored.</p> <p>Contextual Gap: Focus has been limited to select counties; Nakuru County remains under-researched.</p>
2. Parental engagement in resourcing, volunteering, and linkages	Adhiambo (2020); Piliyesi et al. (2020); Kadau (2023); Jeruto et al. (2024); Magara (2023); Natasha (2024); Brown et al. (2020)	Parents provide resources and volunteer, but contributions are constrained by economic challenges, unclear roles, and lack of structured school systems for coordination.	<p>Conceptual Gap: Parental engagement is often limited to financial input; other forms of engagement (e.g., networking, linkages) are under-theorized.</p> <p>Methodological Gap: Lack of mixed-method studies examining how parental beliefs influence resourcing behaviors.</p>
3. Parental engagement in the school-home-based learning and development process	Gedi & Kamau (2023); Amunga et al. (2020); Mwenje et al. (2020); Kim (2022); Hill et al. (2018); Dingili & Yungungu (2023); Yungungu & Rodgers (2022)	Home-based parental involvement supports learner development but is hindered by time constraints, low parental knowledge of CBE, limited digital literacy, and unclear expectations.	<p>Theoretical Gap: Insufficient analysis of the motivational beliefs that drive or hinder home-based engagement.</p> <p>Practical Gap: Limited strategies to support parents as co-educators in CBE.</p>

4. Mediating effect of parental role construction	Yamamoto et al. (2016); Park & Holloway (2018); Kigobe et al. (2018); Levine (2018); Brown (2016); Jeruto et al. (2024)	Parental role construction significantly influences involvement; shaped by cultural norms, self-efficacy, and external invitations. Few studies have tested its mediating role.	<p>Theoretical Gap: Rare empirical testing of role construction as a mediator between engagement and CBE implementation in Kenyan public schools.</p> <p>Methodological Gap: Lack of mediation analysis using hierarchical regression and convergent mixed methods.</p>
5. Teachers' and parents' perceptions and experiences	Levinthal et al. (2021); Ikechukwu (2017); Sibanda (2021); Ngozwana et al. (2024); Mwarari et al. (2020); Gomba & Msezane (2024); Kelty & Wakabayashi (2020)	Mismatched perceptions, poor communication, socioeconomic barriers, and lack of training hinder collaborative partnerships in CBE implementation.	<p>Contextual Gap: Few studies jointly examine perceptions of both teachers and parents in CBE in Kenya.</p> <p>Methodological Gap: Need for integrated qualitative findings within a mixed-methods framework to explore these perspectives.</p>

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter outlines the methodological framework for aligning the research questions with the study findings. It discusses the study's philosophical underpinning, research approach, and design. Additionally, the chapter details the study location, population, sampling techniques, and procedures for determining an appropriate sample size. It describes data collection methods, instruments employed, and measures used to ensure the validity and reliability of the findings. The chapter also covers data analysis strategies for both quantitative and qualitative data, along with ethical considerations adopted to uphold research integrity. It concludes by summarizing the chapter's key elements, setting the foundation for subsequent data analysis and discussion.

3.2 Research Paradigm

This study employs the pragmatism paradigm, widely acknowledged as the philosophical basis for mixed methods research due to its emphasis on solving practical problems using multiple approaches (Tashakkori & Teddlie, 2010; Creswell & Creswell, 2018). Pragmatism prioritizes the research problem over rigid adherence to either positivist or constructivist worldviews, enabling researchers to use various approaches to gain a well-rounded insight into social phenomena (Creswell & Creswell, 2023).

A research paradigm represents a researcher's core philosophical viewpoint about reality and the process of acquiring knowledge (Creswell & Creswell, 2018; 2023). It comprises four essential components: ontology (the nature of reality), epistemology (the nature of knowledge), methodology (the process of acquiring knowledge), and axiology (the role of values in research) (Paudel, 2024). As stated by Parviat, Mufti,

and Wahab (2016), pragmatism emphasizes the research problem as the primary determinant of epistemological and ontological considerations rather than being limited to a single research approach. Morgan (2007) further explains that pragmatism integrates epistemological concerns about knowledge generation with methodological considerations about how that knowledge is gained. This approach goes beyond simply mixing methods, advocating for a fully integrated methodological framework that enhances the applicability and impact of research findings in the social sciences.

This study utilizes a pragmatist viewpoint to examine how parental role construction mediates the relationship between parental engagement and the implementation of the Competency-Based Education (CBE). The versatility of the paradigm allows for the integration of numerical data and contextual narratives, guaranteeing a comprehensive examination of the research problem.

Ontologically, pragmatism posits that multiple realities exist and are socially constructed. While an objective reality exists, individuals perceive and experience it differently based on their social contexts (Morgan, 2007). This study resonates with this view, recognizing that parental engagement, parental role construction, and CBE implementation encompass both observable behaviours (quantitative data) and subjective perspectives from parents and teachers (qualitative data).

Epistemologically, pragmatism asserts that knowledge is derived through practical inquiry rather than being purely objective or subjective. This study reflects this stance by integrating statistical data with participants lived experiences, ensuring a holistic understanding of how parental role construction mediates the relationship between parental engagement and CBE implementation. By combining these perspectives, the study enhances the depth and applicability of its findings.

Methodologically, pragmatism supports methodological pluralism, advocating for research designs that employ multiple techniques to best answer research questions (Morgan, 2007). Consequently, this study utilizes a mixed methods approach, incorporating quantitative data to identify patterns and relationships while using qualitative insights to provide contextual depth. This methodological flexibility facilitates triangulation, strengthens the validity of findings, and ensures that the study captures both the measurable and experiential aspects of parental engagement in CBE implementation (Shannon-Baker, 2016).

From an axiological standpoint, pragmatism recognizes that research is influenced by values, and researchers incorporate their own viewpoints and ethical considerations into the inquiry process (Tashakkori & Teddlie, 2010). In this study, the researcher's values are embedded in the selection of a problem relevant to educational policy and practice, particularly the improvement of parental engagement in CBE implementation. Ethical considerations, such as respecting participants' diverse perspectives, maintaining confidentiality, and minimizing researcher bias, are integral to the study. By embracing multiple viewpoints and prioritizing practical solutions, this research contributes to both theoretical advancements and real-world educational improvements while maintaining ethical integrity.

By adopting the pragmatism paradigm, this study ensures that its methodology remains flexible and problem-driven, allowing for a more comprehensive exploration of how parental role construction influences parental engagement in CBE implementation. This integration of diverse methodologies aligns with the pragmatist philosophy of focusing on "what works," thereby enhancing the study's relevance to educational policy and practice.

3.3 Research Approach

This study adopted a mixed methods research approach, integrating quantitative and qualitative data to provide a comprehensive and problem-centered exploration of the research problem (Creswell & Creswell, 2023; Leavy, 2022). Mixed methods research enhances validity by combining structured numerical data with rich contextual insights, ensuring a more balanced and in-depth analysis (Alise & Teddlie, 2010).

As Creswell and Creswell (2023) emphasize, all research methods have limitations. Therefore, by triangulating data from multiple sources, this approach mitigates biases and enhances reliability. In this study, quantitative data collected from parents examined the relationships between parental engagement, parental role construction, and CBE implementation, while qualitative data from parent representatives and teachers provided deeper insights into these relationships. This integration allowed for a holistic understanding of the mediating effect of parental role construction, strengthening the study's findings and applicability.

3.4 Research Design

This study employed a convergent mixed methods design, a single-phase approach that integrates quantitative and qualitative data to enhance the depth, credibility, and interpretive power of the findings (Creswell & Creswell, 2023; Pearlson, Saunders & Galletta, 2024). A research design serves as the structural blueprint for data collection and analysis, ensuring that the study systematically addresses its research questions (Kassu, 2019; Nakiyaga, Serem, & Ssentamu, 2021).

In a convergent parallel design, both quantitative and qualitative data are gathered concurrently within the same research phase, analyzed independently, and then merged during the interpretation stage to assess whether and how the findings converge,

diverge, or complement one another (Creswell & Plano Clark, 2018; Creswell & Creswell, 2023). This approach acknowledges that each data type offers distinct yet complementary insights, where quantitative data reveal general patterns and statistical relationships, while qualitative data offer contextual depth and participants' perspectives.

According to Creswell and Plano Clark (2023), one of the strengths of this design is that it does not require symmetry in the number or structure of objectives across the quantitative and qualitative strands. Instead, what is essential is that both strands address aspects of a shared phenomenon and are meaningfully integrated. In this study, the first four objectives were addressed quantitatively to examine direct and mediating relationships among parental engagement, parental role construction, and CBE implementation, while the fifth objective used qualitative data to explore teachers' and parents' perceptions of these constructs.

Quantitative data were analyzed using SPSS to test hypotheses and identify trends, while qualitative data, gathered through open-ended items, were thematically coded using MAXQDA 24 to capture key perceptions and contextual insights. Integration occurred at both the descriptive and interpretive levels, with verbatim excerpts aligned with related quantitative items to enrich interpretation and clarify patterns. During interpretation, selected quotations were also used to support, contrast, or elaborate the statistical findings, allowing the qualitative data to deepen and extend the understanding of key relationships.

This QUAN→ qual convergence enabled meaningful triangulation and explanation of results. As Cohen, Manion, and Morrison (2017) explain, convergent designs support

the independent handling of each data strand until the point of convergence, offering flexibility in presenting findings by research question, data type, or theme.

The convergent mixed methods design was best suited for this study as it facilitated the examination of both broad statistical relationships and rich contextual narratives related to the implementation of CBE. By triangulating data from different sources, the study ensured methodological rigor, complementarity, and enhanced validity, leading to a more holistic understanding of how parental engagement and role construction influence curriculum implementation in public primary schools.

3.5 Study Area

The research was carried out within Kenya's Nakuru County, an area spanning roughly 7,498.8 km². The county is located within the Great Rift Valley, bordered by eight counties: Kericho and Bomet to the west, Baringo and Laikipia to the north, Nyandarua to the east, Narok to the southwest, and Kajiado and Kiambu to the south. Nakuru County consists of 11 sub-counties: Naivasha, Nakuru Town West, Nakuru Town East, Kuresoi North, Kuresoi South, Molo, Rongai, Subukia, Njoro, Gilgil, and Bahati, divided into 55 wards.

According to the 2019 census, the county has a population of 2.1 million, with 1,077,272 males and 1,084,835 females across 616,046 households, averaging 3.5 members per household. The main economic activities include agriculture, business, and tourism. The county hosts 1,089 primary schools, 714 of which are public, distributed across the 11 sub-counties.

Nakuru County was purposively selected for this study based on its Annual Development Plan (2022-2023), which highlighted challenges in implementing the Competency-Based Education (CBE) due to limited stakeholder engagement. The

report recommended improving stakeholder involvement, including parents, community members, and education staff, to enhance education quality, particularly in implementing Early Childhood Development Education (ECDE), Competency-Based Education (CBE), and TVET Training (CBET) programs.

The study focused on two sub-counties, Nakuru Town East and Bahati (Nakuru-North), chosen purposively for their large size, number of public schools, and diverse urban-rural settings. These areas provide a rich context to assess parental engagement in CBE implementation, examining how parental roles are constructed across varied parental groups.

3.6 Target Population

A target population refers to the specific group of individuals or elements that a researcher intends to study and draw conclusions about (Babbie, 2020). It is defined based on particular characteristics relevant to the research objectives and represents the larger population to which the researcher seeks to generalize findings (Creswell & Creswell, 2017). Identifying a well-defined target population is crucial in ensuring the study's findings are applicable and meaningful within the broader educational context.

The target population for this study was 860, comprising 688 parents, 86 teachers, and 86 PTA representatives from 86 public primary schools across two sub-counties (45 in Nakuru North, and 41 in Nakuru East). The primary unit of analysis was parents, as they play a central role in parental engagement and role construction in the implementation of the Competency-Based Education (CBE). Additionally, teachers and PTA representatives were included to provide broader insights into how parental engagement influences CBE implementation.

All parents in the 86 schools were considered part of the target population. However, for data collection, eight parents per school (one per grade from Grade 1 to 8) were targeted, ensuring a diverse representation of perspectives across all primary school levels. Similarly, all teachers in these schools were considered within the target population, but one teacher per school, the most experienced in CBE implementation, was targeted to provide expert insights. Additionally, all PTA representatives were included in the target population, with one representative per school chosen to offer institutional perspectives on parental engagement.

Before actual data collection, the researcher verified the total number of parents, teachers, and PTA representatives across the 86 schools to ensure an accurate representation for sampling. This approach allowed for a balanced and comprehensive understanding of the relationship between parental engagement, role construction, and CBE implementation, integrating perspectives from key education stakeholders.

Table 3.1: *Summary of Target Population*

Category	Target Population
Teachers	86
Parents	688
PTA Chairpersons	86
Total	860

3.7 Sampling Procedure and Sample Size Determination

3.7.1 Sampling Procedure

A sampling procedure refers to the specific plan or strategy used to select a subset of individuals, items, or elements from a larger population for research purposes (Creswell, 2014; Babbie, 2020). A well-structured sampling strategy ensures that the

sample accurately represents the characteristics and variability of the target population, thereby enabling valid inferences and meaningful conclusions (Creswell & Creswell, 2018; Neuman, 2013).

This study employed a multi-stage sampling strategy, combining purposive, stratified, and convenience sampling techniques to ensure both representativeness and practical feasibility. Purposive sampling technique was used to select Nakuru East and Nakuru North sub-counties, as they have a high number of public primary schools and socio-economic diversity, providing an appropriate context for examining variations in parental engagement and role construction in Competency-Based Education (CBE) implementation. To achieve a balanced representation, stratified random sampling was employed to select 31 out of the 86 public primary schools in the two sub-counties, ensuring diversity based on location (urban/rural).

A stratified sampling technique was used to select parents, ensuring representation across all grade levels. Parents were first stratified into eight groups based on their child's grade level (Grades 1–8). On the actual day of data collection, the list of parents attending school meetings served as the sampling frame, from which one parent per grade was randomly selected. This resulted in eight parents per school and a total of 248 parents across the 31 schools, ensuring perspectives from all primary school levels were adequately represented. Since data collection coincided with the first term when parent meetings were already scheduled, pre-visits were conducted to coordinate with headteachers and facilitate access to parents. Additionally, two research assistants were engaged to support parents requiring assistance in understanding or responding to the questions, thereby promoting inclusivity and enhancing response reliability.

For teachers, purposive sampling was employed to select those with the most experience in CBE implementation. While the study initially aimed to interview one teacher per school, data saturation led to interviews with 13 teachers across the 31 sampled schools. Teachers were selected based on head teachers' recommendations, ensuring that insights were gathered from those most knowledgeable about CBE implementation.

To incorporate perspectives from school leadership, convenience sampling was used to select PTA representatives for focus group discussions (FGDs). Although the study targeted 31 PTA chairpersons, 10 representatives ultimately participated based on availability. PTA chairpersons were selected due to their leadership roles and ability to provide broader parental perspectives on school decision-making and parental engagement in CBE implementation.

By integrating random, purposive, and convenience sampling techniques, this multi-stage sampling approach ensured the study captured a diverse range of perspectives while maintaining practical feasibility. This strategy allowed for a balanced and representative sample, enhancing the validity and reliability of the findings.

3.7.2 Sample Size Determination

A sample size as defined by (Rodríguez del Águila & González-Ramírez, 2014), is an estimate of the number of cases required in a study following the pursued study objective. It describes the number of individual subjects, items, or elements that are included in a research study as a size subset selected from the larger population for data collection and analysis (Creswell and Creswell,2017; Babbie,2020).

For the quantitative strand, the target population was 688 parents. Out of this, a representative sample comprising 248 parents was determined with the aid of the

Krejcie and Morgan sample size determination table (refer to Appendix VIII). For the qualitative strand, 13 teachers were selected purposively, while 10 PTA representatives were chosen via convenience sampling. Table 3.1 provides a synopsis of the sampling procedure and the determination of sample size:

Table 3.2: *Summary of Target Population, Sample Size, and Sampling Techniques.*

Category	Target Population	Sample Size	Sampling Technique	Data Collection Instrument
Parents	688	248	Stratified Sampling	Questionnaire
Teachers	86	13 (due to saturation)	Purposive Sampling	Interview
PTA Chairpersons	86	10	Convenience Sampling	Focus Group Discussion
Total	860	271		

Source: (Survey data, 2023)

3.8 Research Instruments

Data collection methods refer to systematic techniques used to gather information, observations, and measurements from various sources to create a dataset for analysis and interpretation (Creswell & Creswell, 2018). Research instruments serve as tools for measuring study variables and ensuring the collection of accurate and meaningful data for informed decision-making (Creswell & Clark, 2017). Selecting appropriate data collection techniques and establishing clear guidelines for their use helps minimize potential errors during data analysis and enhances the validity and reliability of the findings (Simiyu, 2021).

In this study, multiple primary data sources were employed to collect both quantitative and qualitative data. Quantitative data were obtained through a structured questionnaire, designed to capture information on parental engagement, parental role construction, and the implementation of the Competency-Based Education (CBE). On

the other hand, qualitative data were collected through semi-structured individual interviews and a focus group discussion (FGD). These qualitative methods provided deeper insights into how parents' perceptions of their roles influenced their engagement in CBE implementation, both within classroom settings and at home. The use of multiple data collection instruments ensured a comprehensive exploration of the research problem, facilitating a more nuanced understanding of parental involvement in CBC implementation.

3.8.1 Questionnaires

A questionnaire is a structured research instrument designed to collect data from respondents by presenting a series of questions, particularly useful when studying large populations and variables that cannot be directly observed, such as perceptions, attitudes, and feelings (Creswell & Clark, 2017). Questionnaires are an efficient method for gathering standardized data on opinions, behaviors, and demographic characteristics while minimizing researcher bias (Creswell, 2014).

In this study, questionnaires were used to collect data from parents regarding their engagement in the implementation of the Competency-Based Education (CBE), their role construction, and their perceptions of CBE. The questionnaire was structured into four sections (A, B, C, and D), each designed to capture specific aspects of the study variables. Section A focused on demographic information, while Sections B, C, and D gathered data on parental engagement, parental role construction, and CBE implementation, respectively.

The questionnaire items were adapted and modified by the researcher based on established frameworks, including Walker et al.'s (2005) *Parental Involvement: Model Revision through Scale Development*, Epstein's (1997) *Parental Involvement Model*,

and the *Kenya Institute of Curriculum Development (KICD) Guidelines on Parental Empowerment and Engagement* (2019). These frameworks provided a strong theoretical foundation for assessing parental involvement within the CBC context, ensuring the questionnaire was aligned with relevant constructs and appropriately contextualized for the study

3.8.2 Semi-Structured Individual Interviews

Semi-structured individual interviews represent a qualitative data collection technique that enables researchers to delve deeply into participants' viewpoints while maintaining flexibility (Flick, 2018). Unlike structured interviews that follow a rigid set of questions, semi-structured interviews use an interview guide with open-ended prompts, allowing participants to express their experiences, thoughts, and viewpoints in a more natural and dynamic manner (Charmaz, 2014; Seidman, 2013).

Cohen et al. (2018) emphasize that interviews serve as versatile data collection tools, incorporating multiple sensory channels, including verbal, non-verbal, visual, and auditory cues. This adaptability allows the interviewer to probe deeper into complex issues, clarify responses, and explore unexpected themes that emerge during the conversation. Additionally, semi-structured interviews can complement other research techniques by providing explanatory insights into survey data or validating findings from different methodologies (Kerlinger, 1970, as cited in Cohen, 2018).

In this study, semi-structured interviews were employed to gather in-depth insights from selected teachers regarding their perceptions of parental engagement in the implementation of the Competency-Based Education (CBE). Specifically, the interviews explored how teachers perceive parental roles and how these perceptions influence engagement within CBE classrooms. This approach was particularly suitable

for capturing nuanced viewpoints, allowing for flexibility in questioning while ensuring that key themes were systematically addressed. The interview process followed Kvale's (2007) seven-step framework, including thematizing, designing, interviewing, transcribing, analysing, verifying, and reporting, to ensure a rigorous and structured approach to data collection and analysis.

3.8.3 Focus Group Discussions (FGD)

Focus groups represent a qualitative data gathering technique where the researcher facilitates discussions among a carefully selected, homogenous group of individuals to explore a specific topic in a structured setting (Allen et al., 2019; Akyildiz & Ahmed, 2021). The structured nature of focus groups allows for in-depth exploration of a particular issue, generating insights that may not easily emerge in individual interviews. Additionally, focus groups foster synergy, where participants build upon each other's contributions, leading to richer discussions and more comprehensive data in a time-efficient manner (Cohen et al., 2018).

The effectiveness of focus group discussions (FGDs) depends on selecting an appropriate group size and ensuring participant homogeneity. A small group may limit diversity in perspectives, while an overly large group can lead to dominance by a few voices or fragmented discussions (Cohen et al., 2018). Best practices suggest an optimal size of 4–12 participants, with individuals who feel comfortable sharing their views in a respectful and structured environment. The role of a skilled facilitator is crucial in guiding discussions while upholding ethical considerations such as confidentiality and informed consent (Cohen et al., 2018; Allan 2020; Akyildiz & Ahmed, 2021). Additionally, social network analysis can be applied to FGDs to identify key participants based on their influence and depth of insight in the discussion (Wu, Rumble, Ruth, Lamm, & Ellis, 2021)

In this study, an FGD was conducted with 10 Parent-Teacher Association (PTA) chairpersons, who were purposively selected from sampled schools in two sub-counties. These participants were identified with the assistance of headteachers and teachers based on their extensive knowledge of the study topic and their leadership roles in representing parents within the school system. The discussion, facilitated by the researcher, followed a structured schedule focusing on parental engagement, parents' evolving roles in CBE, and how these perceptions influenced their involvement in their children's education.

The FGD format provided an interactive platform for deeper exploration of the research questions, allowing PTA chairpersons to share their experiences and perspectives. This approach not only generated rich qualitative data but also complemented findings from the questionnaire and individual interviews, enhancing the overall depth and triangulation of the study (Adler, Salanterä, & Zumstein-Shaha, 2019).

3.9 Validity and Reliability of Research Instruments

Validity and reliability are fundamental to the integrity of research and assessment. Researchers must carefully consider and establish both validity and reliability when designing studies, collecting data, and interpreting results to ensure that their findings are accurate, meaningful, and applicable to the real-world context. In this study all instruments namely: the questionnaire, interview schedule, and FGD guide were assessed for validity, reliability, and trustworthiness:

3.9.1 Validity

Validity is defined as the extent to which a concept is accurately measured in a quantitative study (Heale & Twycross, 2015). According to Mahajan (2020), the validity of a research instrument assesses the extent to which the instrument measures

what it is designed to measure. This study evaluated several types of validity, encompassing of face validity, content validity and construct validity (Cohen et al., 2018).

Face validity is a straightforward approach to assess whether the survey items measure the intended concepts (Hair et al., 2019). In this study, supervisors evaluated the face validity of the questionnaire items based on their relevance to the research objectives, clarity, and comprehensibility. The questionnaire items were revised based on feedback from the supervisors, incorporating their expert insights before administering the questionnaire.

Content validity addresses how well the items developed to operationalize a construct provide an adequate and representative sample of all the items that might measure the construct of interest (Kimberlin & Winterstein, 2008). It ensures that the questionnaire comprises a sufficient collection of items designed to measure the intended concept (Simiyu, 2021). As stated by Shekaran and Bougie (2010), the more the scale items represent the domain of the concept being measured, the greater the content validity. In this study, the researcher engaged expert reviewers from Moi University and Oldenburg University with the output of a pilot study to check the content validity of the instrument. This was followed by a modification of the instrument by plucking out any ineffective and non-functioning items based on the experts' recommendations to ensure that the questionnaire items adequately represented the concepts being measured.

Construct validity is a multifaceted concept that refers to the degree to which a set of measured items accurately reflects the underlying theoretical construct they are designed to assess (Hair et al., 2019). This helps the researchers to be sure that they are truly measuring the concept they intend to study and not something else (DeVellis & Thorpe, 2021; Souza, Alexandre, & Guirardello, 2017). In this study, an Exploratory

Factor Analysis (EFA) was conducted to evaluate the construct validity of survey items measuring parental engagement, parental role construction, and CBC implementation. Construct validity consists of two facets of convergent and discriminant validity. It is used to identify the underlying factor structure in a set of observed variables (items or questions) and group them based on their shared variance. Specifically, Principal Component Analysis (PCA) with Varimax rotation was used to identify the underlying factor structures by maximizing loading dispersion, ensuring each component was statistically identifiable, had strong and distinct loadings without cross-loading, and factor loadings above 0.5, with eigenvalues greater than one (Hair et al., 2019). Therefore, the factor analysis results satisfied the criteria of construct validity, including both the convergent and discriminant validity.

3.9.2 Reliability

Reliability refers to the extent to which a research instrument produces consistent and repeatable results when applied by different researchers, at different time intervals, and under varying conditions (Konjengbam et al., 2020). It focuses on the consistency and reproducibility of measurements, ensuring that the instrument yields stable and dependable data over repeated administrations (Creswell, 2005).

In this study, the reliability of the questionnaire was assessed using Cronbach's alpha (α) coefficient, a widely used measure of internal consistency. Internal consistency examines the degree to which items within the questionnaire reliably measure the same underlying construct. A Cronbach's alpha coefficient of 0.7 or higher is generally considered acceptable for reliability (Field, 2013). A higher reliability coefficient indicates that the questionnaire items consistently represent the intended constructs, thereby enhancing the credibility of the data collected.

3.9.3 Ensuring Trustworthiness

Trustworthiness in qualitative research pertains to the validation of research findings, ensuring their veracity (Pitney, 2004). Anney (2014) posits that trustworthiness involves demonstrating the robustness of the evidence supporting reported results and the strength and accuracy of arguments derived from those results. It is a representative measure for validity and reliability as applied in qualitative research (Lincoln & Guba, 1982; Creswell, 2014; Patton, 2014).

Qualitative research approach, just like any other approach, adopts distinct techniques to ensure production of credible findings and also ensuring there is rigor in its process of inquiry (Anney, 2014). This point is underscored by Houghton, Casey, Shaw & Morphy (2013), who asserted that dependability, transferability, confirmability, and credibility serve as the criteria for evaluating the rigor of qualitative research. This study established trustworthiness by ensuring credibility, transferability, dependability, and confirmability.

3.9.3.1 Credibility

Credibility, in Shenton's words (2004), is concerned with the issue of how true the findings were or, more accurately, how a researcher developed confidence in the validity of a certain inquiry's conclusions. Ary, Jacobs, and Sorensen (2010) pointed out that researchers bear the responsibility of accurately depicting the participants' realities. Triangulation, member screening, and sustained involvement with the participants all worked to ensure credibility in qualitative research (Black, Palombaro & Dole, 2013).

In this study, member checking was used, where the researcher discussed the study's preliminary findings with the participants to judge the degree of correspondence and to incorporate their thoughts into the findings. Member checking was chosen as the

primary method for establishing credibility, a decision supported by Harvey (2015) and Lincoln and Guba (1982), who deem it "the most crucial technique for establishing credibility in a study" (p. 314). Member checking was employed based on the purposively selected key informants who were interviewed over a sustained period of time, and their information was further triangulated to enhance the credibility of the findings.

3.9.3.2 Transferability

Transferability, as defined by Anney (2014), refers to the degree to which qualitative research outcomes can be extended to diverse settings involving different participants. Pitney (2004) additionally points out that qualitative research conclusions are typically specific to a limited group or a particular scenario. Nevertheless, these findings may be relevant to other environments if a similarity, termed 'goodness of fit' (Ary et al., 2010), exists between the two contexts. Black et al. (2013) suggest that transferability is achieved by thoroughly detailing the original context, thereby enabling other researchers to ascertain the applicability of the findings to their own situations.

To ensure transferability in this study, a comprehensive 'thick description' of the research context, design, sampling strategy, sample size, data collection approaches, and duration of data collection was presented, along with supporting literature. This provision allows individuals intending to apply these findings to their distinct contexts to independently judge their relevance (Lincoln & Guba, 1982; Creswell, 2014).

3.9.3.3 Dependability

Dependability pertains to the degree to which the generated data and conclusions would align if the research were reproduced (Shenton, 2004). It indicates the extent to which the information produced and the results would remain consistent if the study were

replicated in a comparable setting (Ary et al., 2010). Murumbe (2021) concisely defined dependability as the consistency of collected information across identical situations.

For the present study, dependability was guaranteed through transparent disclosure of the research process, its limitations, and the ethical considerations adhered to, all documented via an audit trail. As noted by Houghton et al. (2013), an audit trail details the methodological and interpretive decisions made throughout the study. The researcher diligently maintained an audit trail of field notes, delineating the steps and procedures followed during the entire data generation process. This ensures that any subsequent researcher aiming to replicate the study will possess sufficient information from the research report to do so and obtain comparably similar findings (Gunawan, 2015).

3.9.3.4 Confirmability

Finally, confirmability aims to establish whether the researcher's conclusions and interpretations are logically derivable from the presented evidence (Nowell, Norris, White, & Moules, 2017). It indicates the degree to which the findings genuinely reflect participant feedback, rather than researcher bias (Cope, 2013). Data collection accuracy was ensured by audio-recording interviews, which were subsequently transcribed to capture the respondents' narratives, thus ensuring the findings originated from the data itself, not the researcher's preconceptions.

The study also employed an audit trail to maintain authenticity throughout the research process (Houghton et al., 2013). This audit trail was reinforced by meticulous record-keeping and organized management of the raw interview data, facilitating easy information retrieval. Explicit details concerning data analysis methods and how the researcher arrived at the findings were provided. This approach would enable any

reader to follow the research's progression step-by-step through the decisions made and procedures documented in the audit trail, as advised by Houghton et al. (2013).

3.10 Pre-testing of Instruments

Pre-testing is a practice of assessing the research instruments with a small group to identify issues like unclear or biased questions, helping to improve its clarity, reliability, and validity (Nowell et al., 2017). Between 29th January and 12th February 2024, a pilot study was conducted in Gilgil Sub-county, Nakuru, Kenya, to assess the validity, reliability, clarity, and usability of the research instruments, ensuring minimal errors and identifying potential improvements to the questionnaire. The pilot study utilized a sample of 50 respondents that was randomly selected to match the target population.

The data collected were analyzed using SPSS version 25. Participants reported that the questionnaire was clear and of appropriate length. The Cronbach's alpha coefficients for each factor ranged from 0.790 to 0.917, exceeding the recommended threshold of 0.7 (Hair *et.al.*, 2019). The Cronbach values included 0.917 for CBE implementation, 0.914 for parental engagement in participatory decision-making, 0.827 for parental engagement in resourcing and volunteering, 0.910 for parental engagement in home-based learning strategies, and 0.790 for parental role construction. These pilot study results indicated that the questionnaire was highly reliable and the survey was ready for full-scale deployment in other sub-counties in Nakuru County.

3.11 Data Collection Procedures

Following the protocols of conducting scientific research, the researcher obtained an institutional letter from the School of Education Research Ethics Committee at Moi University after successfully defending the proposal. This clearance facilitated the

acquisition of a research permit from the National Council for Science, Technology and Innovation (NACOSTI) and from the Nakuru County and Sub-County authorities.

The researcher then communicated in writing to the headteachers of the selected schools seeking permission to conduct the study and access to parents before initiating data collection. This was followed by pre-visits to the schools to familiarize with respondents and the settings, creating a conducive atmosphere for participants to freely express their opinions during the data collection process. The purpose of the study was clarified, and interview sessions with selected teachers scheduled. To facilitate access to parents, two research assistants were sought and trained to assist in administering the questionnaire. The researcher conducted the interviews and the FGD while also administering most of the questionnaires.

The quantitative and qualitative data were collected concurrently using questionnaires, interviews, and a focus group discussion. Questionnaires were administered exclusively to parents to gather structured data on parental role construction and its relationship with CBE implementation. Demographic information was collected only from parent respondents as part of the questionnaire to contextualize the quantitative analysis. Teachers and PTA representatives were included in the qualitative strand only, through interviews and a focus group discussion respectively, and their demographic data were not formally recorded. Their inclusion aimed to provide experiential and contextual insights rather than for statistical comparison. Teachers, selected based on their CBE experience, offered classroom-based perspectives, while PTA members contributed broader institutional and community viewpoints due to their leadership roles. These multiple perspectives were integrated not to validate the quantitative data but to enrich interpretation, in line with the principles of a convergent mixed-methods design.

The questionnaire provided detailed instructions for respondents and underscored voluntary participation, the right to withdraw, and confidentiality of information shared, which would be used strictly for academic purposes. To ensure anonymity, respondents were directed not to indicate their names or institutional affiliations. Similarly, during interviews, participants were briefed about the purpose of the study, benefits, risks, and ethical considerations. This was followed by the signing of informed consent forms, paving the way for the interview sessions, which lasted between 30–60 minutes.

In conducting the FGD, the researcher partnered with the gatekeepers to assemble ten (10) parent representatives in a safe, private space for discussion. The researcher then set ground rules, sought consent, and elaborated on the purpose, risks, and benefits of the study before facilitating a guided discussion, ensuring each participant had an equal opportunity to contribute. The discussion lasted for approximately two and a half hours.

3.12 Data Analysis Procedures

3.12.1 Quantitative Data Analysis Procedure

The fundamental stages of data analysis typically encompass problem identification, evaluating the suitability of available data, selecting appropriate techniques to address research questions, applying relevant methodologies, appraising their effectiveness, and subsequently synthesizing and disseminating the findings.

For this investigation, quantitative data gathered via questionnaires underwent initial processing, including coding and tabulation, in preparation for statistical examination. Data purification was performed during the pre-screening phase to enhance the integrity of the results.

Descriptive statistics, such as frequency distributions, were employed to characterize the general behavioral patterns of the respondents and to establish profiles of their

demographics. Subsequently, the variable data were subjected to hierarchical linear regression analysis, utilizing Statistical Package for the Social Sciences (SPSS) version 25 and Hayes's PROCESS Macro Version 4.2 (Model 4), to assess direct effects and mediation pathways. Study outcomes were then communicated through frequency tables, percentages, textual descriptions, graphs, and accompanying discussions.

Prior to conducting regression analysis for hypothesis testing, the researcher verified the underlying assumptions of the regression model. This included examining linearity, normality, homoscedasticity, multicollinearity, and identifying both univariate and multivariate outliers. Adherence to these assumptions is crucial, as their violation can lead to inaccurate or unreliable results, potentially causing Type I or Type II errors, or the over-or under-estimation of significance or magnitude of effects.

The study's null hypotheses were tested at $\alpha=0.05$ level of significance while controlling for parents' age, gender and level of education covariates to eliminate the confounding effects so that the model to reflect the actual relationship between the variables under investigation. Table 3.3 shows the hypotheses that were tested in the study.

Table 3.3 Hypothesis Testing

S.no	Hypothesis	Test Statistic	Decision Point
H01	There is no statistically significant relationship between parental participatory decision-making and the Competency-Based education implementation.	Hierarchical Linear Regression	Sig. at $p \leq .05$,
H02	There is no statistically significant relationship between parental volunteering and Competency-Based Education Implementation	Hierarchical Linear Regression	Sig. at $p \leq .05$,
H03	There is no statistically significant relationship between parental home-based learning strategies and Competency-Based Education Implementation.	Hierarchical Linear Regression	Sig. at $p \leq .05$,
H04	Parents' role construction does not significantly mediate the relationship between Parental Engagement and Competency-Based Education Implementation.	Hayes Mediation Test (Model 4) with Bootstrapping	Sig. at $p \leq .05$ & no Zero between the CI

3.12.1.1 Regression Model

The hierarchical linear regression model was used to test hypothesis H₀₁, H₀₂, and H₀₃ as shown in equations (i-iii). In each model, the predictors were grouped into two sets; the covariates and the main predictor. All the predictor variables were added to the model at once without any stepwise addition or selection process to explain the variance in the outcome variable (CBE implementation) at $\alpha=0.05$ level of significance. According to (Woltman et al., 2012), simultaneous entry of predictors in the hierarchical model provides a clearer picture of how the collective set of predictors influences outcome variable.

$$i. \quad Y = \beta_0 + C + \beta_1 X1 + \varepsilon \dots \dots \dots (H_{01})$$

The regression model of the independent variable (parental engagement in participatory decision making) predicting the dependent variable (CBE Implementation) while controlling for the covariates.

$$ii. \quad Y = \beta_0 + C + \beta_1 X2 + \varepsilon \dots \dots \dots (H_{02})$$

The regression model of the independent variable (parental engagement in resourcing, volunteering and linkages) predicting the dependent variable (CBE Implementation) while controlling for the covariates.

$$iii. \quad Y = \beta_0 + C + \beta_1 X3 + \varepsilon \dots \dots \dots (H_{03})$$

The regression model of the mediating variable (parental engagement in home-based learning and development process) predicting the dependent variable (CBE Implementation) while controlling for the covariates.

Where;

Y= Dependent variable, X1-X3 = Independent Variables, C= Covariates, β_0 = Constant, β_1 = Coefficient of the Independent Variable and ε = Error term.

3.12.1.2 Testing Mediation

Hayes' PROCESS simple mediation (model 4) with bootstrapping was used to test the hypothesis (H₀₄). Figure 3. 2 below shows the adopted simple mediation model.

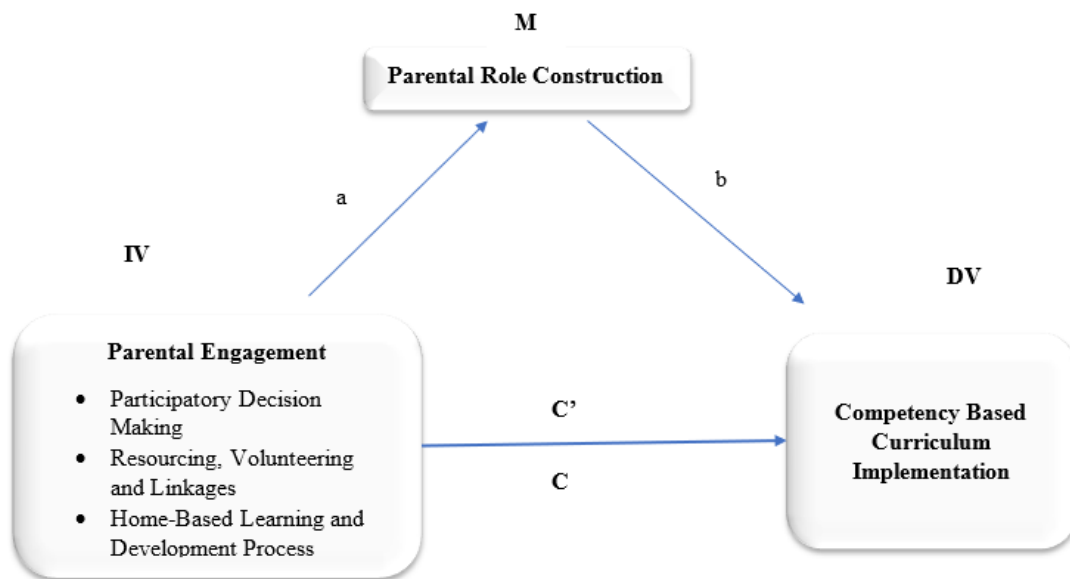


Figure 3: Simple Mediation Model.

Source: Adopted and modified from Hayes (2018), Mediation Model 4.

For mediation to occur, the following conditions must be met (Mackinnon, 2012): Parental engagement (X) must have an effect on CBC implementation (Y). The effect of parental engagement (X) on CBE implementation (Y) shrinks upon the addition of parental role construction (M) to the model. If the predicted directions for both direct and indirect effects hold true, indicating significance in initial conditions, a partial mediation is reported however a full mediation is reported when the independent variable no longer conveys its effect to the dependent variable when accounting for the mediator. Conversely, if the mediator does not exert a significant influence on the dependent variable, no mediation is reported.

Considering these conditions, the researcher employed the simplified Hayes PROCESS macro with bootstrapping to produce output, facilitating an understanding of the

resulting mediation nature and its significance (Hayes, 2018). This procedure was adopted because it is easy to apply, has simplified interpretation and reduces the need for employing multiple linear regressions, with each performing a specific function (Hayes, 2013).

Bootstrapping is a preferred approach to testing for mediation and is gaining increasing popularity. It treats the sample in the dataset as a quasi-population (with replacement). This study utilized 5,000 samples, which is a common number used in mediation studies in social research (Hayes, 2018; MacKinnon, 2012). The decision criterion was based on the confidence intervals from bootstrapping; if they excluded zero, it would be deemed evidence of a significant indirect impact.

Mediation was determined by simply obtaining the product of the coefficients “a” and “b” ($a*b$) or (Total effect – Direct effect) as shown in equation i.

$$i. \quad \text{Mediation} = a*b \dots \dots \dots (H_{04})$$

Therefore, Total effect was obtained by calculating the sum of indirect and the direct effect as shown in equation ii.

$$ii. \quad \text{Total effect (C)} = (a*b) + C'$$

Where; X= Independent Variable, Y= Dependent Variable, M= Mediating Variable, C = Total effect, C'= Direct effect, and ($a*b$) = Indirect effect.

3.12.2 Qualitative Data Analysis Techniques

Qualitative data analysis presents a demanding and frequently intricate process, necessitating the distillation of extensive raw information into significant insights. This involves distinguishing pertinent data from irrelevant, recognizing crucial patterns, and developing a structure to convey the core revelations of the data (Patton, 2014).

According to Creswell (2012), there are six steps commonly used in analyzing qualitative data. These steps are not always taken in sequence, but they represent: preparing and organizing the data for analysis; engaging in an initial exploration of the data through the process of coding it; using the codes to develop a more general picture of the data descriptions and themes; representing the findings through narratives and visuals; making an interpretation of the meaning of the results by reflecting personally on the impact of the findings and on the literature that might inform the findings; and conducting strategies to validate the accuracy of the findings. Braun and Clarke (2006) also provided a summarized easy to follow six step procedure for data analysis in qualitative research which involves: transcribing the data, re-familiarizing with the data, first phase coding, second phase coding, third phase coding and producing a report.

This study adopted the thematic data analysis technique as guided by the procedures above by Creswell (2012) and Braun and Clark (2006) to analyze the qualitative data collected from objective 5 using the interviews. The choice for thematic analysis is because it is an appropriate and powerful method to use when seeking to understand a set of experiences, thoughts, or behaviors across a data set (Braun and Clarke 2012). Through thematic analysis, the research construct's themes to reframe, reinterpret, and/or connect elements of the data. Thus, themes are not merely organizational tools used to classify and label data. While processes of thematic analysis required the researcher to develop organizational and classification labels to describe the data, thematic analysis went further into the interpretation and data transformation processes. To facilitate this process, MAXQDA 24 was used, particularly at the coding and theme generation stages. MAXQDA 24 enabled efficient organization, retrieval, and visualization of coded data, enhancing the accuracy and depth of the thematic analysis.

The software's structured approach to coding helped identify key patterns and relationships within the data, ensuring a systematic and rigorous interpretation of the findings.



Figure 4: Thematic Analysis Framework.

Source: Adopted from Braun and Clark's (2006) and Creswell (2012), six steps framework for qualitative/thematic data analysis.

3.13 Merging of Quantitative and Qualitative Data

Using the convergent research design, the researcher conducted a quantitative analysis of survey data and a qualitative analysis of focus group discussions and interviews. The findings from both methods were then compared to assess areas of convergence and divergence as shown in figure 3.4. A side-by-side narrative approach was employed to

present the results, organizing them conceptually and thematically to provide a cohesive and thorough understanding of the research phenomenon.

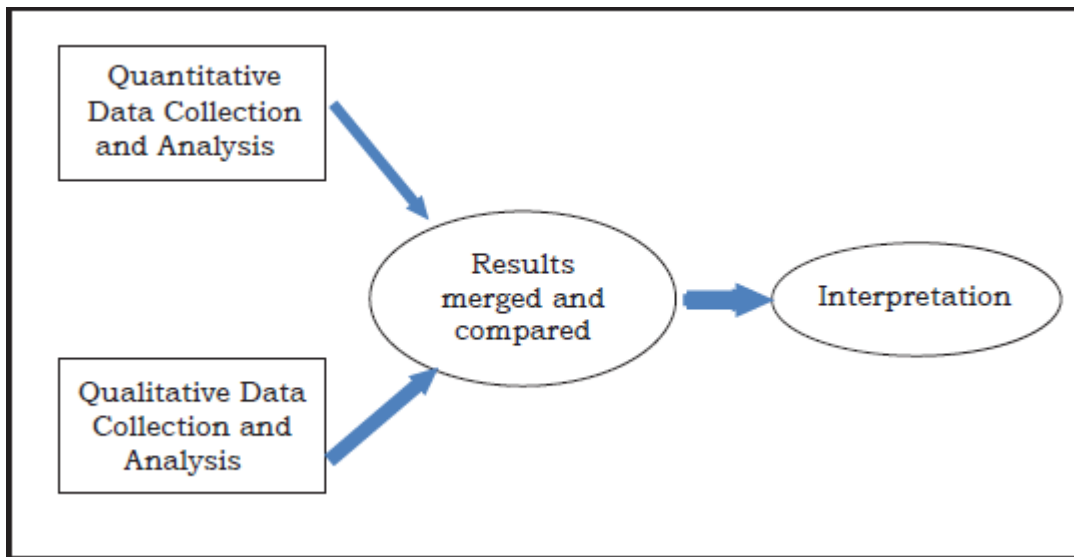


Figure 5: Merging of Quantitative and Qualitative results in a Convergent Mixed-Method Research Design.

Source: Adapted from Creswell and Clark (2018)

3.14 Ethical Considerations

This study adhered to ethical considerations for conducting social science research, ensuring compliance with established guidelines and standards to maintain the trustworthiness and validity of the findings. As defined by Lorelli, Jill, Deborah, and Nancy (2017), ethics are sets of values, standards, and institutional guidelines that regulate the researcher and the research process. These guidelines safeguard the participants' mental, emotional, and physical well-being (Ridley, 2016). Creswell and Clark (2017) emphasized that ethical considerations throughout the research process enable the researcher to protect participants, build trust, ensure the validity of the study, and prevent unethical practices. Additionally, the researcher has a responsibility to respect participants' rights, needs, values, and desires.

Creswell (2014) highlighted key ethical concerns, including the need to respect participants' preferences and interests when reporting data, and the importance of clearly explaining the research objectives, either verbally or in writing. The researcher also needed to secure research permits from academic institutions and relevant research boards. The American Education Research Association (AERA) (2011) further outlined ethical requirements such as participant confidentiality, protection from harm, and obtaining informed consent.

In this study, ethical approval and permits were first sought from the School of Education, Moi University, following a successful defense of the research proposal. With institutional clearance obtained, the researcher applied for a national research permit from the National Council for Science, Technology, and Innovation (NACOSTI), in adherence to national and international research laws. Using these permits, the researcher then sought clearance from County and Sub-County education offices to ensure unrestricted access to the study site.

Familiarization with the research site began by visiting targeted schools to access participants. Participants were provided with detailed information about the study's objectives, design, potential risks, and benefits, with opportunities to ask questions before deciding to participate. They then signed informed consent forms, consistent with McLeod's (2011) recommendation that informed consent includes adequate information about the study's purpose, voluntary participation, and confidentiality. In line with Lambert and Glacken (2011), participants were assured that they could withdraw from the study at any time without facing any consequences.

To maintain privacy and confidentiality, pseudonyms were used in place of participants' names during interviews and in questionnaires, ensuring anonymity. Data collected were securely stored, with electronic files protected by passwords and physical records

kept in locked cabinets. Only the researcher, research assistants, and supervisors had access to the data, and solely for research purposes.

Conflict of interest was avoided by clarifying that the study was conducted purely for academic purposes, with findings aimed at enhancing parental engagement in collaborative partnerships to improve the Competency-Based Education (CBE). The research was self-funded through the DAAD scholarship, with no financial gains anticipated.

Further measures were taken to ensure that respondents did not experience any physical or psychological harm. Controversial questions were excluded, and privacy was upheld during data collection. Data were stored securely for five years as per APA (2010) guidelines, after which they would be disposed of by deleting electronic records and destroying hard copies.

All sources used in the study were accurately cited and referenced according to APA 7th edition guidelines and Moi University's research regulations. These measures ensured the ethical integrity of the research and addressed potential issues such as plagiarism.

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS, INTERPRETATION AND
DISCUSSION OF FINDINGS.

4.1 Introduction

This chapter presents a logical overview of the data presentation, analysis, interpretation and discussion of the study findings, based on the purpose of the study which was to examine the influence of Parental Engagement and Parental Role Construction on the implementation of the Competency-Based Education, among selected Public Primary Schools, in Nakuru County, Kenya. A mixed-methods approach was adopted, with a survey questionnaire used to gather quantitative data, while semi-structured interviews and FGD were employed for qualitative data.

The quantitative data was analyzed using hierarchical linear regression and the Hayes Mediation test with the help of the SPSS version 29 and Hayes PROCESS macro-Version 4.2 (Model 4). The analysis was based on the following null hypotheses which were tested at $\alpha=0.05$ level of significance while controlling for the confounding effects of parents' level of education, age, and gender:

- i. **H01:** There is no statistically significant relationship between parental engagement in participatory decision-making and the implementation of the Competency-Based Education in public primary schools.
- ii. **H02:** There is no statistically significant relationship between parental engagement in resourcing, volunteering, and linkages and the implementation of the Competency-Based Education in public primary schools.
- iii. **H03:** There is no statistically significant relationship between parental engagement in the school-home-based learning and development process

and the implementation of the Competency-Based Education in public primary schools.

- iv. **H04:** Parental Role Construction does not significantly mediate the relationship between Parental Engagement and Competency-Based Education (CBE) Implementation in public primary schools in Nakuru County, Kenya.

In addition, qualitative data were gathered from teachers and parent representatives, who shared detailed insights into their experiences and perspectives on parental engagement and role construction in the context of CBE implementation. While the primary focus was on parental perspectives, teachers were included due to their direct involvement in curriculum delivery and their ability to observe how parental roles are enacted in school settings. PTA members, though parents themselves, were treated as a distinct group because of their leadership roles in school governance and community representation. Their inclusion offered broader institutional and systemic insights. These qualitative perspectives were not used to interpret quantitative results directly but to enrich and contextualize the findings in line with the convergent mixed-methods design adopted in this study.

Thematic analysis was employed to analyze data, guided by the procedures outlined by Creswell (2012) and Braun and Clarke (2006) to identify key themes and patterns. The guiding research question for this strand was:

- i. What are the teachers' and parents' perceptions and experiences regarding parental engagement and role construction in the implementation of the Competency-Based Education in public primary schools, in Nakuru County, Kenya?

Both quantitative and qualitative data were analyzed independently but concurrently. The two data sets were integrated and compared to identify areas of convergence and divergence, following a convergent one-phase research design strategy using the side-by-side narrative method. Quantitative and qualitative data were analyzed independently but in parallel. This entailed writing quantitative results and qualitative findings together on a theme-by-theme or concept-by-concept basis instead of separate presentations to facilitate a more comprehensive discussion of the research outcomes (Creswell & Plano Clark, 2018).

4.2 Pre-data Screening

Data screening before analysis is an essential step that includes various systematic procedures to ensure the dataset is ready and validated for further analysis. The initial step involves data cleaning, which entails detecting and correcting errors, inconsistencies, and missing values to guarantee the dataset's accuracy and dependability (Field, 2018). Data was organized coherently, by coding the responses and inputting them into the SPSS program. The inputted data set was inspected for completeness using spot checks to determine the presence of any missing values or blank entries. This process ensures an accurate transcription of data from the sources (Hair et al, 2019).

This inspection confirmed that all 218 entries were fully complete, with no missing data detected across any variables. As a result, it was not necessary to conduct a missing data analysis or apply treatment methods such as listwise deletion, mean substitution, or multiple imputation. Similarly, since no missing data were observed, classification by mechanism, whether Missing Completely at Random (MCAR), Missing at Random (MAR), or Missing Not at Random (MNAR), was not applicable. The completeness of

the dataset allowed for subsequent pre-data screening without the need for corrective adjustments.

The data set was then evaluated for the unengaged participants, who gave consistent responses to every question. This evaluation was done by computing the response standard deviation to detect any instances with no variance (Hair et al., 2019). As a result, 7 out of 218 responses were identified as unengaged participants and were thus excluded from further analysis. The primary goal of pre-data screening was to convert raw data into a dependable dataset that leads to reliable analytical results, improving the credibility and accuracy of the entire research process (Field, 2018). The dependable dataset had 211 responses which were used for subsequent analysis.

Finally, the researcher initially examined the dataset to identify univariate outliers, which are outliers present in individual variables, before conducting further parametric tests that require a normal distribution. The frequency tables indicated that there were no univariate outliers resulting from data entry errors. The researcher further computed the standardized values (z-scores) for each case. Notably, there were no cases with z-scores outside the range of +3.29 and -3.29; hence, the data were free from univariate outliers (Tabachnick & Fidell, 2013). This implies that any z-score higher than +3.29 or lower than -3.29 is classified as an outlier situation.

4.3 Response Rate

The response rate addresses the proportion of individuals who participate in a study compared to the total number invited or eligible. Higher response rates suggest a more representative sample and enhance the study's credibility. From the 248 respondents sampled in this study, 211 completed the questionnaires, resulting in an overall response rate of 85.1 %. This response rate was sufficient for further analysis, as it

exceeds the minimum acceptable threshold of 70% typically required for survey research (Draugalis et al., 2008).

In addition to the 211 parent respondents, 13 teachers and 10 PTA representatives were purposively and conveniently sampled for the qualitative strand. These participants contributed through semi-structured interviews and a focus group discussion, respectively. However, demographic data were not collected from these qualitative participants, as their involvement aimed to enrich the understanding of CBE implementation through stakeholder perspectives, rather than statistical comparison.

4.4 Demographic Characteristics of the Parent Respondents

The demographic characteristics of the 211 parent respondents were collected in categorical form and summarized using a frequency distribution table, as shown in Table 4.1 below. The table presents an overview of the respondents' gender, age, and education level. This information formed the basis for subsequent analysis, employing descriptive statistics, frequency distributions, and percentages to explore the research objectives and results. Understanding these characteristics offers important context for interpreting the findings, as it sheds light on the profiles and potential perspectives of the respondents. Demographic data were not collected from teachers and PTA representatives, as they participated exclusively in the qualitative strand, contributing experiential insights based on their professional and leadership roles.

Table 4.1 *Demographic Characteristics of Parent Respondents*

Demographic Characteristic		Frequency n	Percentage (%)
Gender	Female	153	72.50%
	Male	58	27.50%
	Total	211	100
Age	20-30yrs	26	12.30%
	30-40yrs	81	38.40%
	40-50yrs	86	40.80%
	Above 50yrs	18	8.50%
	Total	211	100
Level of Education	Certificate	43	20.40%
	Diploma	77	36.40%
	Bachelors	78	37.00%
	Masters/Doctorate	13	6.20%
	Total	211	100

Note: N=211.

Source: Field data (2024)

The results in Table 4.1 show that the gender distribution among the 211 parents who responded shows that the majority were females (72.50%) compared to males (27.50%). This trend reflects societal norms where women, especially mothers, are more involved in their children's education.

The age distribution of the respondents is concentrated in the middle-aged groups, with 40-50 years being the most represented (40.80%), followed closely by 30-40 years (38.40%). Younger parents (20-30 years) make up 12.30% of the respondents, while those above 50 years' account for 8.50%. This age distribution suggests that middle-

aged parents might have more experience and potentially stronger beliefs and engagements in their children's education compared to younger or older parents.

The educational profile of the parent respondents indicates that a significant majority had attained higher post-secondary qualifications. Specifically, 37.0% held a Bachelor's degree, 36.4% had a Diploma, and 20.4% had completed a Certificate programme, referring to technical or professional training undertaken after secondary education. Only 6.2% reported having advanced degrees (Masters or Doctorate). All respondents had completed at least primary education, with the vast majority having progressed through secondary school or beyond. This relatively high level of education suggests that the respondents were likely to be more informed and better equipped to understand and support curriculum reforms such as the Competency-Based Education (CBE).

4.5 Data Reduction Using Factor Analysis

Exploratory Factor Analysis (EFA) was used to identify and extract underlying factors from the study variables' items, providing a concise and interpretable representation of the data (Hair et al., 2019). This analysis was conducted to determine the key dimensions of the study variables, reduce data complexity, and enhance the validity of the measurement constructs used in the study. By identifying latent constructs, EFA helped group related items, ensuring that the survey captured the most meaningful aspects of parental engagement. Before EFA, the following statistical assumptions relevant to multivariate techniques, such as regression analysis, were checked to confirm the suitability of the data for factor extraction.

4.5.1 Sample to variable ratio

Hair et al. (2019) and Saunders et al. (2019) recommend that the sample size for factor analysis should exceed 100 and maintain a sample-to-variable ratio of at least 15:1. In this study, the sample size was 211 with three variables, resulting in a ratio of 70:1, significantly surpassing the recommended threshold. This confirms the adequacy of the sample size for conducting factor analysis in line with established guidelines.

4.5.2 Assessment of Multivariate Outliers

Although assessment of univariate outliers is necessary for multivariate analysis, it is not a sufficient condition for detecting multivariate outliers. Unlike univariate analysis, which focuses on a single variable at a time, multivariate analysis considers the relationships among multiple variables (Hair et al., 2019). The dataset was explored for multivariate outliers by obtaining Mahalanobis D2 scores using the linear regression method.

To identify which specific Mahalanobis D2 score(s) could be associated with multivariate outliers, the probability Mahalanobis D2 Chi-square value distribution was computed using 1 degree of freedom since the hypothesized Model in this study had one predictor variable and one outcome variable.

The rule of thumb is that a probability Mahalanobis D2 test value of less than .001 ($p < .001$) shows the presence of multivariate outliers and, therefore, should be deleted from the dataset (Hair et al., 2019). As a result, all probabilities of Mahalanobis D2 were greater than .001. Therefore, the dataset did not contain any multivariate outliers.

4.5.3 Test for Normality

The researcher examined the normality of the data distribution for individual variables by analyzing their skewness and kurtosis coefficients. A skewness and kurtosis value close to zero indicates that the data is approximately normally distributed. Alternatively, a skewness or kurtosis coefficient within the range of -3 to +3 in absolute value is also considered acceptable for normality. When either of these conditions is met, it implies that the data is approximately normally distributed. Table 4.2 shows the skewness and kurtosis values for the original values.

Table 4.2. *Skewness and Kurtosis Coefficients for the Original Variables*

Original Variables	N=211			
	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
CBE Implementation	-0.568	0.167	-0.318	0.333
Participatory Decision Making	-0.606	0.167	-0.338	0.333
Resourcing Volunteering and linkages	-0.267	0.167	-0.524	0.333
School-Home-Based Learning Strategies	-0.612	0.167	-0.403	0.333
Parental Role Construction	-0.756	0.167	-0.155	0.333

Results in Table 4.2 showed that most variables, except for the parental role construction variable, had skewness and kurtosis values relatively distant from zero, indicating a slightly moderate negatively skewed distribution. Consequently, the data was transformed using fractional rank and *Idf. Normal (fractional rank, mean, Standard deviation)* to achieve normality. Post-transformation, the skewness and kurtosis values were close to zero and within acceptable limits, as shown in Table 4.3

Table 4.3 *Skewness and Kurtosis Coefficients for the Transformed Variables*

Transformed Variables	N=211			
	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
CBE Implementation	-0.091	0.167	-0.741	0.333
Participatory Decision Making	-0.099	0.167	-0.294	0.333
Resourcing Volunteering and linkages	-0.034	0.167	-0.445	0.333
School-Home-Based Learning Strategies	-0.034	0.167	-0.562	0.333
Parental Role Construction	-0.218	0.167	-0.799	0.333

4.5.4 Test for Multicollinearity

Multicollinearity occurs when independent variable/s in a regression model are highly correlated with each other ($r > .8$). This can lead to unstable parameter estimates and inflated standard errors, making it difficult to interpret the results accurately. Pearson's product-moment correlation test was computed to ascertain the potential presence of multicollinearity. Table 4.4 shows the correlation results.

Table 4.4 *Correlation Matrix N=211 for main study variables.*

	1	2	3	4	5
1 CBE implementation	1				
2 Participatory decision making	.362**	1			
3 Resource volunteering and linkages	.303**	.565**	1		
4 School-Home-based learning strategies	.364**	.472**	.642**	1	
5 Parent home-based learning strategies	.548**	.299**	.312**	.459**	1

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

Notably, the correlation coefficient (r) for all study variables fell below the critical threshold of 0.8. This implied that, the variables were not highly correlated ($r > 0.8$) nor was singularity ($r = 1$) present between the predictor variables and the dependent

variable (CBE Implementation). Further to confirm this assumption, an additional step was taken to assess the presence of multicollinearity. Tolerance statistics (TOL) and its reciprocal, the Variance Inflation Factor (VIF) were examined. O'Brien (2007) posits that Tolerance values greater than 0.1 ($TOL > 0.1$) and VIF values below ten ($VIF < 10$) suggest there is no presence of Multicollinearity. The collinearity diagnostic test results (Table 4.5) show that the predictor variable had Tolerance Values above 0.1 and VIF values less than 10. This statistic confirms that Multicollinearity was not a problem.

Table 4.5 *Test for Multicollinearity*

Variable	Collinearity Statistics	
	Tolerance	VIF
Participatory decision making	0.653	1.531
Resource volunteering and linkages	0.499	2.004
School-Home-based learning strategies	0.505	1.981
Parental role construction	0.780	1.282

4.6 Exploratory Factor Analysis (EFA)

After checking and meeting all the assumptions for conducting factor analysis, the number of survey items was reduced and construct validity was assessed using exploratory factor analysis (EFA), specifically Principal Component Analysis (PCA) with Varimax rotation. PCA identified underlying factor structures by maximizing loading dispersion, ensuring each component had strong and distinct loadings. Items with significant loadings were averaged to create composite scores for easier analysis and interpretation. Each statistically identifiable component had at least three to five observed variables loading without cross-loadings and factor loadings above 0.5, with eigenvalues greater than one (Hair et al., 2019).

4.6.1 Exploratory Factor Analysis for Parental Engagement

Parental engagement formed the independent variable of the study and was operationalized as a three-dimensional variable with three key constructs namely: participatory decision-making (5 items), resourcing, volunteering and linkages (6 items), and school-home-based learning and development strategies (6 items) measured on a 5-point Likert scale. Exploratory Factor Analysis (EFA) was conducted to identify the key factors contributing to the common variance in parental engagement.

The KMO value was .890, indicating an adequate sample size for factor analysis (Field, 2018). Additionally, the results in Table 4.6 indicate that Bartlett's test of Sphericity produced Approx. Chi-Square=1578.877, DF=136, Sig=.000, confirming that item correlations were sufficiently significant for factor analysis (Hair et al., 2019).

Table 4.6 *KMO and Bartlett's Test for Parental Engagement*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.890
Bartlett's Test of Sphericity	Approx. Chi-Square	1578.877
	Df	136
	Sig.	.000

The rotated component matrix for items measuring parental engagement was conducted using Varimax rotation with Kaiser Normalization. None of the items were initially dropped; therefore, all 17 items measured parental engagement across three dimensions: participatory decision-making, resourcing, volunteering and linkages, and school-home-based learning strategies.

All parental engagement items loaded perfectly onto the three dimensions without any cross-loading. However, some items (RVL3, RVL4, HBLS1, PDM5) loaded on

components they did not conceptually belong to. After examining the theoretical basis of the constructs, these three items were removed, and the factor analysis was re-run to improve the factor structure and ensure items loaded on the components they conceptually belong to, confirming convergent and discriminant validity.

This strong construct validity implies that parental engagement items effectively measured the intended constructs. Additionally, Cronbach's alpha coefficients for each factor exceeded the recommended threshold of 0.7, indicating high internal consistency and reliability within each construct (Hair et al., 2019). The individual item loadings are interpreted as correlation coefficients. The results are shown in Table 4.7.

Table 4.7 *Exploratory Factor Analysis Results for Parental Engagement*

Rotated Component Matrix		Component			Cronbach α
Code	Statement	Home- Based Learning Strategies	Participatory Decision Making	Resourcing Volunteering and Linkages	
HBLS4	Parents involve children in safe, age-appropriate family and community activities.	0.840			0.829
HBLS2	Parents involve children in play and chores for their development.	0.802			
HBLS3	Parents provide resources and an environment for children to grow and learn.	0.799			
HBLS6	Parents help children with homework, e-learning, and projects.	0.649			
PDM2	The school informs parents about procedures for electing parent representatives to school bodies.		0.808		0.789
PDM3	School invites parents to discuss children's behavior, natural abilities, and academic capabilities.		0.798		
PDM1	Opportunities for parents to participate in key decision-making affecting learners' wellbeing.		0.676		
PDM4	Parental engagement enhances monitoring of children's growth and identification of learning difficulties.		0.645		
RVL5	Opportunities to volunteer services and resources to schools.			0.798	0.778
RVL6	Participation in creating linkages with relevant agencies for resources.			0.767	
RVL1	Participation in identifying and prioritizing school resource needs.			0.705	
RVL2	Participation in fundraising for school improvements.			0.644	
<i>Extraction Method: Principal Component Analysis.</i>					
<i>Rotation Method: Varimax with Kaiser Normalization.</i>					
<i>a Rotation converged in 5 iterations.</i>					

The three components accounted for 62.846% of the total variance in parental engagement (Table 4.8). Home-based learning strategies contributed 39.699%, while participatory decision-making contributed 13.307% of parental engagement. Lastly, resourcing volunteering and linkages contributed 9.841%. This implies that school-home-based learning strategies is the biggest determinant of parental engagement in CBE implementation, compared to participatory decision making. Finally, resourcing volunteering and linkages form the least determinant.

Table 4.8 *Total Variance Explained for Parental Engagement*
Total Variance Explained

Component	Initial Eigen Value			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1. School-Home-Based Learning Strategies	5.161	39.699	39.699	3.066	23.582	23.582
2. Participatory Decision Making	1.73	13.307	53.006	2.678	20.601	44.183
3. Resourcing Volunteering and Linkages	1.279	9.841	62.846	2.426	18.663	62.846

Extraction Method: Principal Component Analysis

4.6.2 Exploratory Factor Analysis for Parental Role Construction

Parental role construction formed the mediating variable of the study and comprised 9 items measured on a 5-point Likert scale. Exploratory Factor Analysis (EFA) was conducted to identify the key factors contributing to the common variance in parental engagement.

The KMO value was .904, indicating an adequate sample size for factor analysis (Field, 2018). Additionally, the results in Table 4.9 indicate that Bartlett's test of Sphericity produced Approx. Chi-Square=1105.106, DF=36, Sig=.000, confirming that item correlations were sufficiently significant for factor analysis (Hair et al., 2019).

Table 4.9 *KMO and Bartlett's Test for Parental Role Construction*

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.904
Bartlett's Test of Sphericity	Approx. Chi-Square-		1105.106
	Df		36
	Sig.		.000

Exploratory factor analysis with coefficients suppressed at (0.7) identified a single essential factor representing the most significant common variance in parental role construction (Table 4.10). This unidimensional factor included seven items with loadings between 0.754 and 0.841. The Cronbach's alpha (α) for this factor was 0.910, exceeding the recommended threshold of 0.7, indicating high internal consistency. Thus, confirming construct validity (Hair et al., 2019).

Table 4.10 *Exploratory Factor Analysis Results for Parental Role Construction*
Rotated Component Matrix

Code	Items	Component	
		Parental Role Construction	A
PRC8	Parents should provide their children with the required resources for school and e-learning activities.	0.841	0.91
PRC6	Parents should academically socialize their child's development for self-sufficiency.	0.837	
PRC2	Parents should attend meetings with teachers or school staff about their child's education.	0.8	
PRC5	Parents should play an active role in curriculum and school-related decisions.	0.797	
PRC4	Parents should regularly communicate with teachers about their child's well-being, behavior, and academic progress	0.785	
PRC1	Parents should assist and guide their child's education regardless of socioeconomic status.	0.78	
PRC7	Parents are responsible for their child's home-based learning, including homework and projects.	0.754	

Extraction Method: Principal Component Analysis.

1 component extracted.

4.6.3 Exploratory Factor Analysis for CBE Implementation

CBE implementation formed the dependent variable of the study and comprised 8 items measured on a 5-point Likert scale. Exploratory Factor Analysis (EFA) was conducted to identify the key factors contributing to the common variance in CBE implementation. The KMO value was .911, indicating an adequate sample size for factor analysis (Field, 2018). Moreover, the results in Table 4.11 indicate that Bartlett's test of Sphericity produced Approx. Chi-Square=724.897, DF=28, Sig=.000, confirming that item correlations were sufficiently significant for factor analysis (Hair et al., 2019).

Table 4.11 *KMO and Bartlett's Test for Parental CBE Implementation*

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			0.911
Bartlett's Test of Sphericity	Approx. Chi-Square-		724.897
	Df		28
	Sig.		.000

Exploratory factor analysis with coefficients suppressed at (0.7) identified a single essential factor representing the most significant common variance in parental role construction (Table 4.12). This unidimensional factor included seven items with loadings between 0.705 and 0.798. The Cronbach's alpha (α) for this factor was 0.879, exceeding the recommended threshold of 0.7, indicating high internal consistency. Thus, confirming construct validity (Hair et al., 2019).

Table 4.12 *Exploratory Factor Analysis Results for CBE Implementation*
Rotated Component Matrix

Code	Items	Component	
		CBE Implementation	α
CBE8	Development of regular, informative, and positive two-way communication between teachers and parents through CBE engagement	0.798	0.879
CBE2	Contribution to the child's holistic development through engagement in CBE implementation	0.785	
CBE5	Improving children's school retention, attendance, self-esteem, and academic performance through CBE engagement	0.769	
CBE3	Positive impact on children's school-related outcomes through active engagement in CBE implementation	0.759	
CBE7	Bringing about improved participatory decision-making through CBE engagement	0.754	
CBE4	Ensuring proper curriculum implementation through engagement in CBE	0.732	
CBE6	Association with positive school attachment and improved school climates through CBE engagement.	0.705	

Extraction Method: Principal Component Analysis.

1 component extracted.

4.7 Statistical Assumptions for Regression Analysis

Before testing the study's hypotheses, the researcher examined the underlying statistical assumptions for regression analysis of the aggregated variables obtained from factor analysis.

4.7.1 Normality of Residuals

Multiple linear regression assumes that the residuals should be normally distributed. This can be verified by plotting a histogram. The histogram in Figure 4.1 displays an approximate normal curve, suggesting that the data fits well and that the normality of the residual's assumption was satisfied.

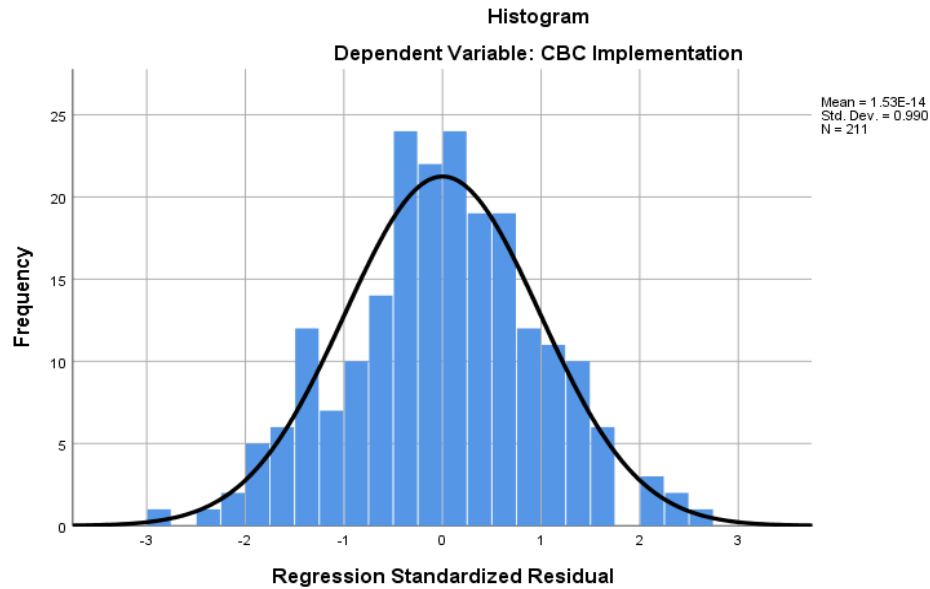


Figure 6: Histogram with Normal Curve.

4.7.2 Linearity of the Residuals

The researcher tested this assumption using normal probability-probability (P-P) plots. Linearity assumes a straight-line relationship between the dependent and independent variables in a regression model, meaning a change in one variable leads to a proportional change in another. The regression standardized residual data points closely followed a straight line (Figure 4.2), indicating a linear association between the predicted and observed variables.

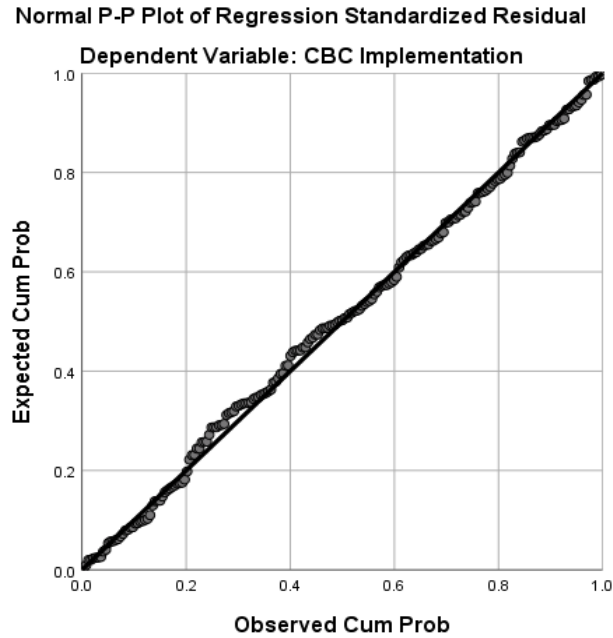


Figure 7: Linearity Normal P-P Plot.

4.7.3 Homoscedasticity

Homoscedasticity assumes that the residuals' variance is consistent across all values of the predicted dependent variable. If this assumption is violated, it can result in biased and unreliable regression coefficients, leading to incorrect conclusions about the predictors' statistical significance. The researcher verified homoscedasticity by plotting a scatter plot of the CBE implementation against the standardized residuals. Figure 4.3 showed that the variances remained constant along the line of best fit across all levels of predictor variables, confirming that the dataset was approximately homoscedastic.

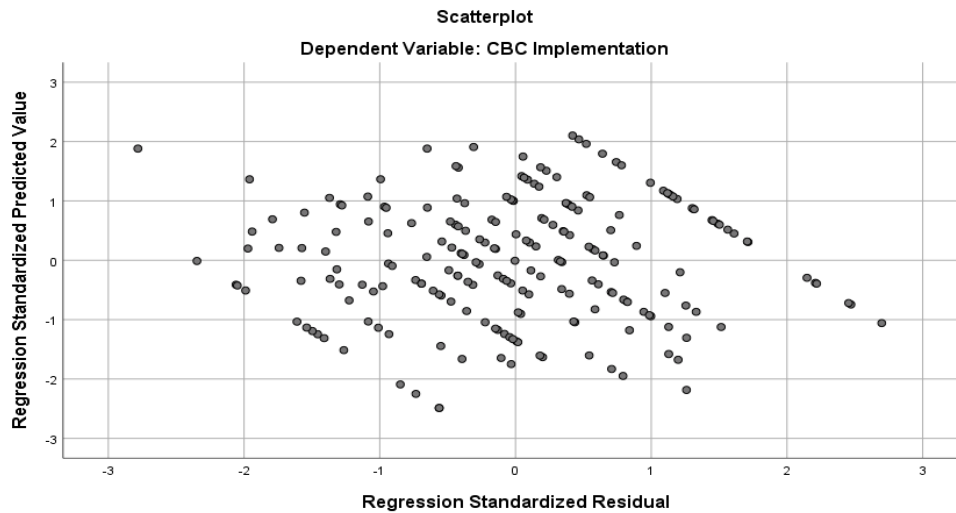


Figure 8: Homoscedasticity Scatter Plot.

4.7.4 Test for Independence of Errors

The researcher performed the Durbin-Watson test to check for independence of errors, ensuring that the residuals were not serially correlated. Durbin-Watson values between 1.5 and 2.5 indicate no autocorrelation (Turner, 2020). Table 4.13 shows an overall Durbin-Watson statistic of 2.0778, confirming no autocorrelation. Ensuring error independence is crucial for the validity and reliability of statistical analyses, so researchers routinely assess this as part of their model diagnostics.

Table 4.13: Test for Independence of Errors

Model	Std. Error of the Estimate	Durbin Watson
Participatory Decision Making	0.43381	2.076
Resourcing Volunteering and Linkages	0.44354	2.038
School-Home-Based Learning Strategies	0.43346	1.95
Parental Role Construction	0.38918	2.042
Overall	0.438784	2.0778

Dependent Variable: CBE Implementation

4.8 Descriptive Statistics of the Study Variables

4.8.1 Competency-Based Education Implementation

Table 4.14 *Descriptive Statistics on CBE Implementation*

Item				
Code	Tested Item	Mean	SD	
CBE1	I acknowledge that teacher-parent collaboration is essential for my child's success in CBE implementation.	4.564	0.822	
CBE2	My engagement in CBE implementation partnerships with the school supports my child's holistic development.	4.218	0.894	
CBE3	Active engagement in my child's education positively impacts their academic and personal outcomes.	4.265	0.86	
CBE4	Parent-school collaboration ensures proper CBE implementation.	4.204	0.89	
CBE5	My engagement in the CBE implementation partnerships enhances school retention, participation, and performance.	4.360	0.77	
CBE6	My engagement in CBE implementation partnerships fosters positive school attachment and improved school climates and programs.	4.209	0.713	
CBE7	My participation in CBE implementation partnerships improves decision-making in school matters.	4.123	0.902	
CBE8	Active CBE partnerships promote regular, effective two-way communication between parents and teachers.	4.332	0.771	
Valid N=211				
	Grand mean	4.284	0.828	

Source: Field data (2024)

The results presented in Table 4.14 indicate strong agreement among parents regarding the significance of teacher-parent collaboration in the successful implementation of the Competency-Based Education (CBE). With a grand mean of 4.284 (SD = 0.828), the results demonstrate that most parents recognize the positive influence of their

engagement on their children's holistic development, academic performance, school retention, and the effectiveness of communication between parents and educators.

For item CBE1, which examined parents' acknowledgment that teacher-parent collaboration is essential for their child's success in CBE implementation, the mean score was 4.564 (SD = 0.822), the highest among all items. This suggests that most parents understand the critical role they play in supporting their children's education. The qualitative findings reinforced this perspective, with teachers emphasizing the impact of parental involvement on student success. One teacher noted,

“When parents are involved, children perform better because they get support both at home and in school.” (Teacher 3).

A PTA representative similarly remarked,

“Our children are more motivated to learn when they see us working closely with teachers.” (PTA Member 2).

Item CBE2 assessed parental engagement in CBE partnerships and their role in supporting children's holistic development, with a mean score of 4.218 (SD = 0.894). This result reflects a strong belief among parents that their participation in school activities contributes to their children's overall growth. Supporting this, a teacher explained,

“When parents participate, we can develop a child's talents and values beyond academics.” (Teacher 5).

Another teacher highlighted the necessity of collaboration, stating that

“Holistic development requires teamwork; parents must reinforce what we teach in school.” (Teacher 9).

Similarly, a PTA member added,

“Parents should not assume learning only happens in school; our involvement completes the process.” (PTA Member 4).

For item CBE3, which measured perceptions of how active parental engagement influences students' academic and personal outcomes, the mean score was 4.265 (SD = 0.86). The findings suggest that parents believe their engagement fosters better learning habits and personal discipline in their children. Teachers supported this view, with one stating that,

“Students whose parents follow up on their schoolwork show greater commitment and responsibility in class.” (Teacher 6).

Another teacher added,

“Even small parental involvement, like checking assignments, makes a significant difference.” (Teacher 2).

A PTA representative emphasized,

“Parents must be proactive in monitoring their children's progress, not just during exams but throughout the term.” (PTA Member 3).

Item CBE4 focused on the role of parent-school collaboration in ensuring the proper implementation of CBE, yielding a mean score of 4.204 (SD = 0.89). The responses indicate that parents recognize the need for their involvement in the effective execution of the curriculum. This was echoed by teachers, with one stating,

“Without parental support, CBE implementation is incomplete because learning happens beyond the classroom.” (Teacher 4).

Another teacher added,

“We need to work together; otherwise, the curriculum's goals cannot be fully realized.” (Teacher 8).

A PTA member reinforced this point, stating,

“Schools can introduce CBE, but without our cooperation at home, it won't be successful.” (PTA Member 1).

For item CBE5, which explored the relationship between parental engagement and student retention, participation, and performance, the mean score was 4.36 (SD = 0.77),

indicating strong parental agreement that engagement improves student outcomes.

Teachers supported this claim, with one stating,

“Some students struggle academically because they lack home support. When parents are engaged, we see a real change in performance.” (Teacher 10).

Another teacher noted,

“When parents attend meetings and monitor school activities, their children remain more focused and motivated.” (Teacher 1).

A PTA member also commented,

“We see that students whose parents are active in school affairs are more confident, active, disciplined and have good results.” (PTA Member 5).

Item CBE6 examined the impact of CBE implementation partnerships in fostering positive school attachment and enhancing school climate and programs, yielding a mean score of 4.209 (SD = 0.713). The findings suggest that parents believe their engagement not only strengthens their children’s sense of belonging to the school but also contributes to a more supportive and engaging learning environment. When parents actively participate, schools tend to implement more inclusive programs, improve teacher-parent collaboration, and create a climate that nurtures student well-being and academic success.

A teacher emphasized this by stating,

“Students feel more confident when they see their parents involved in their education.” (Teacher 11).

Another teacher highlighted the emotional and academic impact noting,

“When parents participate, children develop a sense of pride in their learning.” (Teacher 13).

This increased attachment to school fosters a positive cycle where students feel valued, which in turn enhances their engagement with school activities and programs. A PTA representative reinforced this perspective, stating,

“Children thrive when they know their parents are invested in their education.” (PTA Member 6).

As a result, schools with strong parental engagement often witness the development of more responsive academic programs, extracurricular opportunities, and student support initiatives that further enhance the learning experience.

Item CBE7, which assessed parental participation in decision-making concerning CBE implementation, had a slightly lower mean score of 4.123 (SD = 0.902). This suggests that while parents recognize the importance of their role in school governance, some may feel their influence is limited or face barriers to active participation.

A teacher highlighted the benefits of engagement, stating,

“Involving parents in decision-making helps align school policies with their expectations, making implementation smoother.” (Teacher 10).

However, another teacher noted challenges in participation, explaining,

“Some parents hesitate to engage in decision-making, but those who do contribute valuable insights.” (Teacher 7).

This indicates that while parental involvement enhances the effectiveness of CBE implementation, hesitation or lack of confidence among some parents may hinder broader participation. A PTA member echoed this concern, stating,

“Not all parents feel confident enough to participate, but we need to create more opportunities for their voices to be heard.” (PTA Member 7).

These findings suggest a need for schools to foster a more inclusive decision-making environment, equipping parents with the knowledge, confidence, and opportunities to play a more impactful role in shaping CBE implementation.

Item CBE 8 examined the role of CBE partnerships in enhancing two-way communication between parents and teachers, resulting in a mean score of 4.332 (SD = 0.771). The findings suggest that parents perceive a significant improvement in communication since the adoption of CBE, fostering stronger collaboration between home and school. Increased parental engagement has allowed for more structured interactions, enabling teachers to provide timely feedback while parents take a more active role in their children's learning journey.

This was supported by teachers, with one noting,

“Before CBE, parental engagement was minimal, but now, we have more structured interactions, which benefit both students and teachers.” (Teacher 5).

Another teacher highlighted the positive shift, stating,

“CBE has encouraged open dialogue between teachers and parents, leading to better student progress monitoring.” (Teacher 6).

The strengthened communication channels have not only improved information sharing but have also contributed to a more supportive learning environment. A PTA representative reinforced this perspective, stating,

“We now feel more involved in our children’s education because teachers actively reach out to us.” (PTA Member 8).

These findings underscore the role of CBE partnerships in fostering a culture of open communication, ultimately enhancing student learning outcomes and parental involvement in academic decision-making.

Overall, the integration of quantitative and qualitative findings underscores the critical role of teacher-parent collaboration in CBE implementation. The consistently high mean scores across all items highlight parents' strong belief in the importance of their involvement in their children's holistic development, school engagement, and overall educational success. Qualitative insights from teachers and PTA representatives further reinforce these perspectives, demonstrating that active parental participation fosters improved learning outcomes, student retention, and a supportive learning environment. These findings suggest that effective communication, shared responsibility, and active participation are key enablers of successful CBE implementation. However, challenges such as unclear CBE transitions and parental uncertainties in decision-making must be addressed to enhance collaboration and curriculum implementation. Strengthening teacher-parent partnerships will further improve student academic performance, personal growth, and overall well-being.

These findings are supported by Nyamai (2021), who emphasized that parental participation in curriculum development fosters democratic inclusivity and ensures that parents play a crucial role in student achievement. The study highlighted that parents contribute significantly by overseeing learning, providing resources, and strengthening teacher-parent cooperation. Furthermore, it noted that when parents are excluded from curriculum development, they struggle to understand their role in its implementation, potentially hindering student success. This further reinforces the need for structured parental engagement to enhance curriculum reforms and educational outcomes.

Additionally, these findings align with Haisraeli and Fogiel-Bijaoui (2023), who examined parental involvement in school pedagogy and its impact on shaping teaching methodologies. Their study revealed that parents actively influence pedagogical decisions, advocating for either innovative or traditional practices to support their

children's education. They underscored the importance of structured school-parent collaboration in driving curriculum reforms and fostering effective learning environments. Collectively, these studies emphasize that parental engagement, when effectively structured and encouraged, enhances CBE implementation by ensuring that parents and teachers work together to support student learning and development.

4.8.2 Parental Engagement in Competency-Based Education Implementation

Parental engagement plays a crucial role in the successful implementation of the Competency-Based Education (CBE). This section examines key aspects of parental engagement, including their participation in decision-making, contribution to resourcing, volunteering efforts, and linkages that support learning. Additionally, it explores the role of parents in facilitating school-home-based learning and development strategies, highlighting the extent of their engagement and the challenges they face in effectively supporting CBE implementation.

4.8.2.1 Parental Engagement in Participatory Decision Making

Parental engagement in participatory decision-making is essential for fostering collaborative school environments that support student development. In this study, parents were asked to rate their level of engagement in school decision-making using a five-point Likert scale. The quantitative findings offer an overview of parental participation levels, while qualitative perspectives highlight the challenges and opportunities for strengthening parental involvement in decision-making processes within the Competency-Based Education (CBE) framework. The results are presented in Table 4.15.

Table 4.15 *Descriptive Statistics for Parental Engagement in Participatory in Decision-Making*

Item Code	Statement	Mean	SD
PDM1	I have opportunities to participate in key decisions about my child's education and well-being.	3.441	1.269
PDM2	The school provides information to enhance fair parent participation in electing representatives and school development.	3.64	1.204
PDM3	The school invites parents to discuss their child's observed behavior, academics, and career choices.	3.749	1.158
PDM4	The school involves parents in decision-making to enhance the monitoring of children's growth and learning difficulties.	3.754	1.119
PDM5	The school nominates family and community members for educational committees and workshops.	3.014	1.263
Valid N= 211			
Overall Mean		3.52	1.203

Source: Field data (2024)

The results in Table 4.15 indicate that parents moderately agree that they have opportunities to participate in key decisions about their child's education and well-being (PDM1), with a mean score of 3.441 and a standard deviation of 1.269. This suggests a varied perception among parents regarding their engagement in school decision-making. The qualitative data reinforces this finding, highlighting teachers' calls for more active parental engagement. One teacher emphasized,

"Making parents part of CBE by engaging them in every decision and aspect. Do not make them just onlookers; let them realize their role in the system." (Teacher 4).

However, PTA members' views suggest that parental involvement remains largely passive, with one parent stating,

"As a parent, you know that when the teacher says it's a skipping rope, it's a skipping rope and nothing else... So, Mwalimu decides, and we implement." (PTA Member 3).

This contrast between teachers' expectations and parents' actual experiences suggests a gap between policy intentions and practice in school decision-making processes.

Regarding item PDM2, which examines the school provision of information to enhance fair parent participation in electing representatives and school development, the quantitative results show a relatively high mean score of 3.64 with a standard deviation of 1.204. This implies that while parents generally acknowledge opportunities for involvement, the extent of their participation varies. Qualitative responses provide further context, with teachers stressing the need for better awareness and engagement strategies. One teacher suggested that,

“The government should engage communities to educate parents on CBE aspects, their roles, and assessments through barazas, churches, and Nyumba Kumi.” (Teacher 11).

PTA members, however, highlighted inconsistencies in parental involvement, with one stating,

“Under some school heads, parents are highly involved in decision-making, but others deny us the chance. We are mostly involved in finances, discipline, and development.” (PTA Member 5).

This reinforces the quantitative finding that while structures exist for parental participation, their actual engagement depends on individual school leadership and communication practices.

Under Item PDM3, the quantitative findings indicate that parents largely agree that schools invite them to discuss their child's behavior, academics, and career choices, with a mean of 3.749 and a standard deviation of 1.158. This suggests that schools make an effort to involve parents, at least at an informational level. However, qualitative insights suggest that while parents may be called upon for discussions, their role in shaping decisions remains limited. A teacher emphasized the importance of fostering collaboration through structured interactions, stating,

“Convening parents for meetings and seminars, allowing them to share ideas, and reaching a consensus on their roles is key.” (Teacher 4).

On the other hand, PTA members expressed concerns about their exclusion from key decision-making, with one stating,

“In our school, no... The school just makes decisions and passes the information to parents. Most decisions in classrooms regarding a child’s learning are left to teachers.” (PTA Member 7).

This qualitative evidence supports the quantitative findings by indicating that while schools facilitate parental meetings, these gatherings often serve as platforms for disseminating decisions rather than engaging parents as equal partners.

Similarly, for item PDM4, which assesses whether schools involve parents in monitoring children's growth and learning challenges, the quantitative results indicate a strong agreement (mean = 3.754, SD = 1.119). While these numbers suggest that many parents perceive some level of engagement, qualitative data reveal that teachers acknowledge their role in fostering collaboration but emphasize the need for deeper parental involvement in decision-making about students' learning progress and challenges. One teacher noted,

“Teachers play a key role in engaging parents, but all stakeholders must collaborate to address CBE-related challenges and define roles.” (Teacher 4).

However, PTA members expressed concerns that parental involvement remains largely directive rather than participatory, as one stated,

“Most schools make decisions based on government directives or the insights of a few elected representatives. Parents mainly implement directives.” (PTA Member 2).

This perspective suggests that while parents may be informed about their children's academic progress, their role in shaping interventions for learning difficulties or contributing to individualized support strategies is limited. Strengthening parent-

teacher collaboration in decision-making could ensure that parents are not just recipients of information but active participants in developing solutions tailored to their children's needs.

Finally, for item PDM5, which examines whether schools nominate family and community members for educational committees and workshops, the lowest level of agreement was recorded (mean = 3.014, SD = 1.263), indicating that parents feel least involved in this area. The qualitative data reinforce this, with teachers advocating for broader community involvement. One teacher emphasized,

“Education involves multiple stakeholders such as teachers, government officers, local authorities, and churches to ensure society understands CBC and its roles.” (Teacher 4).

However, PTA members reported that school decisions are largely controlled by select groups, with one stating,

“The school decisions are largely informed by the government or a few elected representatives, with parents mainly serving as implementers.” (PTA Member 6).

This qualitative evidence supports the quantitative findings by demonstrating that while there is recognition of multiple stakeholders, parents remain on the periphery of actual decision-making processes.

Overall, the quantitative results (grand mean = 3.52, SD = 1.203) suggest moderate parental engagement in school decision-making. The qualitative findings provide depth to these numbers, revealing that while structures exist for parental participation, their actual role is often limited to implementation rather than active decision-making. Teachers advocate for more parental education and engagement, whereas PTA members express frustration over their minimal influence in shaping school policies. These findings contradict recommendations by KICD (2019), which emphasize that parents should be actively involved in formulating decisions affecting learners' overall

well-being within and outside the school. Greater parental participation would enhance ownership of decisions and strengthen their role in shaping children's education.

The findings indicate that while frameworks for parental participation exist, parents primarily serve as implementers rather than decision-makers in school matters. Teachers emphasize the need for increased parental education and engagement, while PTA members express dissatisfaction with their limited influence. This gap between intended and actual parental engagement suggests that schools should adopt more inclusive decision-making strategies to empower parents as active stakeholders in CBE implementation.

These findings align with Zhu, Cheong, Wang, and Tong (2023), who reported that in China, parents are not adequately sensitized on how they can contribute to curriculum development and implementation. Many parents do not fully understand the curriculum development process and must simply adapt to decisions made by policymakers, even when their concerns remain unaddressed. Similarly, this current study highlights that despite existing participation structures, parents lack a meaningful role in shaping CBE-related decisions, reinforcing the need for more transparent and inclusive engagement strategies.

Additionally, these findings are supported by Hyassat, Al-Bakar, Al-Makahleh, and al-Zyoud (2024), who examined parental involvement in inclusive education in Jordan. Their study found that while parents of children with disabilities were moderately involved, they faced challenges such as financial constraints, limited awareness of their role, and insufficient invitations from schools. They emphasized the importance of structured policies and school-led initiatives to enhance parental engagement. This

underscores the need for schools to proactively educate parents on their roles and create mechanisms that invite meaningful parental input in decision-making.

By strengthening parental engagement strategies and ensuring their voices are integrated into school decision-making processes, schools can enhance CBE implementation and create a more inclusive and participatory educational environment.

4.8.2.2 Parental Engagement in Resourcing, Volunteering and Linkages

Parental engagement in CBE implementation is reflected through support in resource mobilization, volunteering, and facilitating connections/linkages with external organizations. Table 4.16 presents the extent of parental participation in these activities.

Table 4.16 *Descriptive Statistics for Parental Engagement in Resourcing, Volunteering, and Linkages*

Item Code	Statement	Mean	SD
RVL1	I participate in identifying, quantifying, prioritizing, and securing school resources.	3.104	1.253
RVL2	I participate in fundraising to improve the school facilities and services.	3.213	1.226
RVL3	I provide my children with classroom learning materials as needed.	4.109	1.015
RVL4	I encourage and facilitate my children to volunteer in appropriate school activities.	3.981	1.046
RVL5	I am given opportunities to volunteer my services at the school.	3.251	1.218
RVL6	I participate in creating linkages with government and non-government agencies for resource mobilization.	2.948	1.295
Valid N=211			
Overall mean		3.434	1.176

Source: Field data (2024)

The results presented in Table 4.16 indicate that parents acknowledge their participation in identifying, prioritizing, and securing school resources, both financially and in-kind (RVL1). This is reflected in a moderate mean score of 3.104 (SD = 1.253), suggesting

that while some parents actively engage in resource mobilization, others may participate to a lesser extent. Qualitative data from both teachers and PTA members provide further insights into these findings. A teacher emphasized the necessity of parental involvement, stating that,

“CBC is resource-based, requiring close interaction with materials. Parents need to engage in providing digital gadgets and other resources at home” (Teacher 4).

Similarly, a PTA member highlighted the proactive role of parents in addressing school needs beyond material resources, sharing that

“Last year, we had a discipline issue in Grade 7, and as the parents’ association, we brought in volunteer counselors to help” (PTA member 1).

These responses demonstrate that while parents contribute to resource mobilization, their level of involvement varies depending on individual capacities and school demands.

Parental engagement in fundraising efforts to improve school facilities and services (RVL2) recorded a mean score of 3.213 (SD = 1.226), indicating a generally positive perception of their contribution but with notable variability. A PTA member illustrated their role in supporting school programs by stating,

“I ensure my children have uniforms and pay for the feeding program when asked” (PTA member 2).

This response suggests that while some parents actively contribute to school fundraising efforts, their involvement may largely be confined to direct financial obligations related to their children. The variability in responses indicates that while some parents participate willingly, others may face financial constraints that limit their ability to contribute consistently.

A particularly strong area of parental engagement is providing their children with classroom materials (RVL3), which had a high mean score of 4.109 (SD = 1.015). The relatively low standard deviation suggests strong agreement among parents in this area. Teachers confirm that parental involvement in resourcing is crucial, as one explained,

“I engage parents in providing teaching materials because the government supplies some, but we must improvise or request parents to buy or use available resources from home” (Teacher 2).

Likewise, PTA members reaffirmed their commitment to ensuring that children have adequate learning materials, with one stating,

“Parental engagement means providing materials like books, manila papers, and uniforms” (PTA member 3)

while another added,

“I buy the required books, crayons, tissue papers, and sacks” (PTA member 4).

These verbatims illustrate that parents recognize and actively take part in their responsibility to supply essential learning resources, making it one of the strongest aspects of their participation.

Encouraging and facilitating children to volunteer in school activities (RVL4) had a high mean score of 3.981 (SD = 1.046), indicating a strong parental appreciation for engaging their children in school-based volunteer activities. The high mean suggests that parents recognize the importance of fostering responsibility and participation in their children’s education through extracurricular engagement.

Regarding opportunities to volunteer their services at school (RVL5), parents reported a moderate mean score of 3.251 (SD = 1.218), highlighting mixed experiences in this area. Some parents indicated they had been given meaningful opportunities to

participate, while others may not have had similar experiences. A PTA member shared that,

“We had counselors among us, and they volunteered to talk to students” (PTA member 1)

while another added,

“Parents are invited to speak to students on health, discipline, and careers” (PTA member 5).

These statements highlight that parents with relevant expertise, such as counseling or professional experience, are invited to contribute, though opportunities may not be equally available to all.

Finally, parental participation in creating linkages with government and non-government agencies for resource mobilization (RVL6) had the lowest mean score of 2.948 (SD = 1.295), indicating limited involvement in this area. This aligns with qualitative responses from teachers, one of whom noted that,

“CBC is highly practical, and the school cannot provide all materials, so we request parents to support due to the large class sizes” (Teacher 7).

PTA members also acknowledged their role in linking the school with professionals, with one stating,

“On career days, we invite parents in different professions to speak to students” (PTA member 6).

These findings suggest that while some parents contribute by leveraging professional networks, broader community partnerships with government and NGOs remain underdeveloped.

Overall, the combination of quantitative and qualitative data reveals that while parents actively participate in some aspects of resource mobilization, particularly in providing classroom materials and encouraging student engagement, there are notable variations

in their level of involvement across different domains. Fundraising and school volunteering show moderate participation, whereas linkages with external agencies remain a challenge. These findings highlight the need for schools to adopt strategies that enhance parental engagement, particularly in areas with lower participation, to maximize resource mobilization for effective learning.

These findings align with Jeruto, Kisilu, and Kabesa (2024), who found a significant positive relationship between parental engagement in volunteering and resource provision and learners' academic performance in pre-primary schools. Their study underscored the crucial role of parents in enhancing early learning outcomes through material support and active participation in school activities. Similarly, the current study emphasizes that parental engagement in resource mobilization plays a critical role in CBE implementation, reinforcing the need for schools to actively engage parents in supporting curriculum delivery.

Furthermore, these findings correspond with Appiah-Kubi and Amoako (2020), who examined parental participation in children's education in Ghana from the perspectives of teachers and parents. Their study revealed that while many parents contribute to their children's education by providing resources, supervising homework, attending school meetings, and supporting extracurricular activities, barriers such as economic hardships, low self-esteem, and inadequate communication with schools limit full participation. They emphasized the importance of structured parental support programs to address socioeconomic challenges and foster stronger school-parent collaboration.

Therefore, these results suggest that, although parental engagement in resource mobilization is evident, targeted interventions are key to closing participation gaps and achieving equitable contributions across various areas of school support.

4.8.2.3 Parental Engagement in School-Home-Based Learning and Development Strategies

The successful implementation of the Competency-Based Education (CBE) depends on strong parental engagement in school-home-based learning and child development strategies. By emphasizing active learning, practical skills, and holistic growth, CBE requires parents to support their children beyond the classroom. Table 4.17 presents the extent of parental engagement in providing resources, facilitating experiential learning, and monitoring developmental progress in CBE implementation.

Table 4.17 *Descriptive Statistics for School-Home-Based Learning and Development Strategies*

Item Code	Statement	Mean	SD
SHBLS1	The school provides information on age-grade-appropriate learning standards to help me support my child at home.	3.389	1.269
SHBLS2	I engage my child in age-appropriate play and chores at home for their holistic development.	4.071	1
SHBLS3	I provide adequate resources and an enabling environment for my child's learning and life skills.	4.095	0.936
SHBLS4	I involve my child in safe and age-appropriate family and community activities that enhance learning.	4.109	0.932
SHBLS5	I actively monitor and support my child's developmental milestones at home.	4.071	1.009
SHBLS6	I actively help my children with their homework, e-learning, and projects.	4.332	0.864
Valid N=211			
	Overall mean	4.01	1.002

Source: Field data (2024)

The results in Table 4.17 indicate that parents recognize the importance of being informed about essential learning standards based on their children's grade and age to better understand the curriculum and support home learning (SHBLS1). However, the level of agreement on this aspect varies, as reflected in a mean score of 3.389 and a

standard deviation of 1.269. This suggests that while some parents receive adequate information to support home learning, others may require more structured communication. Teachers corroborated this by emphasizing the role of lesson plans in guiding parental involvement, with one noting,

"We use lesson plans that explicitly mention how parents should be involved in each day's lesson." (Teacher 3).

This implies that while schools provide information, its effectiveness depends on how well parents access and utilize it.

Parents also reported a strong commitment to engaging their children in play and age-appropriate chores to foster physical, intellectual, spiritual, social, and emotional development at home (SHBLS2). The high mean score of 4.071 and a standard deviation of 1.000 indicate significant parental agreement, though some variability exists in how frequently or consistently parents implement these activities. This highlights the importance of play and hands-on experiences in holistic child development.

A key aspect of parental involvement is the provision of adequate resources and an enabling environment for children's growth, learning, and acquisition of life and self-skills (SHBLS3). With a mean score of 4.095 and a standard deviation of 0.936, parents demonstrated strong agreement in this area. Teachers affirmed that parents actively participate in digital literacy activities, with one stating,

"Parents and children engage in digital literacy activities, searching for materials, printing them, and bringing them to school." (Teacher 3).

Similarly, PTA members shared their commitment to supporting learning at home, with one parent noting,

"I share my phone with the child for research and assist with homework when I get home early." (PTA Member 2).

These perspectives suggest that parents are leveraging available resources, including digital tools, to enhance their children's learning experiences.

Beyond resource provision, parents reported high involvement in engaging their children in safe and age-appropriate family and community activities that enhance learning (SHBLS4). This aspect received a mean score of 4.109 and a standard deviation of 0.932, indicating strong agreement with relatively low variability. This implies that parents consistently engage their children in safe and age-appropriate family and community activities that contribute to their learning. The high mean score suggests that most parents strongly agree with this practice, indicating that it is a common and valued aspect of home-based learning. The relatively low standard deviation shows that there is little variation in responses, meaning that the majority of parents have similar levels of involvement in these activities. This consistency suggests that parents recognize and actively utilize community-based learning opportunities to enhance their children's development.

Parental involvement in monitoring and supporting their children's developmental milestones at home (SHBLS5) was also highly rated, with a mean score of 4.071 and a standard deviation of 1.009. These findings highlight parents' awareness of their role in tracking and facilitating their children's cognitive, social, and emotional development. Teachers reinforced this by explaining that CBE inherently requires parental engagement. One teacher remarked,

"CBE requires parents to engage automatically, as KICD guides include take-home activities for parents to help with." (Teacher 11).

Similarly, PTA members echoed this sentiment, with one stating,

"I help with assignments and provide my phone and bundles for research." (PTA Member 3).

These responses indicate that parents actively support their children's progress, particularly through structured learning and digital literacy support.

The highest level of parental involvement was observed in helping children with homework, e-learning, and projects (SHBLS6), as reflected in a mean score of 4.332 and a relatively low standard deviation of 0.864. This suggests a very strong agreement among parents regarding their role in supporting school assignments. Teachers highlighted how CBE has formalized parental involvement in extended learning, with one explaining,

"Learners take extended school work home, where parents should assist; previously called homework." (Teacher 2).

PTA members also confirmed their active participation, with one stating,

"I have a student in that class... I actively participate in my child's homework." (PTA Member 1).

Other parents noted their support by sharing digital resources, with one explaining,

"I share my phone with the child for research." (PTA Member 2)

and another adding,

"I provide bundles for research and assist with assignments." (PTA Member 3).

These statements reflect a deep level of parental engagement in guiding their children's academic progress.

Overall, the findings indicate a high level of parental engagement in home-based learning and child development, with an overall mean score of 4.01 and a standard deviation of 1.002. The qualitative responses provide deeper insights into how parents

support their children's learning through direct involvement in assignments, digital literacy, and developmental milestones. However, some aspects such as engagement in play, chores, and community learning activities, require further exploration to assess the extent of parental participation. While the data demonstrates strong parental engagement, schools can further enhance this by improving communication on learning standards and providing clearer guidance on how parents can support various aspects of their children's education at home

These findings are in tandem with the Regional Education Learning Initiative (Magara, 2023), which found that over 75% of parents, regardless of their education level, actively supported their children's learning at home by creating a structured learning environment, assisting with assignments, and tracking progress. The study further emphasized that structured parental engagement strategies, such as partnerships with schools and community groups, significantly improved learning outcomes.

Additionally, the findings align with Sarsale, Alonzo, Jumarito, Garcia, Molina, Oo, Sy, and Yepes (2024), who examined parental involvement in student assessment and its impact on academic achievement. Their study emphasized that students demonstrated improved learning outcomes when parents actively engaged in assessment-related activities, such as monitoring progress, assisting with homework, and participating in school decision-making. They underscore the importance of parental involvement in not only daily learning activities but also in assessment processes to enhance curriculum effectiveness.

Furthermore, these findings correspond with Dingili and Yungungu (2023), who explored parental involvement in Grade Four learners' take-home assignments in Vihiga County, Kenya. Their study found that while parents played an active role in

homework support by providing instructional resources, creating conducive learning environments, and offering motivation, several challenges such as inadequate time, limited knowledge of CBE, poor communication with teachers, and negative parental attitudes, hindered effective participation. They emphasized the need for structured parental support, timely communication, and sensitization to enhance curriculum delivery.

Together, these studies highlight that while parents are actively involved in home-based learning, targeted interventions are necessary to address the challenges that limit their full participation.

4.8.3 Parental Role Construction

Parental role construction is essential in the implementation of the Competency-Based Curriculum (CBC), as it defines parents' perceptions of their responsibilities in supporting their children's learning. Table 4.18 presents findings on various parental responsibilities, highlighting the extent of their involvement in academic support, school engagement, and decision-making.

Table 4.18 *Descriptive Statistics for Parental Role Construction*

Item code	Item	Mean	SD
PRC1	It is my responsibility as a parent to actively assist and guide my child's education, regardless of my socioeconomic status.	4.441	0.878
PRC2	It is my responsibility as a parent to attend meetings with teachers or other school staff concerning my child's education.	4.469	0.812
PRC3	It is my responsibility to attend school or class events, such as a play, dance, sports event, or science fair at my child's school.	4.123	1.066
PRC4	It is my responsibility to regularly communicate with my child's teachers concerning their well-being, behavior, and academic progress.	4.351	0.926
PRC5	It is my responsibility as a parent to play an active role in curriculum and school-related decisions by contributing to discussions at my child's school.	4.322	0.895
PRC6	It is my responsibility to academically socialize my child's development which would lead toward later self-sufficiency.	4.346	0.883
PRC7	I am entirely responsible for my child's home-based learning including assisting them through homework and school projects.	4.275	1.028
PRC8	It is my responsibility to provide my child with the required resources for school, home-based, and e-learning activities.	4.327	0.947
PRC9	It is my responsibility to volunteer my services and resources to the school e.g., fundraising, mobilizing well-wishers etc.	3.896	1.218
Valid N=211			
Overall mean		4.283	0.962

Source: Field Data (2024)

Results in Table 4.18 show that parents overwhelmingly agree it is their responsibility to actively assist and guide their child's education, regardless of their socioeconomic status, for PRC1, with a mean score of 4.441 and a standard deviation of 0.878. This high mean score indicates a strong consensus among parents about their role in their

child's educational journey, emphasizing that socioeconomic factors should not impede their engagement. Teachers supported this view, one teacher stated,

"Some parents believe it's their duty to support their child's education, regardless of financial status." (Teacher 7).

Similarly, PTA members reinforced this responsibility. One PTA member shared,

"As a parent, I believe it is my duty to be involved in my child's education, no matter our financial situation. I always try to guide them in their studies." (PTA Member 1).

These perspectives suggest a shared understanding among parents and educators about the importance of active parental engagement in a child's education.

In PRC2, parents also show strong agreement that it is their responsibility to attend meetings with teachers or other school staff regarding their child's education. This is reflected in the mean score of 4.469 and a standard deviation of 0.812, indicating consistent views on the importance of attending such meetings. Teachers highlighted the role of PTAs in facilitating these engagements. For example, Teacher 5 noted,

"PTAs help organize meetings where we inform parents about their roles and school plans."

Likewise, PTA members acknowledged their commitment to attending school meetings. One PTA member explained,

"Attending school meetings is important to me because it helps me understand my child's progress and any concerns the teachers may have." (PTA Member 2).

These insights reinforce the critical role of parental engagement in maintaining effective communication with schools.

The responsibility to attend school or class events, such as plays, dances, sports events, or science fairs (PRC3), had a slightly lower mean score of 4.123 and a higher standard deviation of 1.066. This suggests that while many parents recognize the importance of

attending these events, there is more variability in their commitment or ability to do so. Teachers noted that parents support events in various ways. For instance, one of them stated that,

"Parents support events by providing play materials and paying for trips." (Teacher 5)

PTA members also acknowledged the significance of attending school functions. One PTA member shared,

"I make an effort to attend my child's school events because it shows them that I care about their education and activities." (PTA Member 3).

These perspectives highlight both the financial and emotional investment parents make in school activities.

Regarding regular communication with teachers about their child's well-being, behavior, and academic progress (PRC4), parents expressed a strong sense of responsibility, with a mean score of 4.351 and a standard deviation of 0.926. Teachers affirmed this commitment, highlighting ways in which parents stay engaged. For example, one of the teachers noted,

"Parents engage by ensuring school attendance, paying fees, and providing essentials like uniforms and meals." (Teacher 4)

Similarly, PTA members emphasized the role of communication in supporting children's education. One PTA member explained,

"I frequently communicate with my child's teachers to check on their academic progress and overall well-being." (PTA Member 4).

These findings indicate that parents value consistent communication as a means of supporting their children's education.

Parents also believe they should play an active role in curriculum and other school-related decisions by contributing to decision-making discussions at their child's school

(PRC5). This belief is reflected in a mean score of 4.322 and a standard deviation of 0.895, showing strong agreement and relatively low variability among parents. Teachers observed that responsible parents actively support their children's academic development. For instance, Teacher 7 noted,

"Some responsible parents help children develop creative school projects."

PTA members also expressed their willingness to participate in decision-making. One PTA member stated,

"Whenever there are school meetings about curriculum or policy changes, I try to contribute because I want to be part of the decisions that affect my child." (PTA Member 5).

These findings underscore the importance of parental involvement in shaping educational policies and curriculum decisions.

For PRC6, parents feel a strong responsibility to academically support their child's development towards later self-sufficiency, as indicated by a mean score of 4.346 and a standard deviation of 0.883. This demonstrates a high level of commitment to ensuring their child's long-term academic success and independence. However, teachers noted some challenges in this area. One of the teachers explained,

"Many parents still believe it's the teacher's role to handle all education-related activities." (Teacher 1)

In contrast, PTA members expressed a more proactive stance. One PTA member shared,

"I help my child set academic goals and encourage them to work hard so they can have a bright future." (PTA Member 6).

This contrast highlights an evolving perspective on shared responsibility between parents and teachers.

In terms of being entirely responsible for home-based learning, including assistance with homework and school projects (PRC7), parents showed strong agreement with a mean score of 4.275 and a standard deviation of 1.028. Despite the high mean, the slightly higher standard deviation suggests some variability in how parents perceive or fulfill this responsibility. Teachers highlighted difficulties, with one of them stating,

"Some parents leave assignments entirely to teachers, believing it's their job." (Teacher 5)

PTA members, however, emphasized their engagement in their children's education.

One PTA member stated that,

"I always make sure to help my child with homework and projects because I want them to succeed in school." (PTA Member 7).

These insights suggest that while many parents take an active role in home-based learning, there remains a need for greater parental engagement and school guidance in this area.

Parents also agreed that it is their responsibility to provide their child with the required resources for school, home-based, and e-learning activities (PRC8), reflected in a mean score of 4.327 and a standard deviation of 0.947. This indicates a strong consensus on the importance of supplying necessary resources for their child's education. Teachers acknowledged parental contributions. For instance, Teacher 2 noted,

"Parents provide uniforms, meals, and school fees but expect the government to handle the rest." (Teacher 2)

PTA members expressed a similar commitment. One PTA member explained,

"I prioritize buying school materials and ensuring my child has access to online learning resources." (PTA Member 1).

These findings demonstrate the financial sacrifices parents make to support their children's education. However, when it comes to volunteering services and resources to the school, such as fundraising or mobilizing well-wishers (PRC9), the mean score

dropped to 3.896 with a higher standard deviation of 1.218. This suggests that while many parents recognize the importance of volunteering, there is greater variability in their willingness or ability to participate in these activities. Teachers noted the contributions of some parents. For example, one of the teachers stated that,

"Parents contribute to school projects, KNEC assessments, and even motivate teachers." (Teacher 12)

PTA members also acknowledged their role in volunteering. One PTA member shared,

"I volunteer at the school whenever I can, whether it's helping with fundraising or contributing to school activities." (PTA Member 7).

These insights highlight the need for schools to encourage more consistent parental involvement in volunteer initiatives.

Overall, the grand mean score of 4.283 with a standard deviation of 0.962 across all items reflects a generally strong sense of parental responsibility towards their child's education. The findings indicate that parents generally recognize and embrace their role in supporting their children's education, with strong engagement in areas such as academic guidance, communication with teachers, and providing necessary resources. However, there is some variability in parents' perceptions of their roles in school events and volunteering, suggesting areas where schools might need to provide additional support or encouragement to foster more uniform engagement.

These findings align with Williams-Johnson and Gonzalez-DeHass (2022), who emphasized that parental role construction is a key psychological factor influencing parental involvement, particularly in diverse cultural contexts. Their study, grounded in the Hoover-Dempsey and Sandler (HDS) model, highlighted that parents' perceptions of their role, self-efficacy, and school invitations significantly impact their engagement in their children's education. Therefore, a need for schools to actively shape parents' understanding of their roles to enhance their participation.

Furthermore, these findings correspond with Cook (2024), who examined stakeholders' views on parental involvement in an urban school setting. The study revealed varying perceptions among parents, teachers, and school administrators regarding parental engagement, emphasizing the need for structured interventions such as workshops to bridge the gap between school expectations and parental participation.

These findings indicate, that while parents demonstrate a strong sense of responsibility, schools must adopt targeted strategies to address disparities in engagement, particularly in areas such as school events and volunteering, to ensure comprehensive parental involvement in CBE implementation.

Based on this study's findings, I recommend implementing a comprehensive multi-level approach to address parental engagement challenges. Schools should establish structured communication channels including digital platforms, monthly newsletters, and scheduled consultation sessions that accommodate diverse work schedules. Additionally, creating parent resource centers within schools would provide dedicated spaces for workshops, training sessions, and informal interactions.

At the policy level, educational institutions should develop clear frameworks that formalize parental roles in school governance while providing training for both educators and parents on effective collaboration techniques. Community-based initiatives should leverage local resources and cultural contexts to build broader support networks that enhance parental participation.

These research-informed strategies directly address the barriers identified in this study and offer practical, implementable solutions for strengthening the critical partnership between schools and families in supporting student achievement.

4.9 Testing Effects of Covariates on the Dependent Variable

Parents' age, gender, and level of education, were controlled in this study to account for their confounding effects on CBE implementation. The multiple regression model results (Table 4.19) indicated that these control variables do not explain any variation in CBE implementation among the respondents (R square value of 0.084, $p > 0.05$).

Table 4.19 *Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.147 ^a	0.022	0.008	0.46250	.207

a Predictors: (Constant) Gender, Age, Level of education

b Dependent Variable: CBE Implementation

Therefore, joint prediction of the covariates (Table 4.20) was not statistically significant, $F(3, 227) = 6.912$, $p < 0.05$).

Table 4.20 *Model Fitness*

Model		ANOVA				Sig.
		Sum of Squares	df	Mean Square	F	
1	Regression	0.984	3	0.328	1.533	.207 ^b
	Residual	44.279	207	0.214		
	Total	45.263	210			

a Dependent Variable: CBE implementation

b Predictors: (Constant), Gender, Age, Level of education

The regression weights presented in Table 4.21, indicated that the covariates had no significant effect on CBE implementation. The main purpose of including the covariates in the regression model was to enhance the credibility of the study findings, ensuring that they were not distorted by confounding influences. Therefore, their coefficients generally do not have a causal interpretation to the study.

Table 4.21 *Regression Coefficients*

Model		Unstandardized		Standardized Coefficients		
		B	Std. Error	Beta (β)	t	Sig.
1	(Constant)	4.576	0.217		21.049	.000
	Gender	-0.089	0.073	-0.086	-1.221	.224
	Age	-0.051	0.039	-0.089	-1.294	.197
	Level of Education	0.034	0.038	0.063	0.893	.373

b Dependent Variable: CBE Implementation

Although the covariates were not statistically significant, they are theoretically important and have been shown in prior research to influence the outcome variable. Therefore, they were included in the subsequent Hierarchical model for further analysis.

4.10 Hypothesis Testing

The first three null hypotheses (**H01**, **H02**, and **H03**) were examined using hierarchical multiple regression analysis. The change in the coefficient of determination (R^2), standardized beta coefficient (β), and the p-value test statistics were computed at $\alpha=0.05$ level of significance while controlling for respondents' gender, age, and level of education. The decision rule for testing these hypotheses was to reject **H0** if $p < 0.05$ or accept it if otherwise.

4.10.1 Relationship between Parental Engagement in Participatory Decision-making and CBE Implementation.

Hypothesis one (H01) proposed that there is no statistically significant relationship between parental engagement in participatory decision-making and the implementation of the CBE in public primary schools in Nakuru County, Kenya. The model summary results in Table 4.22 indicate a significant increase in the predictive capacity of the

hierarchical model by 0.126 or approximately 12.6% over the covariates with the addition of participatory decision-making variables.

Table 4.22 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Sig. F Change
1	.147 ^a	0.022	0.008	0.4625	0.022	.207
2	.384 ^b	0.148	0.131	0.43277	0.126	.000

a Predictors: (Constant), Level of Education, Age, Gender

b Predictors: (Constant), Level of Education, Age, Gender, Participatory Decision Making

c Dependent Variable: CBE Implementation

Jointly, participatory decision-making (Table 4.23) statistically and significantly predicted CBE implementation, $F(4,210) = 8.918, p < 0.05$.

Table 4.23 Model Fitness

Model		ANOVA				Sig.
		Sum of Squares	Df	Mean Square	F	
1	Regression	0.984	3	0.328	1.533	.207^a
	Residual	44.279	207	0.214		
	Total	45.263	210			
2	Regression	6.681	4	1.67	8.918	.000^c
	Residual	38.582	206	0.187		
	Total	45.263	210			

a Dependent Variable: CBE Implementation

b Predictors: (Constant), Level of Education, Age, Gender

c Predictors: (Constant), Level of Education, Age, Gender, Participatory Decision Making

The standardized regression coefficients (β) and p-values associated with the independent variables (Table 4.24) showed that while controlling for parents age, gender, and level of education, participatory decision making positively and significantly affected CBE implementation in public primary schools.

Table 4.24 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta (β)	T	Sig.
1	(Constant)	4.576	0.217		21.049	0.000
	Gender	-0.089	0.073	-0.086	-1.221	0.224
	Age	-0.051	0.039	-0.089	-1.294	0.197
	Level of Education	0.034	0.038	0.063	0.893	0.373
2	(Constant)	3.824	0.245		15.617	0.000
	Gender	-0.109	0.069	-0.105	-1.589	0.114
	Age	-0.022	0.037	-0.039	-0.602	0.548
	Level of Education	0.024	0.036	0.044	0.662	0.509
	Participatory Decision-Making	0.201	0.036	0.359	5.516	0.00

a Dependent Variable: CBE Implementation

The results showed that participatory decision-making positively affected CBE implementation ($\beta=0.359$, $p<0.05$). Indicating a positive relationship between the two variables. Since $p<0.05$, we reject the proposed null hypothesis (**H01**) and conclude that participatory decision-making significantly and positively influences CBE implementation in public primary schools.

The positive beta coefficient indicates that increased participatory decision-making is associated with higher CBE implementation. Specifically, a 1 standard deviation increase in participatory decision-making predicts a 0.359 standard deviation (or 35.9%) increase in CBE implementation.

The optimal model was therefore found to be:

$$\text{CBE Imp} = 3.824 - 0.105\text{GE} + 0.039\text{AG} + 0.044\text{LE} + 0.359\text{PDM}$$

Where **CBE imp** = CBC Implementation, **GE** = parents' gender, **AG** = parents' age, **LE** = parents' level of education, and **PDM** = participatory decision making.

4.10.2 Relationship between Parental Engagement in Resourcing, Volunteering and Linkages and the Implementation of CBE.

Hypothesis two (H02) proposed that there is no statistically significant relationship between parental engagement in resourcing, volunteering, and linkages and the implementation of CBE in public primary schools in Nakuru county, Kenya. The model summary results in Table 4.25 indicate a significant increase of the predictive capacity of the hierarchical model by 0.86 or approximately 8.6 % over and above the covariates with the addition of parental volunteering in school activities' variable.

Table 4.25 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Sig. F Change
1	.147 ^a	0.022	0.008	0.4625	0.022	.207
2	.328 ^b	0.108	0.09	0.444279	0.086	.000

a Predictors: (Constant), Level of Education, Age, Gender

b Predictors: (Constant), Level of Education, Age, Gender, Resourcing, Volunteering & Linkages

c Dependent Variable: CBE Implementation

Jointly, parental engagement in resourcing, volunteering and linkages in school activities (Table 4.26) statistically and significantly predicted CBE implementation, $F(4,210) = 6.215, p < 0.05$.

Table 4.26 Model Fitness

		ANOVA				
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.984	3	0.328	1.533	.207 ^a
	Residual	44.279	207	0.214		
	Total	45.263	210			
2	Regression	4.874	4	1.218	6.215	.000 ^c
	Residual	40.389	206	0.196		
	Total	45.263	210			

a Dependent Variable: CBE Implementation

b Predictors: (Constant), Level of Education, Age, Gender

c Predictors: (Constant), Level of Education, Age, Gender, Volunteering.

The standardized regression coefficients (β) and p-values associated with the independent variables (Table 4.27) showed that while controlling for parents age, gender, and level of education, parental volunteering in school activities in positively and significantly affected CBE implementation in public primary schools.

Table 4.27 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta (β)	T	Sig.
1	(Constant)	4.576	0.217		21.049	0.000
	Gender	-0.089	0.073	-0.086	-1.221	0.224
	Age	-0.051	0.039	-0.089	-1.294	0.197
	Level of Education	0.034	0.038	0.063	0.893	0.373
2	(Constant)	3.928	0.254		15.464	0.000
	Gender	-0.108	0.07	-0.104	-1.542	0.125
	Age	-0.021	0.038	-0.037	-0.559	0.577
	Level of Education	0.023	0.037	0.042	0.622	0.535
	Resourcing, Volunteering & linkages	0.176	0.04	0.299	4.454	0.000

a Dependent Variable: CBE Implementation

The results in the Table 4.27 above showed that parental engagement in resourcing, volunteering and linkages positively affected CBE implementation ($\beta=0.299$, $p<0.05$), indicating a positive relationship between the two variables. Since $p<0.05$, we reject the proposed null hypothesis (**H02**) and conclude that parental engagement in resourcing, volunteering and linkages significantly and positively influences the implementation of the CBE in public primary schools.

The positive beta coefficient indicates that increased parental volunteering in school activities is associated with higher CBE implementation. Specifically, a 1 standard deviation increase in parental resourcing, volunteering and linkages predicts a 0.299 standard deviation (or 29.9%) increase in CBE implementation.

The optimal model for was therefore found to be:

$$\mathbf{CBC\ Imp = 3.928 - 0.104GE - 0.037AG + 0.042LE + 0.299 RVL}$$

Where **CBE imp** = CBE Implementation, **GE** = parents' gender, **AG** = parents' age, **LE** = parents' level of education, and **RVL** = parental resourcing, volunteering & linkages.

4.10.3 Relationship between Parental Engagement in School-Home-Based Learning and Development Process and the implementation of the CBE.

Hypothesis three (H03) proposed that there is no statistically significant relationship between parental engagement in the school-home-based learning and development process and the implementation of the CBE in public primary schools in Nakuru county Kenya. The model summary results in Table 4.28 indicate a significant increase of the predictive capacity of the hierarchical model by 0.124 or approximately 12.4% over

and above the covariates with the addition of parental engagement in the school-home-based learning and development process variable.

Table 4.28 *Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Sig. F Change
1	.147 ^a	0.022	0.008	0.4625	0.022	.207
2	.381 ^b	0.145	0.129	0.43331	0.124	.000

a Predictors: (Constant), Level of Education, Age, Gender

b Predictors: (Constant), Level of Education, Age, Gender, Participatory Decision Making

c Dependent Variable: CBE Implementation

Jointly, parental engagement in school- home-based learning and development processes (Table 4.29) statistically and significantly predicted CBE implementation, $F(4,210) = 8.768, p < 0.05$.

Table 4.29 *Model Fitness*

Model		ANOVA				
		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.984	3	0.328	1.533	.207^a
	Residual	44.279	207	0.214		
	Total	45.263	210			
2	Regression	6.585	4	1.646	8.768	.000^c
	Residual	38.678	206	0.188		
	Total	45.263	210			

a Dependent Variable: CBE Implementation

b Predictors: (Constant), Level of Education, Age, Gender

c Predictors: (Constant), Level of Education, Age, Gender, Home-Based Learning Strategies

The standardized regression coefficients (β) and p-values associated with the independent variables (Table 4.30) showed that while controlling for parents age, gender, and level of education, parental engagement in home-based learning strategies positively and significantly affected CBE implementation in public primary schools.

Table 4.30 *Regression Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta (β)	T	Sig.
1	(Constant)	4.576	0.217		21.049	0.000
	Gender	-0.089	0.073	-0.086	-1.221	0.224
	Age	-0.051	0.039	-0.089	-1.294	0.197
	Level of Education	0.034	0.038	0.063	0.893	0.373
2	(Constant)	3.429	0.293		11.721	0.000
	Gender	-0.094	0.069	-0.090	-1.367	0.173
	Age	-0.007	0.037	-0.012	-0.187	0.852
	Level of Education	0.028	0.036	0.051	0.776	0.439
	School-Home-Based Learning and Development Process.	0.252	0.046	0.360	5.462	0.000

a Dependent Variable: CBC Implementation

The results indicated that parental engagement in the school-home-based learning and development process positively affected the implementation of the CBE ($\beta=0.360$, $p<0.05$), indicating a positive relationship between the two variables. Since $p<0.05$, we reject the proposed null hypothesis (**H01**) and conclude that parental engagement in the school-home-based learning and development process significantly and positively influences the implementation of the CBE in public primary schools.

The positive beta coefficient indicates that increased parental engagement in the school-home-based learning and development process is associated with higher CBE implementation. Specifically, a 1 standard deviation increase in parental engagement in the school-home-based learning and development process predicts a 0.36 standard deviation (or 36%) increase in CBE implementation.

The optimal model was therefore found to be:

$$\text{CBE Imp} = 3.429 - 0.09\text{GE} - 0.012\text{AG} + 0.051\text{LE} + 0.360\text{SHBLS}$$

Where **CBE imp** = CBE Implementation, **GE** = parents' gender, **AG** = parents' age, **LE** = parents' level of education, and **SHBLS** = School-Home-Based Learning Strategies.

4.10.4 Mediating Effect of Parental Role Construction on the Relationship Between Parental Engagement and CBE Implementation

Hypothesis four (H04) proposed that parental role construction has no significant mediating effect on the relationship between parental engagement and CBE implementation in Nakuru County, Kenya. To test this hypothesis, the mediating effect of parental role construction (M) on the relationship between parental engagement constructs (participatory decision-making, volunteering in school activities, and home-based learning strategies) (X₁, X₂, X₃) and CBE implementation (Y) was tested using Hayes' Mediation Model 4 in PROCESS macro for SPSS. The bias-corrected accelerated (BCa) bootstrapping method with 5000 resamples at a 0.05 significance level ($p < 0.05$) was employed to assess mediation.

Mediation analysis was conducted to determine whether a previously significant relationship between parental engagement constructs (X₁, X₂, X₃) and CBE implementation (path c) becomes non-significant or is reduced when paths a and b are included in the model. Full mediation occurs when the indirect effect (path a*b) fully accounts for the relationship between parental engagement constructs and CBE implementation, rendering the direct effect (path c') non-significant. Partial mediation is established if the direct effect (path c') remains significant but is attenuated when parental role construction (M) is introduced, indicating that parental role construction

plays a role but does not fully explain the relationship. The mediation is considered statistically significant if the **95% confidence interval (CI) for the indirect effect ($a*b$) is significant (t-value > 1.96, $p < 0.05$) and does not include zero in between**.

Hayes' model (Figure 4.4) illustrates the direct, indirect, and total effects of parental engagement on CBC implementation through parental role construction.

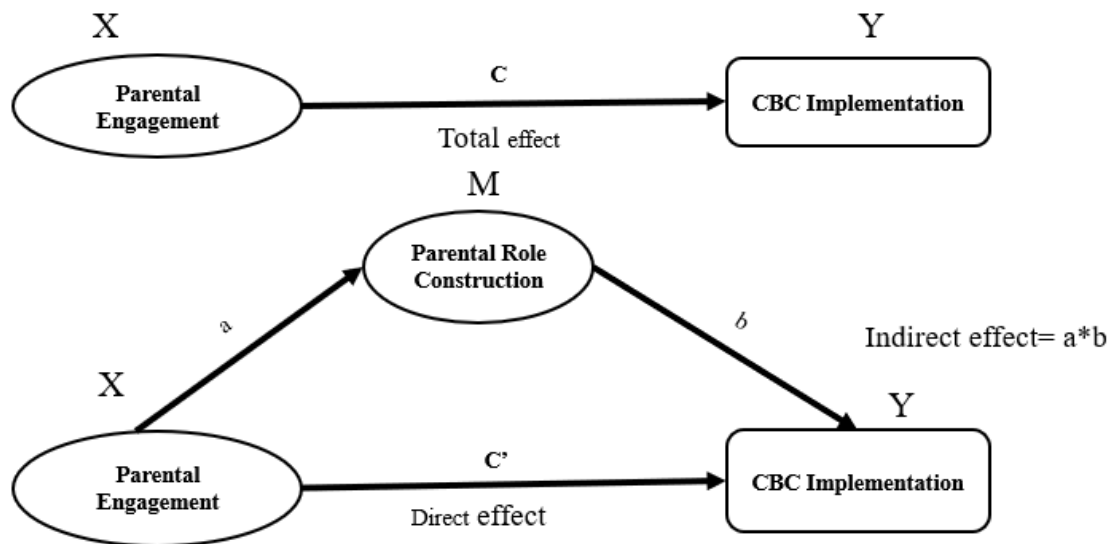


Figure 9: Simple Mediation Model Effects.

Source: Researcher' constructed as adapted in (Hayes, 2013)

4.10.4.1 Mediating Effect of Parental Role Construction on The Relationship Between Parental Engagement in Participatory Decision-making and CBE Implementation.

H04a proposed that parental role construction has no significant mediating effect on the relationship between parental engagement in participatory decision-making and CBE implementation. The results are presented in Tables 4.31 and 4.32

Table 4.31 *Path Estimates*

Path		Coefficient		95%Confidence Interval			P
		(B)	SE	Lower	Upper	T	
A	Effect of X on M	0.1955	0.0446	0.1077	0.2834	4.3884	.000
B	Effect of M on Y	0.4078	0.0494	0.3104	0.5052	8.2561	.000
C	Total Effect of X on Y	0.2006	0.0364	0.1289	0.2723	5.5155	.000

Source: Field Data (2024)

The path estimates in Table 4.31 show that parental engagement in participatory decision-making (X) had a significant positive effect on parental role construction (M) ($B = .1955$, $p < 0.05$). Parental role construction (M) also had a significant positive effect on CBE implementation (Y) ($B = .4078$, $p < 0.05$). Additionally, parental engagement in participatory decision-making directly affected CBE implementation ($B = .2006$, $p < 0.05$).

These results indicate that paths a, b, and c in the mediation model were significant and positive, controlling for covariates. Bootstrapping with 5,000 samples (Table 4.32) confirmed the significance of the indirect effect, providing insights into the mediation.

Table 4.32 *Mediation Estimates*

Effect	B	SE	95%Confidence Interval		T	p	% Mediation
			Lower	Upper			
Indirect (a*b)	0.0797	0.0216	0.0388	0.1226			38
Direct (C')	0.1209	0.0330	0.0558	0.1860	3.6597	.0003	62
Total (C)	0.2006	0.0364	0.1289	0.2723	5.5155	.0000	100

**Performed at 5,000 Bootstrap Samples for percentile Bootstrap Confidence Intervals (BCI)*

The mediation estimates in Table 4.32 indicate that both the direct effect ($B = 0.1209$, CI [0.0558, 0.1860], $p < 0.05$) and the indirect effect ($B = 0.0797$, Boot CI [0.0388, 0.1226]) in the model are statistically significant. The results also revealed that 38% of

the total effect of parental engagement in participatory decision-making on CBE implementation was mediated by parental role construction.

This implies that parental role construction partially mediates the positive relationship between parental engagement in participatory decision-making and CBE implementation. Furthermore, the bootstrap confidence intervals for both the lower and upper limits do not contain zero, providing support for the observed significant effects. Hence, we reject the null hypothesis (H_{04a}) and conclude that parental role construction partially mediates the positive relationship between parental engagement in participatory decision-making and CBE implementation.

These findings are supported by Hill (2022), who examined parental role construction and its impact on parental involvement in education. Hill's study emphasized that parents' understanding of their role is shaped by cultural, social, and developmental factors, yet schools often overlook these perspectives in decision-making processes. The study underscored the importance of inclusive school policies that actively involve parents as key stakeholders in curriculum reform.

In summary, these findings offer a comprehensive perspective on the influence of parental engagement in participatory decision-making on CBE implementation. While the study corroborates Hill's (2022) emphasis on parental role construction, demonstrating that parents' belief in their active contribution significantly enhances their engagement and subsequent impact (38% mediated effect), it also reveals a substantial direct influence (62%).

This notable direct effect suggests that parental engagement in participatory decision-making can foster CBE implementation through mechanisms beyond a shifting understanding of their personal role. Direct parental involvement in school governance

and decision-making forums can lead to immediate and tangible benefits, such as direct allocation of resources, adjustments in school policies to better suit CBE requirements, or enhanced accountability from school administration. Furthermore, parents' active presence and vocal input in these processes can directly mobilize collective action within the community or provide the school with critical, immediate feedback that shapes implementation efforts, irrespective of their individual conceptualization of their co-educator role.

Therefore, while strengthening parental role construction through targeted school policies and engagement strategies remains crucial for optimizing CBE implementation, it is equally vital for schools to establish and maintain accessible, meaningful platforms for parents to directly participate in decision-making processes. Such dual approaches, addressing both parental beliefs and direct opportunities for influence, are essential for fostering truly effective and impactful collaborative partnerships in the context of the CBE.

4.10.4.2 Mediating Effect of Parental Role Construction on the Relationship Between Parental Engagement in Resourcing, Volunteering and Linkages and CBE Implementation.

H04b proposed that parental role construction does not significantly mediate the relationship between parental engagement in resourcing, volunteering, and linkages and CBE implementation. The results are presented in Tables 4.33 and 4.34.

Table 4.33 *Path Estimates*

Path		95%Confidence Interval					
		Coefficient (B)	SE	Lower	Upper	T	P
A	Effect of X on M	0.2168	0.0471	0.1239	0.3096	4.6036	.000
B	Effect of M on Y	0.4246	0.0505	0.3250	0.5242	8.4019	.000
C	Total Effect of X on Y	0.1760	0.0395	0.0981	0.2538	4.4543	.000

The path estimates in Table 4.33 show that parental engagement in resourcing, volunteering, and linkages making (X) had a significant positive effect on parental role construction (M) ($B = .2168$, $p < 0.05$). Parental role construction (M) also had a significant positive effect on CBC implementation (Y) ($B = .4246$, $p < 0.05$). Additionally, parental engagement in resourcing, volunteering, and linkages directly affected CBE implementation ($B = .1760$, $p < 0.05$). These results indicate that paths a, b, and c in the mediation model were significant and positive, controlling for covariates. Bootstrapping with 5,000 samples (Table 4.34) confirmed the significance of the indirect effect, providing insights into the mediation.

Table 4.34 *Mediation Estimates*

Effect	B	SE	95%Confidence Interval		T	P	% Mediation
			Lower	Upper			
Indirect (a*b)	0.0920	0.0220	0.0495	0.1371			52
Direct (C')	0.0839	0.0359	0.0132	0.1546	2.3397	.0203	48
Total (C)	0.1760	0.0395	0.0981	0.2538	4.4543	.0000	100

**Performed at 5,000 Bootstrap Samples for percentile Bootstrap Confidence Intervals (BCI)*

The mediation estimates in Table 4.34 indicate that both the direct effect ($B = 0.0839$, CI [0.0132, 0.1546], $p < 0.05$) and the indirect effect ($B = 0.0920$, Boot CI [0.0495, 0.1371]) in the model are statistically significant. The results also revealed that 52% of the total effect of parental engagement in resourcing, volunteering, and linkages on CBE implementation was mediated by parental role construction.

This implies that parental role construction partially mediates the positive relationship between parental engagement in resourcing, volunteering, and linkages in school activities and CBE implementation. Furthermore, the bootstrap confidence intervals for both the lower and upper limits do not contain zero, providing support for the observed significant effects. Hence, we reject the null hypothesis (H_{04b}) and conclude that parental role construction partially mediates the positive relationship between parental engagement in resourcing, volunteering, and linkages and the implementation of the CBE.

These findings resonate with Jeruto, Kisilu, and Kabesa (2024), who found a significant positive relationship between parental engagement in volunteering and resource mobilization and learners' academic performance in pre-primary schools. Their study underscored the crucial role of parental participation in school-based activities, material provision, and linkages between home and school.

Moreover, these findings agreed with those of Piliyesi, Ogada, and Ochieng (2020), who emphasized that successful curriculum implementation requires active parental involvement beyond the traditional view that teachers are the primary stakeholders. Their study highlighted that parents play a critical role in mobilizing resources, supporting school activities, and fostering collaboration between schools and external partners to enhance student outcomes.

In summary, these findings, particularly the partial mediation by parental role construction, offer a more nuanced understanding of how parental engagement in resourcing, volunteering, and linkages influences CBE implementation. While parental role construction significantly mediates 52% of this relationship, signifying that a clear understanding of their role indeed enhances parents' effectiveness as contributors, the statistically significant direct effect (48%) suggests that other mechanisms are also at play.

This direct effect implies that even without a fully developed parental role construction, direct parental contributions in resourcing and volunteering can independently and immediately benefit CBE implementation by addressing resource gaps or directly supporting school activities. Similarly, parents establishing linkages with the school and community may directly foster a supportive ecosystem for the curriculum, regardless of their explicit understanding of their 'co-educator' role. These direct contributions may stem from general community responsibility, a desire for their child's well-being, or simply responding to school requests for support.

Therefore, while fostering a clear understanding of parents' roles as co-educators is crucial for deepening their engagement and maximizing their impact on CBE implementation, it is equally important to recognize and facilitate these more immediate and direct forms of parental involvement. This dual understanding offers valuable insights for designing comprehensive strategies that both cultivate parents' conceptual understanding of their educational roles and provide actionable pathways for their direct contributions to curriculum implementation.

4.10.4.3 Mediating Effect of Parental Role Construction on The Relationship Between Parental Engagement in School-Home-Based Learning and Development Process and the Implementation of the CBE.

H04c proposed that parental role construction has no significant mediating effect on the relationship between parental engagement in the school-home-based learning and development process and CBE implementation. The results are presented in Tables 4.35 and 4.36

Table 4.35 *Path Estimates*

Path		Coefficient (B)	SE	95%Confidence Interval		T	P
				Lower	Upper		
A	Effect of X on M	0.3869	0.0526	0.2832	0.4906	7.3555	.000
B	Effect of M on Y	0.4104	0.0542	0.3034	0.5173	7.5655	.000
C	Total Effect of X on Y	0.2524	0.0462	0.1613	0.3435	5.4620	.000

Table 4.35 presents the path estimates, revealing that parental engagement in school-home-based learning and development process (X) had a significant positive effect on parental role construction (M) ($B = .3869$, $p < 0.05$). Parental role construction (M) also had a significant positive effect on CBC implementation (Y) ($B = .4104$, $p < 0.05$). Additionally, parental engagement in school-home-based learning and development process directly affected CBE implementation ($B = .2524$, $p < 0.05$).

These results indicate that paths a, b, and c in the mediation model were significant and positive, controlling for covariates. Bootstrapping with 5,000 samples (Table 4.36) confirmed the significance of the indirect effect, providing insights into the mediation.

Table 4.36 *Mediation Estimates*

Effect	B	SE	95%Confidence Interval		T	P	% Mediation
			Lower	Upper			
Indirect (a*b)	0.1588	0.0296	0.1034	0.2177			63
Direct (C')	0.0936	0.0460	0.0029	0.1843	2.0339	.0433	37
Total (C)	0.2524	0.0462	0.1613	0.3435	5.4620	.0000	100

**Performed at 5,000 Bootstrap Samples for percentile Bootstrap Confidence Intervals (BCI)*

The mediation estimates in Table 4.36 show that both the direct effect (B = 0.0936, CI [0.0029, 0.1843], $p < 0.05$) and the indirect effect (B = 0.1588, Boot CI [0.1034, 0.2177]) in the model are statistically significant. The significance of the indirect effect was confirmed through bootstrap confidence intervals, as zero was not within the 95% BCI. The results also indicated that 63% of the total effect of parental engagement in the school-home-based learning and development process on CBE implementation was mediated by parental role construction.

This implies that parental role construction partially mediates the positive relationship between parental engagement in the school-home-based learning and development process and CBE implementation. Furthermore, the bootstrap confidence intervals for both the lower and upper limits do not contain zero, providing support for the observed significant effects. Hence, we reject the null hypothesis (H_{04c}) and conclude that parental role construction partially mediates the positive relationship between parental engagement in the school-home-based learning and development process and the implementation of CBE.

These findings are supported by Wang and Li (2024), who explored the relationship between parental involvement in homework and students' academic performance

across different sociocultural contexts. Their study revealed that asking about homework was positively associated with achievement while helping and checking had mixed effects depending on societal collectivism and individualism. They emphasized the importance of culturally responsive parental involvement strategies to optimize student learning at home.

Similarly, these findings align with a study by Gruchel, Kurock, Bonanati, and Buhl (2022), who examined the relationship between parental involvement and children's internet use, highlighting the role of parental role construction, self-efficacy, and instructional support in shaping children's online learning behaviors. Their study found that parents' motivational factors were strong predictors of parental instruction, influencing children's engagement in school-home-related internet activities. They reinforced the importance of empowering parents with the skills and knowledge to support their children's learning at home actively.

Together, these studies demonstrate that when parents perceive themselves as facilitators of home-based learning and actively engage in structured educational activities, CBC implementation becomes more effective. This reinforces the need for schools to equip parents with digital literacy skills and instructional strategies that complement CBC learning approaches.

To gain deeper insights into the extent of this mediation across different aspects of parental engagement, a comparative mediation analysis is presented in Table 4.37. This table examines how parental role construction influences the relationship between various parental engagement constructs (participatory decision-making, resourcing, volunteering and linkages, and school-home-based learning and development process) and the overall implementation of CBE.

Table 4.37 *Comparative Mediation Estimates*

Effect	% Mediation		
	Participatory Decision Making	Volunteering, Resourcing, and Linkages	Home-Based Learning Strategies
Indirect (a*b)	38	52	63
Direct (C')	62	48	37
Total	100	100	100

Dependent Variable: CBC Implementation

Mediator: Parental Role Construction.

The findings from the comparative mediation estimates in Table 4.37 highlight the role of parental role construction in mediating the relationship between parental engagement and CBE implementation. Parental engagement, which is examined through three constructs (participatory decision-making, volunteering, resourcing and linkages, and school-home-based learning and development process) demonstrates varying degrees of mediation through parental role construction. Notably, the strongest mediation effect was observed in home-based learning strategies (63%), suggesting a deeper reliance on parents' internalized roles in supporting at-home CBE activities.

For participatory decision-making, 38% of the effect on CBE implementation occurs indirectly through parental role construction, while 62% of the effect is direct. This substantial direct effect implies that parental presence and vocal input in formal school governance and decision-making forums can directly influence CBE implementation through immediate policy adjustments, resource allocation decisions, or enhanced accountability from school leadership, even if parents have not fully internalized a specific co-educator role. The impact here may be more about collective agency and the structural mechanisms of participation rather than solely individual psychological constructs. This suggests that while parental perception of their role contributes to the impact of decision-making on CBE implementation, a substantial proportion of the

effect is still exerted directly. This finding indicates that parental engagement in school governance and decision-making processes significantly influences CBE implementation, even without necessarily shaping parents' role perceptions. However, strengthening parental awareness of their responsibilities in decision-making could further enhance their contribution to the curriculum.

In the case of volunteering, resourcing, and linkages, 52% of the effect on CBE implementation is mediated through parental role construction, while 48% is direct. The almost balanced direct and indirect effects suggest that while a clear understanding of their role significantly enhances the impact of these efforts, the tangible contributions like direct provision of materials, physical volunteer hours and opening community networks, also exert a direct, observable influence on CBE implementation by addressing immediate resource needs or providing direct support functions, even in the absence of a deeply internalized 'co-educator' identity. This balanced mediation effect suggests that parental role construction significantly enhances the impact of volunteering and resource mobilization on CBE implementation. When parents actively provide learning materials, volunteer their time and services, and create linkages between home and school, their role perception strengthens the effectiveness of these activities. Schools can optimize CBE implementation by ensuring that parents not only engage in these activities but also understand their significance in shaping their children's educational outcomes.

The strongest mediation effect is observed in home-based learning strategies, where 63% of the impact on CBE implementation is indirect through parental role construction, while only 37% of the effect is direct. This strong mediation effect underscores that home-based learning, which often requires consistent, nuanced, and pedagogically informed support, is highly dependent on parents' internal beliefs about

their responsibility and competence in this role. While the direct effect (37%) acknowledges that even simple acts like providing a conducive study environment contribute, the dominant indirect pathway highlights that a parent's active embrace of their instructional and supportive role is paramount for effective home-based CBE learning. This implies that parents' perceived role in overseeing their children's home-based learning plays a critical role in determining the success of CBE implementation. Parents who actively assist with homework, monitor learning progress, and create a supportive home environment tend to be more effective in implementing competency-based learning strategies when they fully embrace their role. Given this, schools should focus on strengthening parental awareness and equipping them with strategies to effectively support home-based learning.

Overall, these findings reveal that while parental role construction consistently enhances the impact of parental engagement on CBE implementation, its mediating influence varies significantly across different forms of involvement. The strongest mediation in home-based learning (63%) suggests that this area of engagement is most sensitive to parents' internalized roles, requiring deliberate efforts to cultivate their understanding and confidence as co-educators at home. In contrast, the more direct impact observed in participatory decision-making (62% direct) implies that ensuring accessible and meaningful avenues for parental input remains crucial, even as efforts to strengthen their role perceptions continue. For volunteering, resourcing, and linkages, a balanced influence (52% mediated, 48% direct) indicates that both direct contributions and a strong understanding of their significance are vital. This nuanced understanding underscores that schools and policymakers should adopt differentiated strategies tailored to each type of parental engagement to maximize its effectiveness for CBE implementation.

These results are consistent with Kigobe, Ghesquiere, Ngu'mbi, and Leeuwen (2019), who found that parental role construction indirectly influences school engagement through child and school invitations and parents' perceived availability of time and energy. Their study highlighted that home- and school-based parental engagement is shaped by different factors, with home involvement primarily driven by parents' aspirations for their children's success.

Furthermore, these findings align with Sira Park and Holloway (2018), who found that parental role construction mediates the relationship between school factors and parental involvement in adolescents' education. Their study highlighted that parents engaged in response to inclusive school practices and to compensate for perceived gaps in student experiences, with economically disadvantaged parents being particularly responsive.

Additionally, these findings are supported by Williams-Johnson and Gonzalez-DeHass (2022), who emphasized that parental role construction is a key psychological factor influencing parental involvement, particularly in diverse cultural contexts. Their study, based on the Hoover-Dempsey and Sandler (HDS) model, found that parents' perceptions of their role, self-efficacy, and school invitations significantly impact their engagement in their children's education.

Collectively, these findings underscore the pivotal role of parental role construction as a psychological and behavioral enabler in CBE implementation. While direct parental engagement is essential, its effectiveness is significantly enhanced when parents fully understand and embrace their role in their children's education. The strong mediation effect observed in home-based learning suggests that schools should prioritize strategies that empower parents with the knowledge, skills, and confidence to actively participate in curriculum-related activities both at home and in school.

We can hence conclude that structured interventions, including targeted parental training, inclusive school policies, and enhanced communication between schools and parents, can bridge existing gaps in decision-making, resource mobilization, and learning support. Strengthening school-parent partnerships through these approaches will not only improve CBE implementation but also contribute to more meaningful and sustainable parental engagement in education.

Table 4.38 *Comparative Direct Effects between Unmediated and Mediated Model*

Parental Engagement	Unstandardized (B) Coefficients of Direct Effect		
	Unmediated Model	Mediated Model	Change Due to the Mediator
Participatory Decision Making	0.2006	0.1209	0.0797
Volunteering, Resourcing, and Linkages	0.1760	0.0839	0.0921
Home-Based Learning Strategies	0.2524	0.0936	0.1588

Dependent Variable: CBC Implementation

Mediator: Parental Role Construction.

The results in Table 4.38 highlight how the inclusion of parental role construction as a mediating variable alters the direct relationships between parental engagement components and CBE implementation. In the unmediated model, home-based learning strategies show the strongest positive association with CBE implementation, with a coefficient of 0.2524. This suggests that, when considered independently, parental involvement in supporting learning at home plays a substantial role in advancing CBE outcomes. However, when parental role construction is introduced as a mediator in the mediated model, the coefficient drops to 0.0936. The change of 0.1588 indicates that a significant portion of this relationship is indirect, operating through the extent to which parents see themselves as active participants in their children's learning. This finding underscores the importance of fostering clear role identification among parents to maximize their impact on home-based learning within the CBE framework.

Similarly, volunteering, resourcing, and linkages had a direct coefficient of 0.1760 in the unmediated model, which decreases to 0.0839 when the mediator is accounted for, a change of 0.0921. This indicates that parental contributions to school activities, resource support, and collaboration with community actors are more effective when parents perceive these roles as part of their responsibilities. Without strong role construction, these efforts may be sporadic or less impactful.

Participatory decision-making, while showing the smallest overall shift, still experiences a reduction in its coefficient from 0.2006 in the unmediated model to 0.1209 in the mediated model, a change of 0.0797. This suggests that although direct involvement in school governance is valuable, its effectiveness is also partly dependent on how well parents understand and internalize their role in educational decision-making. Parents who are not confident in or clear about their expected contribution may not engage meaningfully, even when opportunities are presented.

These findings emphasize that parental role construction plays a central role in shaping how engagement translates into tangible outcomes in CBE implementation. Without this mediating factor, the influence of engagement efforts, whether in decision-making, resource mobilization, or home learning, is likely to be overestimated. For example, overlooking this mediator would inflate the estimated direct impact of home-based learning by 0.1588, volunteering/resourcing by 0.0921, and decision-making by 0.0797. This distortion could lead researchers, educators, and policymakers to misjudge which forms of engagement are most effective, and more importantly why in the implementation of CBE.

The implication is that interventions aimed at improving CBE outcomes should go beyond creating opportunities for parental engagement and focus on strengthening

parents' understanding of their roles. Awareness campaigns, parent training workshops, and inclusive communication strategies are essential for building a shared vision of what meaningful parental involvement looks like within the CBE framework.

Neglecting to account for parental role construction risks producing incomplete or inaccurate conclusions about what drives CBE implementation success. Schools and policymakers that rely solely on direct engagement efforts may implement strategies that fail to achieve desired results because they do not address the underlying motivational and psychological mechanisms influencing parent behavior. Therefore, these results support the broader argument that effective CBE implementation requires more than structural involvement, it demands psychological ownership. Supporting parents to see themselves not just as supporters, but as co-educators, is critical to translating engagement into sustained educational outcomes. This aligns with the Hoover-Dempsey and Sandler model, which posits that parents' motivational beliefs, especially role construction, are foundational to effective school involvement.

4.11 Summary of the Hypotheses Test Results

Table 4.39 summarizes the hypotheses tested in the results and their statistical significance.

Table 4.39 *Summary of the Hypothesis Test Results*

	Hypothesis	Decision point	Results
H₀₁	There is no statistically significant relationship between parental engagement in participatory decision-making and CBE implementation in public primary schools in Nakuru County, Kenya	P<.05	Rejected
H₀₂	There is no statistically significant relationship between parental engagement in resourcing, volunteering, and linkages and CBE implementation in public primary schools in Nakuru County, Kenya	P<.05	Rejected
H₀₃	There is no statistically significant relationship between parental engagement in the school-home-based learning and development process and CBE implementation in public primary schools in Nakuru County, Kenya.	P<.05	Rejected
H_{04a}	Parental role construction does not significantly mediate the relationship between parental engagement in participatory decision-making and CBE implementation in public primary schools in Nakuru County, Kenya.	P<.05 No zero in between Boot LCI- UCI	Rejected
H_{04b}	Parental role construction does not significantly mediate the relationship between parental engagement in resourcing, volunteering, and linkages and CBE implementation in public primary schools in Nakuru County, Kenya.	P<.05 No zero in between Boot LCI- UCI	Rejected
H_{04c}	Parental role construction does not significantly mediate the relationship between parental engagement in school-home-based learning strategies and CBE implementation in public primary schools in Nakuru County, Kenya.	P<.05 no Zero in between Boot LCI- UCI	Rejected

4.12 Connection of the Findings to the Theory

The study was guided by Epstein's Typology of Parental Involvement (1997) and Hoover-Dempsey and Sandler's (2005) Theoretical Model of the Parental Involvement Process. Epstein's framework identifies six types of parental involvement: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. The findings of this study align closely with this framework,

demonstrating that parental engagement in participatory decision-making, resourcing, volunteering, linkages, and school-home-based learning significantly influences CBE implementation in public primary schools in Nakuru County, Kenya.

The rejection of the null hypotheses in this study affirms the relevance of Epstein's framework, particularly in the areas of decision-making, volunteering, and learning at home. The finding that parental engagement in participatory decision-making significantly influences CBE implementation supports Epstein's assertion that shared decision-making fosters a sense of responsibility and ownership among parents, leading to improved educational outcomes. Similarly, the significant relationship between parental engagement in resourcing, volunteering, and linkages with CBE implementation reinforces the importance of collaborative efforts between schools and families in providing adequate learning materials, mentorship, and community support structures for effective curriculum implementation. Additionally, the study's finding that parental engagement in school-home-based learning and development process positively influences CBE implementation aligns with Epstein's emphasis on the role of parents in reinforcing learning activities beyond the classroom environment, ensuring continuity of learning experiences at home.

Hoover-Dempsey and Sandler's (2005) model further explains the mechanisms through which parental involvement impacts educational outcomes, particularly through parental role construction. This study found that parental role construction significantly mediates the relationship between parental engagement in participatory decision-making, resourcing, volunteering, linkages, and school-home-based learning with CBE implementation. The rejection of the mediation null hypotheses supports Hoover-Dempsey and Sandler's assertion that parents' beliefs about their roles in their children's education influence the extent and effectiveness of their engagement. When

parents perceive themselves as key contributors to their children's education, they are more likely to participate actively in decision-making, provide learning resources, volunteer, and facilitate home-based learning activities.

Beyond their theoretical alignment, the findings of this study also hold significant implications for educational policy, particularly in Kenya's context of CBE implementation. The study's affirmation of the crucial role of parental engagement in decision-making, resourcing, volunteering, linkages, and home-based learning directly corroborates the explicit emphasis on Parental Empowerment and Engagement (PE&E) as a guiding principle within the Competency-Based Education framework (KICD, 2019; Republic of Kenya, 2017). This provides empirical evidence supporting the fundamental design of CBE policy, which tasks parents as co-educators responsible for a holistic learning environment.

However, while policies advocate for parental involvement, our findings on the partial mediation by parental role construction offer a critical insight. This suggests that merely prescribing parental activities may not be sufficient for optimal engagement; policies must also actively cultivate parents' understanding and belief in their expanded educational roles. The challenges in stakeholder engagement observed locally, as highlighted in Nakuru County's Annual Development Plan (2022-2023), resonate with the national concerns raised by the Presidential Working Party on Education Reform (2023) regarding the persistent discrepancy between anticipated and actual parental engagement. Therefore, these findings underscore the need for policy to move beyond aspirational statements by investing in targeted sensitization campaigns, structured training programs for parents on their CBE roles, and fostering continuous, clear communication channels between schools and families to strengthen parental role construction and enable more effective curriculum implementation.

Overall, the study findings reinforce the theoretical underpinnings of Epstein's Typology of Parental Involvement and Hoover-Dempsey and Sandler's Theoretical Model by demonstrating that parental engagement in various forms, coupled with strong parental role construction, enhances CBE implementation in public primary schools. These findings highlight the critical role of parents as key stakeholders in education and underscore the need for schools to adopt inclusive and collaborative strategies that encourage parental participation in curriculum implementation.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study examined the influence of Parental Engagement and Parental Role Construction on the implementation of the Competency-Based Education (CBE), among selected Public Primary Schools, in Nakuru County, Kenya. The study objectives were: to assess the effect of parental engagement in participatory decision-making on the CBE implementation; to investigate the effect of parental engagement in resourcing, volunteering, and linkages on the CBE implementation; to examine the effect of parental engagement in the school-home-based learning and development process on the CBE implementation; to analyze the mediating effect of Parental Role Construction on the relationship between Parental Engagement and CBE implementation; and to explore teachers' and parents' perceptions and experiences regarding Parental Role Construction and Parental Engagement in the CBE implementation. Adopting a pragmatic paradigm and a convergent mixed-methods design, the study collected data from 248 parents, 13 teachers, and 10 PTA members through surveys, interviews, and focus group discussions, analyzed using quantitative statistical methods and qualitative thematic analysis. This chapter presents a concise summary of the key findings, draws overarching conclusions based on these findings, provides recommendations for policy and practice, and offers suggestions for further research arising from this study.

5.2 Summary of The Findings

5.2.1 Effect of Parental Engagement in Participatory Decision-making on CBE Implementation

Parental engagement in participatory decision-making positively and significantly influenced CBE implementation ($\beta=0.359$, $p<0.05$) in public primary schools in Nakuru County, Kenya. As parental engagement in participatory decision-making increases, CBE implementation in primary schools will likely exhibit a corresponding positive trend. The positive influence suggests that when parents actively participate in decision-making processes, they contribute to the successful adoption and implementation of CBE by fostering a supportive learning environment, enhancing resource mobilization, and reinforcing curriculum objectives at home. Thus, strengthening parental engagement strategies is crucial for improving the effectiveness and sustainability of CBE implementation in primary schools.

5.2.2 Effect of Parental Engagement in Resourcing, Volunteering, and Linkages on CBE Implementation

Parental engagement in resourcing, volunteering, and linkages positively and significantly influenced CBE implementation ($\beta=0.299$, $p<0.05$) in public primary schools in Nakuru County, Kenya. As parental engagement in these areas increases, CBE implementation in primary schools is likely to improve correspondingly. The positive influence suggests that when parents contribute resources such as learning materials and infrastructure, volunteer their time in school activities and mentorship programs, and establish linkages with external stakeholders such as community organizations and education partners, they enhance the availability of learning materials, support co-curricular activities, and strengthen collaboration between schools and the community. This active engagement fosters a more conducive learning

environment, ultimately improving the effectiveness of CBE implementation. Thus, reinforcing parental engagement strategies in resourcing, volunteering, and stakeholder linkages is crucial for sustaining and enhancing the successful adoption of CBE in primary schools.

5.2.3 Effect of Parental Engagement in School-Home-Based Learning and Development Process on CBE Implementation

Parental engagement in school-home-based learning and the development process positively and significantly influenced CBE implementation ($\beta=0.360$, $p<0.05$) in public primary schools in Nakuru County, Kenya. As parental engagement in school-home-based learning and development increases, CBE implementation in primary schools is likely to improve conformably. The positive influence suggests that when parents actively support learning at home by assisting with homework, monitoring academic progress, and creating a conducive learning environment, they reinforce the competencies emphasized in CBE. Additionally, their engagement in the development process through participation in school meetings, curriculum discussions, and feedback mechanisms strengthens collaboration between schools and families, ultimately enhancing learning outcomes. Thus, fostering strong school-home partnerships is essential for ensuring the effective and sustainable implementation of CBE in primary schools.

5.2.4 Mediating Effect of Parental Role Construction on the Relationship Between Parental Engagement and CBE Implementation.

Parental role construction partially mediated the direct effects of parental engagement on CBE implementation. Specifically, the mediation effect was evident in the relationship between parental engagement in participatory decision-making and CBE implementation ($B = 0.1209$, CI [0.0558, 0.1860]), as well as in the relationships

involving resourcing, volunteering, and linkages ($B = 0.0839$, CI [0.0132, 0.1546]) and school-home-based learning and development processes ($B = 0.0936$, CI [0.0029, 0.1843]).

The significant indirect effects highlight the crucial role of parental role construction in shaping the effective implementation of CBE in primary schools. Notably, parental engagement in the school-home-based learning and development process demonstrated the highest indirect effect (63%) through parental role construction, followed by volunteering, resourcing, and linkages (52%), while participatory decision-making exhibited the lowest indirect effect (38%).

These findings underscore the complex and multifaceted influence of parental role construction in enhancing CBE implementation. They emphasize that when parents perceive themselves as active participants in their children's education, they are more likely to engage meaningfully in decision-making, resource mobilization, volunteering, and home-based learning. This mediation role suggests that strengthening parents' understanding of their roles can maximize the effectiveness of CBE implementation.

These findings further suggest that the effectiveness of CBE implementation is not solely dependent on the frequency or type of parental engagement but is significantly shaped by how parents perceive and internalize their roles in their children's education. The strong indirect effects observed, particularly in school-home-based learning and development processes, imply that parents who see themselves as essential contributors are more likely to engage in ways that meaningfully support curriculum delivery and learning outcomes. This highlights parental role construction as a pivotal psychological mechanism that translates engagement behaviors into tangible support for CBE.

Strengthening this internalized role identity may thus be key to fostering sustained and impactful parental involvement across various domains of CBE implementation.

5.2.5 Teachers' and Parents' Perceptions Regarding Parental Role Construction and Parental Engagement in the CBE Implementation

The study objective sought to explore teachers' and parents' perceptions and experiences regarding parental role construction and parental engagement in the CBE implementation in public primary schools in Nakuru County, Kenya. The summary of the findings is as follows:

5.2.5.1 Teachers' and Parents' Perceptions on Parental Engagement in Participatory Decision-Making

The study reveals a moderate level of parental engagement in school decision-making within the Competency-Based Education (CBE) framework, as reflected in the grand mean of 3.52 (SD = 1.203). Quantitative findings indicate that while parents acknowledge opportunities to participate in key decisions, their engagement is often limited to implementation rather than active participation. The highest levels of agreement were recorded in areas where schools invite parents to discuss their child's academics, behavior, and career choices and in monitoring children's growth and learning challenges. However, the lowest agreement was observed in the nomination of family and community members to educational committees and workshops, suggesting a gap in structured parental engagement beyond conventional discussions.

Qualitative insights further highlight this discrepancy, with teachers advocating for increased parental engagement, particularly in decision-making processes, while PTA members' express frustration over their limited influence. Teachers emphasize the need for structured interactions, parental education on CBE, and greater collaboration among

stakeholders to enhance participatory decision-making. Conversely, parents often perceive their role as passive, with school leadership and government directives primarily shaping decisions. Some PTA members note inconsistencies in parental involvement across schools, with engagement levels largely dependent on individual school leadership styles.

The findings suggest that while schools provide mechanisms for parental participation, actual engagement remains limited to consultation and implementation. Thus, primary schools should implement more inclusive decision-making processes, actively involve parents in policy discussions, and provide targeted awareness programs to empower them as key stakeholders in CBE implementation.

5.2.5.2 Teachers' and Parents' Perceptions of Parental Engagement in Resourcing, Volunteering, and Linkages

The study reveals a moderate level of parental engagement in resourcing, volunteering, and linkages within the Competency-Based Education (CBE) framework, as reflected in the grand mean of 3.434 (SD = 1.176). Quantitative findings indicate that while parents actively support their children by providing classroom materials and encouraging their participation in school activities, engagement in broader school fundraising and volunteering varies significantly.

Parental participation in establishing linkages with government and non-government agencies for resource mobilization is notably low, suggesting a gap in external collaborations. Qualitative insights further reveal that while some parents actively engage in school development initiatives, financial constraints, and limited structured opportunities hinder broader participation. These findings emphasize enhanced parental engagement, particularly in resource mobilization and external partnerships, to support

CBE implementation effectively. Therefore, schools should adopt more structured engagement strategies to optimize parental participation in fundraising, volunteering, and linkages with external organizations.

5.2.5.3 Teachers' and Parents' Perceptions on Parental Engagement in School-Home-Based Learning and Development Process

The study reveals a high level of parental engagement in school-home-based learning and child development under the Competency-Based Education (CBE), as indicated by a grand mean of 4.01 (SD = 1.002). Quantitative findings highlight that parents actively support their children by providing resources for learning, involving them in safe family and community learning activities, and monitoring developmental milestones at home. The highest level of parental engagement is observed in assisting children with homework, e-learning, and projects, suggesting strong parental involvement in structured academic support.

However, parental awareness of learning standards provided by schools is relatively lower, indicating variability in how well schools communicate expectations for home learning. Qualitative findings reinforce this, with teachers emphasizing the need for structured lesson plans that explicitly outline parental roles. Parents also reported leveraging digital tools for learning, such as sharing phones for research and printing materials for school use. The findings suggest that while parents play an active role in their children's education, particularly in direct learning support, there is a need for improved school-parent communication to ensure consistency in parental involvement across all aspects of CBE implementation. Thus, primary schools should enhance engagement by providing clearer guidance on learning standards and reinforcing structured parental involvement in experiential learning and developmental monitoring.

5.2.5.4 Teachers' and Parents' Perceptions on Parental Role Construction in Supporting Children's Education Under CBE

The study reveals a strong parental commitment to supporting children's education under the Competency-Based Education (CBE), as indicated by a grand mean of 4.283 (SD = 0.962). Quantitative findings show that parents actively engage in their children's academic development by ensuring they complete assignments, providing necessary learning materials, and attending school meetings. These findings suggest a high level of parental responsibility in facilitating home-based learning.

However, participation in school-related activities, such as attending extracurricular events and decision-making forums, is slightly lower, indicating that some parents view education as primarily the teachers' responsibility. Additionally, engagement in volunteering and fundraising activities remains the least prominent, mainly due to financial constraints and a lack of structured opportunities for participation.

Qualitative findings reinforce these insights, with teachers emphasizing the need for more structured parental engagement in school activities beyond academics. Some parents reported challenges in balancing work commitments with school engagement, while others highlighted a lack of awareness regarding opportunities for participation. Schools recognize the need for improved communication strategies to enhance parental engagement, particularly in decision-making and resource mobilization.

The findings suggest that while parents are actively involved in supporting learning at home, there is a need for schools to provide clearer guidance on engagement opportunities. Thus, strengthening communication and offering structured participation frameworks can help bridge existing gaps and promote more comprehensive parental involvement in the CBE framework.

5.2.5.5 Teachers' and Parents' Perceptions and Experiences with CBE Implementation

The study reveals a strong parental commitment to supporting the implementation of the Competency-Based Education (CBE), as indicated by a grand mean of 4.284 (SD = 0.828). Findings highlight that parents widely acknowledge the importance of teacher-parent collaboration for CBE success and actively engage in CBE partnerships to support their children's holistic development. Parents recognize that their involvement positively impacts students' academic and personal growth, with the highest levels of engagement observed in supporting school retention, participation, and performance. However, participation in decision-making regarding CBE implementation is relatively lower, indicating that while parents recognize their role, some may feel limited in their influence over school matters. Qualitative findings support this, with teachers emphasizing the need for more structured parental involvement in governance, while some parents express uncertainty about how to contribute effectively.

The study further reveals that CBE partnerships promote regular and effective two-way communication between parents and teachers, facilitating better student progress monitoring. However, qualitative findings highlight challenges such as inconsistent communication strategies and unclear CBE transitions, which may hinder full parental engagement. Despite these barriers, parents leverage digital tools, such as mobile phones, to conduct research and communicate with teachers, demonstrating a proactive approach to supporting learning at home.

These findings suggest that while parents actively participate in their children's education through direct academic support, collaboration with schools, and fostering a conducive learning environment, there is a need for clearer communication, structured decision-making opportunities, and enhanced parental awareness of CBE

implementation processes. Thus, addressing communication gaps, providing structured decision-making opportunities, and enhancing parental awareness of CBE implementation processes can further strengthen teacher-parent partnerships, ultimately improving student learning outcomes and holistic development.

5.3 Study Conclusion

Parental engagement in participatory decision-making positively and significantly enhances CBE implementation in public primary schools. When parents actively participate in school governance, they foster a supportive learning environment, enhance resource mobilization, and reinforce curriculum objectives at home. Strengthening school-community partnerships through inclusive decision-making frameworks can further improve CBE adoption and sustainability, ensuring holistic learning experiences for learners.

Parental engagement in resourcing, volunteering, and linkages positively and significantly enhances CBE implementation in public primary schools. When parents contribute learning materials and infrastructure, volunteer in school activities, and establish linkages with external stakeholders, they improve resource availability, support co-curricular programs, and strengthen school-community collaboration. Reinforcing parental involvement strategies in these areas can further enhance CBE adoption and sustainability, ensuring a well-supported and holistic learning experience for learners.

Parental engagement in school-home-based learning and the development process positively and significantly enhances CBE implementation in public primary schools. When parents actively support learning at home by assisting with homework, monitoring academic progress, and creating a conducive learning environment, they

reinforce the competencies emphasized in CBE. Additionally, their participation in school meetings, curriculum discussions, and feedback mechanisms strengthens school-family collaboration, ultimately improving learning outcomes. Strengthening school-home partnerships through structured engagement strategies can further enhance CBE adoption and sustainability, ensuring holistic learning experiences for learners.

Parental role construction plays a crucial mediating role in enhancing CBE implementation by shaping the extent and effectiveness of parental engagement. The findings indicate that parental role construction significantly mediates the relationship between parental engagement and CBE implementation, with the strongest indirect effect observed in home-based learning strategies (63%), followed by resourcing, volunteering, and linkages (52%), and participatory decision-making (38%). These results suggest that when parents perceive themselves as active participants in their children's education, they are more likely to engage meaningfully in decision-making, resource mobilization, volunteering, and home-based learning, ultimately improving CBE implementation. Strengthening parental role construction through targeted sensitization, training, and inclusive school policies can further enhance CBE adoption and sustainability, ensuring meaningful school-community collaboration and improved student learning outcomes.

Finally, the study concludes that although parents actively support home-based learning and collaboration with teachers, their engagement in decision-making, resource mobilization, and external partnerships remains moderate, often due to financial constraints and limited structured opportunities. Teachers advocate for more inclusive parental engagement, structured communication, and greater collaboration, whereas parents often perceive their role as primarily supportive rather than participatory in

governance. Despite these challenges, CBE partnerships foster a positive learning environment, strengthen teacher-parent collaboration, and contribute to student success. Addressing communication gaps, increasing parental awareness of their roles, and implementing inclusive decision-making frameworks can enhance engagement, ultimately improving CBE implementation and student learning outcomes.

5.4 Implications and contributions of the Study

The findings from this study have several significant theoretical, policy, and practical implications and contributions. These implications extend beyond the immediate research context by providing actionable measures and considerations that can inform education stakeholders, including policymakers, school administrators, teachers, and parents.

5.4.1 Theoretical Implications

This study provides empirical support for Epstein's Parent Involvement Model (2002) and Hoover-Dempsey and Sandler's Parent Involvement Model (2005), both of which have been widely applied to examine parental engagement and its effects on student learning (Epstein, 2002; Hoover-Dempsey & Sandler, 2005; Hornby & Lafaele, 2011). By contextualizing these frameworks within the Competency-Based Education (CBE) in public primary schools in Nakuru County, Kenya, this study offers new insights into the dimensions and determinants of parental engagement in curriculum implementation and identifies critical areas for refinement.

Epstein's Parent Involvement Model (2002) identifies six key types of parental involvement: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. The findings from this study confirm the applicability of these dimensions in CBE implementation while highlighting gaps

in their application. Notably, while schools provide opportunities for parental participation, decision-making remains largely consultative rather than participatory, aligning with studies that suggest parents have limited influence in educational governance (Deslandes & Bertrand, 2005; Nyatuka, 2020). These findings underscore the need for structured mechanisms that actively integrate parents into school decision-making processes, thereby enhancing their influence in school governance and ensuring their meaningful contribution to the implementation of the Competency-Based Education (CBE).

Additionally, the study supports Epstein's argument that strong school-family-community partnerships enhance educational outcomes. Findings indicate that parental contributions such as providing learning materials, volunteering, and engaging with external stakeholders significantly support CBE implementation. However, as previous research suggests, engagement in resource mobilization remains inconsistent, particularly among low-income parents (Epstein & Sheldon, 2006; Oketch & Rolleston, 2020). This calls for inclusive strategies, initiated and supported by schools, in collaboration with education policymakers and community-based organizations, that facilitate parental participation in resource mobilization through sensitization and support programs.

The study also validates Hoover-Dempsey and Sandler's emphasis on psychological and motivational factors, especially parental role construction, self-efficacy and school-led invitations, as critical determinants of engagement (Green et al., 2007; Walker et al., 2010). The findings strongly support this perspective, showing that parents who perceive themselves as active participants in their children's education engage more in CBE-related activities such as decision-making, resource provision, and home learning. Notably, parental role construction has the greatest influence on home-based learning

and resource mobilization, reinforcing the idea that parental beliefs shape engagement behaviors (Hoover-Dempsey et al., 2005; Hornby, 2011). However, the study reveals that some parents still view education as primarily the responsibility of teachers, often due to cultural norms and inadequate school communication (Kuteli, Waweru, & Okech, 2021; Ngussa, & Rehema, 2019).

This finding aligns with Hoover-Dempsey and Sandler's assertion that external factors, such as school-led invitations and community expectations, shape parental role construction. Consequently, schools must actively reshape parental perceptions through awareness programs, training workshops, and inclusive policies that reinforce parents' roles as co-educators in the CBE framework. Additionally, the findings confirm that school-led invitations significantly influence parental engagement, supporting prior research that identifies school initiatives as a key driver of participation (Epstein, 2018; Wang & Sheikh-Khalil, 2014). While schools frequently invite parents to discussions on student progress, engagement in decision-making and resource mobilization remains low, suggesting the need for more structured and continuous collaboration strategies.

Beyond validating these theoretical models, this study identifies gaps that warrant refinement to better align with the CBE context. Conventional parental involvement models do not fully account for contextual factors such as policy structures, economic constraints, and digital learning trends, all of which significantly influence parental engagement in CBE implementation (Nyatuka, 2020; Wang, 2021). For instance, while existing models emphasize decision-making as a form of parental involvement, the study reveals that many parents are excluded from policy discussions at the school level, despite the recognized benefits of participatory decision-making (Muriithi & Thinguri, 2019). Future parental involvement frameworks should integrate policy

engagement as a distinct component, ensuring parents have a meaningful role in shaping educational reforms.

Financial constraints also pose a significant barrier to parental engagement in school resourcing and volunteering efforts. Similar challenges have been documented in low-income contexts where parents struggle to meet the financial demands of education (Nyatuka, 2020; Kimu, 2012). This highlights the need for parental involvement models to better address socioeconomic barriers and propose targeted interventions for low-income families. Additionally, as digital tools increasingly support home learning, parental involvement frameworks should incorporate digital learning trends and explore how schools can assist parents in leveraging technology for effective CBE implementation (Wang & Sheikh-Khalil, 2014).

In summary, this study validates and extends Epstein's and Hoover-Dempsey, and Sandler's models in the CBE context. While these frameworks provide a solid foundation for understanding parental engagement, the findings suggest refinements in structured decision-making, economic constraints, and digital learning integration. Strengthening parental role construction, enhancing school-led invitations, and developing inclusive involvement strategies are crucial for optimizing engagement in CBE implementation. These insights not only enrich the discourse on parental engagement but also offer theoretical advancements to guide future research and policy reforms.

5.4.2 Policy Implications

The findings from this study have critical implications for policy development related to shaping effective frameworks for enhancing parental engagement in the implementation of CBE. First, the study highlights the need to institutionalize

structured parental participation in school decision-making, ensuring that schools and policymakers adopt strategies that facilitate active participation in curriculum implementation. While existing policy frameworks encourage parental participation, findings reveal that decision-making processes remain largely consultative rather than participatory. Policymakers should develop mandatory frameworks that promote structured parental representation in school governance, ensuring that parents contribute to shaping CBE implementation strategies in a meaningful way. This includes establishing parent advisory councils and strengthening school-based management systems to integrate parents into curriculum-related discussions.

Secondly, the study findings highlight that addressing socioeconomic barriers to parental engagement is essential. Many parents, particularly those from low-income backgrounds, face financial constraints that limit their engagement in school activities. Policymakers should consider initiatives such as financial aid programs, subsidized learning materials, and community partnerships to bridge this gap. Additionally, targeted awareness campaigns and training workshops can equip parents with the necessary skills and knowledge to actively support CBE learning at home.

Furthermore, the study findings underscore the role of proactive school-led initiatives in fostering parental engagement. Policies should encourage schools to adopt structured communication systems, ensure regular communication, provide structured feedback mechanisms, and capacity-building programs that empower parents. The study suggests that school-driven invitations significantly influence parental participation, reinforcing the need for policies that make parental involvement an integral part of school operations.

The study also calls for policy interventions that incorporate digital learning as a key component of parental engagement. With the increasing integration of technology in education, policymakers should develop strategies that equip parents with the necessary digital literacy skills to support home-based learning. This includes investments in community-based digital learning programs, provision of affordable internet access, and development of school-parent digital communication platforms to enhance information flow and engagement in CBE implementation.

Finally, the study emphasizes the need for adoption of culturally responsive policies that recognize the diverse perspectives and roles of parents in education. Policymakers should adopt flexible, context-specific approaches that acknowledge cultural influences on parental engagement, ensuring that engagement strategies are inclusive and adaptable to different socio-cultural contexts. This includes strategies like multilingual communication, flexible engagement formats, and collaboration with local structures such as religious and community organizations. By fostering inclusive, participatory, and well-supported parental engagement frameworks, policymakers can enhance the effectiveness of CBE implementation and contribute to improved educational outcomes for all learners.

5.4.3 Practical Implications

The study findings offer significant practical implications that inform actionable steps for education stakeholders including the Ministry of Education, the Teachers Service Commission (TSC), school administrators, teachers, and parents' associations, to develop targeted initiatives that foster meaningful parental participation in curriculum implementation. This study emphasizes the need for structured and inclusive approaches that enhance collaboration between schools and parents to improve learning outcomes.

The findings of this study indicate that schools need to move beyond consultative parental engagement and adopt participatory models that empower parents as active contributors to curriculum implementation. School administrators should develop structured engagement programs that allow parents to play a role in decision-making, home-based learning support, and resource mobilization. This can be achieved through regular parent-teacher workshops, structured feedback mechanisms, and dedicated school-community engagement policies.

Additionally, the study underscores the importance of equipping parents with the necessary skills and knowledge to support CBE implementation effectively. The Ministry of Education and school leadership should organize capacity-building programs, including parental training/empowerment sessions on CBE pedagogy, digital literacy, and home-based learning support. Providing parents with practical guidance to assist their children with CBE tasks at home will enhance learning continuity beyond the classroom.

Moreover, addressing socioeconomic barriers and disparities is critical to fostering equitable parental engagement. Schools, in collaboration with the Ministry of Education and local government authorities, should establish support mechanisms such as school-based financial aid programs, subsidized learning materials, and community-based partnerships to assist low-income families. Encouraging collective resource mobilization through school committees and community networks can further enhance access to learning materials and school infrastructure.

The study also highlights the role of digital tools in facilitating parental engagement. Schools and education policymakers should leverage technology to improve parent-teacher communication and collaboration. This includes developing school-parent

communication platforms, integrating mobile-based learning applications, and providing digital literacy training for parents to support home-based learning activities.

Furthermore, the study calls for school administrators to create a more welcoming and inclusive environment that encourages parents to actively engage in school activities.

Establishing dedicated parental engagement committees, recognizing parental contributions through incentives, and fostering open dialogue between schools and families can enhance parental motivation and long-term commitment to CBE implementation.

Finally, the findings suggest that schools should adopt culturally sensitive and context-specific engagement approaches. Adopting flexible engagement approaches that consider parents' work schedules, literacy levels, and unique community dynamics can improve participation among parents. This includes implementing alternative meeting schedules, providing multilingual communication resources, and utilizing community structures such as religious institutions and local organizations to reach a broader spectrum of parents.

By implementing these practical strategies, education stakeholders can strengthen parental engagement in CBE implementation, ultimately improving student learning experiences and academic outcomes. These insights also provide a foundation for developing scalable and sustainable parental engagement models that can be adapted in other education systems across Kenya and similar contexts globally.

5.4.4 Academic and Methodological Contributions

This study advances existing academic knowledge by providing new insights into the mechanisms and factors that shape parental engagement and parental role construction in the implementation of the Competency-Based Education (CBE). By examining

different dimensions of parental engagement: participatory decision-making, resourcing, volunteering, linkages, and school-home-based learning and development processes, this study deepens the understanding of how parents influence pupils' learning outcomes within the CBE framework. Unlike previous studies that primarily treated parental involvement as a broad concept, this research highlights the multidimensional nature of parental engagement, offering a more comprehensive framework for analyzing its impact on curriculum implementation (Epstein, 2021).

Incorporating parental role construction as a mediating factor in the relationship between parental engagement and CBE implementation strengthens the robustness and depth of the research findings. This addition contributes to a more detailed understanding of how the independent variable influences the dependent variable (Hayes, 2022).

The findings reveal that parental role construction mediates the effects of parental engagement on CBE implementation, suggesting that without structured parental role construction, parental engagement may not achieve its full potential. Specifically, parental engagement in home-based learning strategies demonstrated the highest indirect effect (63%) through parental role construction, followed by volunteering, resourcing, and linkages (52%), while participatory decision-making exhibited the lowest indirect effect (38%).

This study contributes to the growing body of literature emphasizing the role of parents as co-educators, reinforcing the idea that successful curriculum implementation requires a shared responsibility between schools and families. Policymakers and educators who overlook the mediating role of parental role construction risk designing CBE implementation strategies that do not fully harness the potential of parental

engagement. By recognizing and integrating structured parental role construction into CBE implementation models, education stakeholders can develop more holistic and effective interventions. The mediated model employed in this study offers a more accurate representation of the interplay between parental engagement, parental role construction, and CBE implementation, providing valuable insights for future policy development and educational practice.

From a methodological standpoint, this study makes a significant contribution by employing a convergent mixed-methods design, which captured both the breadth of quantitative data and the depth of qualitative insights. This integrated approach facilitated the triangulation of statistical findings with contextual narratives, offering a more dynamic and nuanced understanding of parental engagement, role construction, motivations, and challenges in the implementation of the Competency-Based Education (CBE). Unlike studies that rely solely on either quantitative or qualitative methods, this mixed-methods strategy enabled a comprehensive exploration of the complex interplay between parental roles and CBE implementation, aligning with best practices in educational research and enhancing the validity and richness of the findings (Creswell & Creswell, 2023).

Moreover, the methodological advancement in this study is also seen in the inclusion of covariate control for demographic variables such as parents' age, gender, and level of education. Although these variables did not explain any variation in CBE implementation among the respondents ($R^2 = 0.084$, $p > 0.05$), by statistically controlling for these variables, this study ensures that the findings are robust, precise, and generalizable across diverse parental populations.

Lastly, while using a single theory is acceptable in social science research, it may be limited in fully capturing the dynamics of parental role construction in CBE implementation in primary schools. Therefore, this study contributes to a multi-theoretical model that explains the relationship between parental engagement and parental role construction in CBE implementation. It integrates Epstein's Parent Involvement Model (2002) and Hoover-Dempsey and Sandler's Parent Involvement Model (2005) to provide a comprehensive framework for understanding parental engagement and role construction in CBE implementation. Epstein's model informs the dimensions of parental engagement, categorizing it into participatory decision-making, resourcing, volunteering, and school-home-based learning. Meanwhile, Hoover-Dempsey and Sandler's model explain why parents engage and highlights parental role construction as a mediating factor influencing the effectiveness of engagement in CBE implementation. By combining these models, this study demonstrates that structured parental role construction enhances engagement outcomes, offering valuable insights for policymakers and educators in designing more effective parental engagement strategies in the CBE implementation framework.

5.5 Recommendations

The study makes the following recommendations:

i. Strengthening Parental Engagement in Participatory Decision-Making:

The Ministry of Education, should take the lead in developing and implement clear national policies that institutionalize active parental engagement in decision-making processes related to CBE implementation. The policies should mandate the inclusion of parents in school governance structures and provide frameworks for participation. Once developed, the school management boards should implement these policies at the school level by organizing sensitization

workshops and training sessions to educate parents on their roles in decision-making, curriculum changes, and school governance under CBE. Additionally, structured parental representation in decision-making bodies, such as school management committees, should be established to encourage parents' participation in policy formulation and implementation. Furthermore, schools should empower Parent-Teacher Associations (PTAs) to act as intermediaries between parents and school management, ensuring that parental voices are meaningfully represented in key decisions affecting CBE implementation.

ii. Enhancing Parental Engagement in Resourcing, Volunteering, and

Linkages: Primary schools should implement structured programs that guide parents on how to contribute learning materials, co-curricular support, and infrastructure for CBE implementation. Additionally, schools should create flexible volunteer opportunities for parents, allowing them to participate in mentorship, career talks, extracurricular activities, and other school programs. Strengthening school-community linkages is also essential, and schools should actively engage external stakeholders, such as NGOs, community leaders, and corporate sponsors, to support CBE implementation by providing additional resources and expertise. Furthermore, the government should explore policies that provide financial relief or subsidies to economically disadvantaged parents to reduce barriers to engagement in school resourcing and volunteering.

iii. Promoting Parental Engagement in School-Home-Based Learning and

Development: Primary schools should implement of structured communication channels, such as digital platforms, newsletters, and regular parent meetings, to keep parents informed of CBE requirements and their role in supporting learning at home. Schools should also conduct training programs that equip

parents with the necessary skills to effectively support their children's homework, projects, and skill development under CBE. Additionally, the Kenya Institute of Curriculum Development (KICD) should develop user-friendly guides outlining parental roles in CBE learning to ensure consistency and clarity in school-home engagement. Furthermore, schools and policymakers should explore strategies to improve parental access to digital learning resources, enabling them to support their children's academic work using available technological tools.

iv. Strengthening Parental Role Construction to Enhance CBE

Implementation: Primary schools should initiate awareness campaigns that help parents understand their critical roles in CBE implementation and equip them with strategies to engage effectively in their children's education. The Ministry of Education should integrate parental role construction as a core component in education policies, ensuring that schools actively engage parents in CBE implementation. Additionally, the government and schools should implement support programs, such as scholarships and material provisions, to ensure parents from economically disadvantaged backgrounds can actively participate in CBE implementation. Furthermore, schools should develop tools to assess and track parental involvement in CBE implementation, identifying gaps and areas that require intervention.

v. Improving Teacher-Parent Partnerships for Effective CBE

Implementation: Primary schools should institutionalize regular engagement forums where teachers and parents discuss CBE progress, challenges, and collaborative solutions. The Ministry of Education should include parental engagement strategies in teacher training programs to equip teachers with skills

for effectively working with parents. Additionally, schools should ensure open communication channels between teachers and parents, including digital platforms such as WhatsApp groups, SMS alerts, and school portals. Furthermore, schools should establish recognition programs that reward and appreciate parents who actively participate in CBE implementation to motivate further engagement.

By implementing these recommendations, schools, Ministry of Education policymakers, and other stakeholders can enhance parental engagement, strengthen parental role construction, and improve the overall success of CBE implementation in public primary schools in Nakuru County, Kenya.

5.6 Suggested Areas of Further Research

The following are the suggested areas of further research on unexplored that emerged from the current study but existed beyond its scope:

- i. This study examined the mediating effect of parental role construction on the relationship between parental engagement and CBE implementation. Several other mediating and moderating factors could be investigated in future studies such as parental self-efficacy, school invitations for engagement and socio-economic factors.
- ii. This study adopted a cross-sectional design, which provided a snapshot analysis of parental engagement and its influence on CBE implementation. However, parental engagement is a dynamic process that evolves with time. Therefore, a longitudinal study tracking parental engagement across different phases of CBE implementation would provide deeper insights into how parental role construction changes and how sustained engagement influences curriculum

execution and outcomes. Such a study would offer policymakers and educators a more comprehensive understanding of the long-term impact of parental engagement on CBE success.

- iii. This study adopted a complex mixed-methods approach with a strong quantitative component. While this provided empirical validation of the relationships between parental engagement, parental role construction, and CBE implementation, future research could adopt a more qualitative or phenomenological approach to capture in-depth parental and teacher experiences. A qualitative study focusing on lived experiences, challenges, and motivations for parental engagement, using grounded theory, would offer richer contextual insights that may not be fully captured through quantitative measures. Such findings would help in designing targeted interventions to enhance parental engagement in CBE implementation.
- iv. This study focused on curriculum implementation in government schools. Investigating the curriculum implementation process in private primary schools, considering that they operate under different administrative structures, funding models, and parental expectations, is key. Since private schools often have different levels of parental engagement, a comparative study would provide insights into best practices and challenges unique to both sectors. This would help education stakeholders tailor engagement strategies to different school contexts, ensuring that CBE implementation is effective across all types of institutions.
- v. This study focused on parental engagement in the implementation of CBE at the primary school level. However, as learners' transition to higher levels of

education, parental engagement and expectations evolve significantly. Future research should explore parental engagement in CBE at the secondary or tertiary education levels, where parental roles may be less direct but still critical in academic guidance, career decision-making, and resource support. Investigating how parental engagement evolves across educational levels would provide valuable insights for policymakers and educators to develop strategies that ensure continuous and meaningful parental involvement throughout a child's academic journey.

REFERENCES

- AACSB International. (2020). *2020 Guiding Principles and Standards* (pp. 1–55).
- Adler, K., Salanterä, S., & Zumstein-Shaha, M. (2019). Focus group interviews in child, youth, and parent research: An integrative literature review. *International Journal of Qualitative Methods*, *18*, 1609406919887274.
- Ajuoga, M. A., & Keta, E. (2021). Competence Based Curriculum for Kenyan Primary Schools: Implementation Challenges Among Stakeholders in Kenya. *International Journal of Innovation Research and Advanced Studies (IJIRAS)*, *8*(3).
- Akala, B. M. M. (2021). Revisiting education reform in Kenya: A case of Competency Based Curriculum (CBC). *Social Sciences & Humanities Open*, *3*(1), 100107.
- Akyıldız, S. T., & Ahmed, K. H. (2021). An overview of qualitative research and focus group discussion. *International Journal of Academic Research in Education*, *7*(1), 1-15.
- Alexander Muindi, P., Kirimi, F., & Nyambura, S. (2022). Comparative Analysis of Selected Parental Factors and Academic Achievement Among Pupils in Primary Schools in Machakos County, Kenya. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, *9*(6).
- Alise, M. A., & Teddlie, C. (2010). A continuation of the paradigm wars? Prevalence rates of methodological approaches across the social/behavioral sciences. *Journal of mixed methods research*, *4*(2), 103-126.
- Allan, A. (2020). Structuring the debate about research ethics in the psychology and law field: An international perspective. *Psychiatry, Psychology and Law*, *27*(3), 397-411.
- Alyssa R. Gonzalez-DeHass, Patricia P. Willems, Jillian R. Powers & Ann T. Musgrove (2022) Parental involvement in supporting students' digital learning, *Educational Psychologist*, *57*:4, 281-294, DOI: 10.1080/00461520.2022.2129647
- Alzaid, A., Korang, T., & Parra, J. (2020, April). International Students/Parents' Perspective on the Use of Educational Technology and Digital Tools to Engage in their Children's Education. In *Society for Information Technology & Teacher Education International Conference* (pp. 1579-1584). Association for the Advancement of Computing in Education (AACE).
- Amunga, J., Were, D., & Ashioya, I. (2020). The Teacher-Parent Nexus in the Competency Based Curriculum Success Equation in Kenya. *International Journal of Educational Administration and Policy Studies*, *12*(1), 60-76.
- Amutabi, M. N. (2019). Competency based curriculum (CBC) and the end of an era in Kenya's education sector and implications for development: Some empirical reflections. *Journal of Popular Education in Africa*, *3*(10), 45-66.
- Anderson, K. J., & Minke, K. M. (2007). Parent involvement in education: Toward an understanding of parents' decision making. *The Journal of educational research*, *100*(5), 311-323.

- Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of emerging trends in educational research and policy studies (jeteraps)*, 5(2), 272-281.
- Antipkina, I., & Ludlow, L. H. (2020). Parental involvement as a holistic concept using Rasch/Guttman scenario scales. *Journal of Psychoeducational Assessment*, 38(7), 846-865.
- Antony-Newman, M. (2019). Parental involvement of immigrant parents: A meta-synthesis. *Educational Review*, 71(3), 362–381. <https://doi.org/10.1080/00131911.2017.1423278>
- Anyango, M. N., Odhiambo, A. I., & Janet, W. (2020). Stakeholder Consultation and Implementation of Competency Based Education Programme in Public Primary Schools in Kisumu East Sub-County, Kenya.
- Anyikwa, N., & Obidike, N. (2012). Mothers' constructions of their roles in the literacy education of their children. *Africa Development*, 37(3), 57-67.
- Appiah-Kubi, J., & Amoako, E. (2020). Parental participation in children's education: Experiences of parents and teachers in Ghana. *Journal of Theoretical Educational Science*, 13(3), 456-473.
- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent involvement in preschool: Predictors and the relation of involvement to preliteracy development. *School psychology review*, 37(1), 74-90.
- Ary, D., Jacobs, L., & Sorensen, C. (2010). *Introduction to research in education* (8th ed.). Belmont: Thomson Wadsworth.
- Auerbach, S. (2007). From moral supporters to struggling advocates: Reconceptualizing parent roles in education through the experience of working-class families of color. *Urban Education*, 42(3), 250-283.
- Averill, R., Metson, A., & Bailey, S. (2016). Enhancing parental involvement in student learning. *Curriculum Matters*, 12, 109-131.
- Babbie, E. R. (2020). *The practice of social research*. Cengage learning.
- Bæck, U. D. (2015). Beyond the fancy cakes. Teachers' relationship to home-school cooperation in a study from Norway. *International Journal about Parents in Education*, 9(1).
- Barger, M. M., Kim, E. M., Kuncel, N. R., & Pomerantz, E. M. (2019). The relation between parents' involvement in children's schooling and children's adjustment: A meta-analysis. *Psychological bulletin*, 145(9), 855.
- Bediako, S. A. (2021). *Evaluating the Teaching and Learning of Integrated Science Curriculum in Basic Schools Within the Abura Asebu Kwamankese District* (Doctoral dissertation, University of Cape Coast).
- Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental involvement and adolescents' educational success: The roles of prior achievement and socioeconomic status. *Journal of youth and adolescence*, 45(6), 1053–1064. <https://doi.org/10.1007/s10964-016-0431-4>

- Berk, Laura E., and Adena B. Meyers. 2016. *Infants, Children and Adolescents*. 8th edition. Boston: Person.
- Black, J. D., Palombaro, K. M., & Dole, R. L. (2013). Student experiences in creating and launching a student-led physical therapy pro bono clinic: A qualitative investigation. *Physical Therapy*, 93(5), 637-648.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Brossard, M., Cardoso, M., Kamei, A., Mishra, S., Mizunoya, S., & Reuge, N. (2020). Parental Engagement in Children's Learning: Insights for remote learning response during COVID-19.
- Brown, J. C., Graves, E. M., & Burke, M. A. (2022). Involvement, engagement, and community: Dimensions and correlates of parental participation in a majority–minority urban school district. *Urban Education*, 57(5), 899-934.
- Brown, J. L. (2016). *Parental motivational beliefs and involvement in school* (Master's thesis, Oklahoma State University).
- Caridade, S. M. M., Sousa, H. F. P. E., & Pimenta Dinis, M. A. (2020). The mediating effect of parental involvement on school climate and behavior problems: School personnel perceptions. *Behavioral Sciences*, 10(8), 129.
- Chakrabarty, S. N. (2013). Best Split-Half and Maximum Reliability. *IOSR Journal of Research & Method in Education*, 3(1), 1-8.
- Charmaz, K. (2014). *Constructing Grounded Theory* (2nd ed.). Sage Publications.
- Childs, J., & Grooms, A. A. (2022). Be There and Be Present: An Interorganizational Network to Improve School Attendance. *Journal of Cases in Educational Leadership*, 25(4), 338-351.
- Christensen, J. Waterford Research Institute, LLC.
- Christenson, S., & Reschly, A. L. (Eds.). (2010). *Handbook of school-family partnerships* (pp. 362-379). New York, NY: Routledge.
- Chu, A. M., Nnam, K. I., & Falzefu, A. R. (2018). The competency-based curriculum implementation: Appraisal from the perspective of teachers' use of resources. *International Journal of Trend in Scientific Research and Development*, 2(4), 2278-2288.
- Clarke, B. L., Wheeler, L. A., Sheridan, S. M., Witte, A. L., Sommerhalder, M. S., & Svoboda, E. A. (2017). Supporting Latinx student success via family–school partnerships: Preliminary effects of conjoint behavioral consultation on student and parent outcomes. *Journal of Educational and Psychological Consultation*, 27(3), 317-343.
- Cohen, L., Manion, L., & Morrison, K. (2017). Research design and planning. In *Research Methods in Education* (pp. 173-201). Routledge.
- Collins, L. M. (2007). Research Design and Methods. *Encyclopedia of Gerontology*. 2nd Ed., (pp. 433-442).

- Cook, L. D. (2024). Stakeholders' views on parental involvement in the schooling of children in an urban school: A case study. *Education and Urban Society*, 56(2), 201-229.
- Cope, D. G. (2013). Methods and meanings: Credibility and trustworthiness of qualitative research. *Number 1/January 2014*, 41(1), 89-91.
- Cope, D. G. (2014). Methods and meanings: credibility and trustworthiness of qualitative research. In *Oncology nursing forum* (Vol. 41, No. 1).
- County Government of Nakuru. (2021). *Annual Development Plan 2022-2023*. Nakuru, Kenya: Author.
- Creswell, J. W. (2012). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Plano Clark, V. L. (2023). Revisiting mixed methods research designs twenty years later. *Handbook of mixed methods research designs*, 1(1), 21-36.
- Creswell, R. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. USA: SAGE Publications.
- Curry, K. A., & Holter, A. (2019). The influence of parent social networks on parent perceptions and motivation for involvement. *Urban Education*, 54(4), 535-563.
- de Oliveira Lima, C. L., & Kuusisto, E. (2020). Teacher-parents' partnerships. In L. Gómez Chova, A. López Martínez, & I. Candel Torres (Eds.), *Pedagogy in basic and higher education: Current developments and challenges* (pp. 203–208). IATED Academy.
- Deloitte Access Economics. (2017). *Review of education for students with disability in Queensland State schools*. Queensland Department of Education and Training.
- Department of Education, Employment and Workplace Relations, Australia, 2017: Department of Education, Employment and Workplace Relations. (2017). *Family-School Partnerships Framework: A guide for schools and families*. Australian Government.
- Deslandes, R., & Bertrand, R. (2005). Motivation of parent involvement in secondary-level schooling. *The Journal of Educational Research*, 98(3), 164-175.

- Dettmers, S., Yotyodying, S., & Jonkmann, K. (2019). Antecedents and outcomes of parental homework involvement: How do family-school partnerships affect parental homework involvement and student outcomes? *Frontiers in psychology, 10*, 1048.
- DeVellis, R. F. (2016). *Scale development: Theory and applications*. Sage Publications.
- DeVellis, R. F., & Thorpe, C. T. (2021). *Scale development: Theory and applications*. Sage publications.
- Dingili, R., & Yungungu, A. M. (2023). Parental involvement in grade four learners' take-home assignments in Vihiga county, Kenya. *Social Sciences & Humanities Open, 8*(1), 100589.
- DoE, 2018 (Parent and Community Engagement Framework in Queensland): Department of Education (Queensland). (2018). *Parent and community engagement framework*. Queensland Government.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies* (pp. 95-123). Oxford: Oxford University Press.
- Dotger, B. H. (2010). School leaders. In S. Redding, M. Murphy, & P. Sheley (Eds.), *Handbook on promising practices for family involvement in schools* (pp. 129–136). Academic Development Institut
- Dubey, U. K. B., & Kothari, D. P. (2022). *Research methodology: Techniques and trends*. Chapman and Hall/CRC.
- Đurišić, M., & Bunijevac, M. (2017). Parental involvement as an important factor for successful education. *Center for Educational Policy Studies Journal, 7*(3), 137-153.
- Echaune, M., Ndiku, J. M., & Sang, A. (2015). Parental Involvement in Homework and Primary School Academic Performance in Kenya. *Journal of Education and Practice, 6*(9), 46-53.
- Echaune, Manasi, Judah M. Ndiku, and Anthony Sang. 2015. "Parental Involvement in Homework and Primary School Academic Performance in Kenya." *Journal of Education and Practice 6* (9).
- Emerson, L., Fear, J., Fox, S., & Sanders, E. (2012). Parental engagement in learning and schooling: Lessons from research. *A report by the Australian Research Alliance for Children and Youth (ARACY) for the Family–School and Community Partnerships Bureau: Canberra*.
- Epstein, J. L. (1997). *School, family, and community partnerships*. Thousand Oaks, CA: Sage.
- Epstein, J. L. (2007). Improving family and community involvement in secondary schools. *Principal leadership, 8*(2), 16-22.
- Epstein, J. L. (2010). *School, family, and community partnerships*. Boulder, CO: Westview Press.
- Epstein, J. L. (2018). *School, family, and community partnerships: Preparing educators and improving schools*. Routledge.

- Epstein, J. L., & Connors, L. J. (1995). School and family partnerships in the middle grades. *Creating school/family partnerships, 1*, 137-166.
- Epstein, J. L., & Sanders, M. G. (2002). Family, school, and community partnerships. *Handbook of parenting volume 5 practical issues in parenting*, 406.
- Epstein, J. L., & Sheldon, S. B. (2006). Moving forward: Ideas for research on school, family, and community partnerships. In C. F. Conrad & R. Serlin (Eds.), *Handbook for research in education: Engaging ideas and enriching inquiry* (pp. 117–138). Thousand Oaks, CA: Sage.
- Erickson, L. B., Wisniewski, P., Xu, H., Carroll, J. M., Rosson, M. B., & Perkins, D. F. (2016). The boundaries between: Parental involvement in a teen's online world. *Journal of the Association for Information Science and Technology*, 67(6), 1384-1403.
- Evertson, D. W. (2020). *The Influence of Principal Leadership on Teacher Collaboration: Does Effective Professional Development Mediate This Effect?* (Doctoral dissertation, The University of Nebraska-Lincoln).
- Ferlazzo, L. (2011). Involvement or Engagement? *Educational leadership*, 68(8), 10-14.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage Publications.
- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). SAGE Publications.
- Flick, U. (2018). Doing qualitative data collection—charting the routes. *The SAGE handbook of qualitative data collection*, 1-16.
- Flowers, T. M. (2015). *Examining the relationship between parental involvement and mobile technology use* (Doctoral dissertation, Walden University).
- Francis, G. L., Register, A., & Reed, A. S. (2019). Barriers and supports to parent involvement and collaboration during transition to adulthood. *Career Development and Transition for Exceptional Individuals*, 42(4), 235-245.
- Garbacz, S. A., Herman, K. C., Thompson, A. M., & Reinke, W. M. (2017). Family engagement in education and intervention: Implementation and evaluation to maximize family, school, and student outcomes. *Journal of school psychology*, 62, 1-10.
- Garbacz, S. A., Minch, D. R., Jordan, P., Young, K., & Weist, M. D. (2020). Moving towards meaningful and significant family partnerships in education. *Adolescent Psychiatry*, 10(2), 110-122.
- Gedi, F., & Kamau, J. N. (2023). The Role of Parental/Guardian Involvement in the Implementation of Competency Based Curriculum Project in Tarbaj Sub-County, Wajir County, Kenya. *International Journal of Professional Practice*, 11(2), 55-67.
- Gisewhite, R. A., Jeanfreau, M. M., & Holden, C. L. (2021). A call for ecologically-based teacher-parent communication skills training in pre-service teacher education programmes. *Educational Review*, 73(5), 597-616.

- Gomba, G. K. B., & Msezane, S. B. (2024). Examining Teachers' Views on Parental Involvement in Schools: A Study of the Hlanganani District in Limpopo: Parental Involvement in Schools. *International Journal of Curriculum and Instruction*, 16(1), 87-106.
- Gonzalez-DeHass, A. R., Willems, P. P., Powers, J. R., & Musgrove, A. T. (2022). Parental involvement in supporting students' digital learning. *Educational Psychologist*, 57(4), 281-294.
- Gonzalez-Mena, J. (2011). Making connections. *Exchange*, 199, 12-14.
- Goodall, J. 2014. "Re-thinking Engagement transport." In *Growing Engagement: Re-imagining relationships between schools, families and communities*, edited by Schools of Tomorrow, 8–19. Peterborough: Schools for Tomorrow
- Goodall, J., Lewis, H., Clegg, Z., Ylonen, A., Wolfe, C., Owen, S., ... & Ramadan, I. (2022). Defining Parental Engagement in ITE: from relationships to partnerships. *Wales Journal of Education*, 24(2).
- Grace, M., & Gerdes, A. C. (2019). Parent-teacher relationships and parental involvement in education in Latino families. *Contemporary School Psychology*, 23(4), 444-454.
- Green, C. L., Walker, J. M., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of educational psychology*, 99(3), 532.
- Gross, D., Bettencourt, A. F., Taylor, K., Francis, L., Bower, K., & Singleton, D. L. (2020). What is parent engagement in early learning? Depends who you ask. *Journal of Child and Family Studies*, 29, 747-760.
- Gruchel, N., Kurock, R., Bonanati, S., & Buhl, H. M. (2022). Parental involvement and Children's internet Uses-Relationship with parental role construction, self-efficacy, internet skills, and parental instruction. *Computers & Education*, 182, 104481.
- Gunawan, J. (2015). Ensuring trustworthiness in qualitative research. *Belitung Nursing Journal*, 1(1), 10-11.
- Gunawan, J. (2015). Ensuring trustworthiness in qualitative research. *Belitung Nursing Journal*, 1(1), 10-11.
- Haboush, K. L., & Alyan, H. (2015). School psychology: Enhancing school climate and school connectedness. In *Handbook of Arab American psychology* (pp. 318-330). Routledge.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate data analysis (MVDA). *Pharmaceutical Quality by Design: A Practical Approach*. <https://doi.org/10.1002/9781118895238.ch8>.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th ed.). Cengage Learning.
- Haisraeli, A., & Fogiel-Bijaoui, S. (2023). Parental involvement in school pedagogy: a threat or a promise? *Educational Review*, 75(4), 597-616.

- Hancock, B., Ockleford., & Windridge, K. (2009). *An introduction to qualitative research*. Trent focus group Nottingham.
- Harvey, L. (2015). Beyond member-checking: A dialogic approach to the research interview. *International Journal of Research & Method in Education*, 38(1), 23-38.
- Harwood, C. G., Knight, C. J., Thrower, S. N., & Berrow, S. R. (2019). Advancing the study of parental involvement to optimise the psychosocial development and experiences of young athletes. *Psychology of Sport and Exercise*, 42, 66-73.
- Hasnat, M. A. (2017). Rural parents' engagement in education in Bangladesh: Problems and possibilities.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate behavioral research*, 50(1), 1-22.
- Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication monographs*, 85(1), 4-40.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategory independent variable. *British journal of mathematical and statistical psychology*, 67(3), 451-470.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based nursing*, 18(3), 66-67.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based nursing*, 18(3), 66-67.
- Herman, K. C., & Reinke, W. M. (2017). Improving teacher perceptions of parent involvement patterns: Findings from a group randomized trial. *School Psychology Quarterly*, 32(1), 89.
- Hidayat, H., & Arini, F. D. (2022). Exploring Factors of the Parent-Teacher Partnership Affecting Learning Outcomes: Empirical Study in the Early Childhood Education Context. *International Journal of Instruction*, 15(4).
- Hill, N. E. (2022). Parental involvement in education: Toward a more inclusive understanding of parents' role construction. *Educational Psychologist*, 57(4), 309-314.
- Hill, N. E., & Wang, M.-T. (2015). From middle school to college: Promoting engagement, developing aspirations and the mediated pathways from parenting to post high school college enrollment. *Developmental Psychology*, 51(2), 224–235. <https://doi.org/10.1037/a0038367>
- Hill, N. E., Witherspoon, D. P., & Bartz, D. (2018). Parental involvement in education during middle school: Perspectives of ethnically diverse parents, teachers, and students. *The Journal of Educational Research*, 111(1), 12-27.

- Hindin, A., & Mueller, M. (2016). Assessing and understanding teacher candidates' dispositions toward and knowledge of parent involvement. *The Teacher Educator*, 51(1), 9-32.
- Hobbs, Matthew (2016). What is test-retest reliability and why is it important? Cambridge Cognition. <https://www.cambridgecognition.com/blog/entry/what-is-test-retest-reliability-and-why-is-it-important>.
- Hoover-Dempsey, K. V., & Jones, K. P. (1997). Parental Role Construction and Parental Involvement in Children's Education.
- Hoover-Dempsey, K. V., & Sandler, H. M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers college record*, 97(2), 310-331.
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of educational research*, 67(1), 3-42.
- Hoover-Dempsey, K. V., Bassler, O. C., & Brissie, J. S. (1987). Parent involvement: Contributions of teacher efficacy, school socioeconomic status, and other school characteristics. *American Educational Research Journal*, 24(3), 417-435.
- Hoover-Dempsey, K. V., Walker, J. M., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S., & Closson, K. (2005). Why do parents become involved? Research findings and implications. *The elementary school journal*, 106(2), 105-130.
- Hornby, G. (2011). *Parental involvement in childhood education: Building effective school-family partnerships* (Vol. 53, No. 9). New York: Springer.
- Hornby, G., & Blackwell, I. (2018). Barriers to parental involvement in education: An update. *Educational review*, 70(1), 109-119.
- Hornby, G., & Lafaele, R. (2011). Barriers to parental involvement in education: An explanatory model. *Educational review*, 63(1), 37-52.
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse researcher*, 20(4).
- Hyassat, M., Al-Bakar, A., Al-Makahleh, A., & al-Zyoud, N. (2024). Special education teachers' perceptions of parental involvement in inclusive education. *Education Sciences*, 14(3), 294.
- Ice, C. L., & Hoover-Dempsey, K. V. (2011). Linking parental motivations for involvement and student proximal achievement outcomes in homeschooling and public schooling settings. *Education and Urban Society*, 43(3), 339-369.
- Ikechukwu, O. (2017). Exploring teachers' perceptions of parental involvement via the capability approach: A case of a low income school community.
- Ishimaru, A. M. (2019). From family engagement to equitable collaboration. *Educational Policy*, 33(2), 350-385.

- Ishimaru, A. M., Lott, J., Fajardo, I., & Salvador, J. (2014). Towards equitable parent-school collaboration: Developing common parent engagement indicators. *Equitable Parent-School Collaboration Research Project*.
- Ishimaru, A. M., Torres, K. E., Salvador, J. E., Lott, J., Williams, D. M. C., & Tran, C. (2016). Reinforcing deficit, journeying toward equity: Cultural brokering in family engagement initiatives. *American Educational Research Journal*, 53(4), 850-882.
- Jahreie, J. (2022). The standard school-ready child: the social organization of 'school-readiness'. *British Journal of Sociology of Education*, 43(5), 661-679.
- Jerry J. Vaske, Jay Beaman & Carly C. Sponarski (2017) Rethinking Internal Consistency in Cronbach's Alpha, *Leisure Sciences*, 39:2, 163-173, DOI:10.1080/01490400.2015.1127189
- Jeruto, F., Kisilu, A. S., & Kabesa, S. (2024). Influence of Parental Roles On Academic Performance of Learners in Pre-Primary Schools in Kakamega County, Kenya. *Journal of African Interdisciplinary Studies*, 8(9), 26-36.
- Jeruto, F., Kisilu, A. S., & Kabesa, S. (2024). The Effect of Parental Engagement in Volunteering and Resourcing On Academic Performance of Learners in Pre-Primary Schools: A Case of Kakamega County, Kenya. *Journal of Popular Education in Africa*, 8(9), 5-15.
- Jeynes, W. (2010). *Parental involvement and academic success*. Routledge. n
- Johnson, P. (2016). Types of parental involvement and their effect on student mathematics in secondary education: Attitudes, self-efficacy, and achievement.
- Kabir, A. H., & Akter, F. (2014). Parental Involvement in the Secondary Schools in Bangladesh: Challenges and a Way Forward. *International journal of whole schooling*, 10(2), 1-18.
- Kadau, I. (2023). Parental Involvement in the Implementation of CBC in Primary Schools. *APLIKATIF: Journal of Research Trends in Social Sciences and Humanities*, 2(2), 135-146.
- Kalayci, G., & Öz, H. (2018). Parental Involvement in English Language Education: Understanding Parents' Perceptions. *International Online Journal of Education and Teaching*, 5(4), 832-847.
- Karani, A., Miriam, K., & Mirona, J. (2021). Teaching competence-based agriculture subject in primary schools in Kenya; a Review of Institutional Preparedness. *International Journal of Education, Technology and Science*, 1(1), 14-30.
- Kassu, S. J. (2019, August 7th). *Research Design and Methodology*. <https://www.intechopen.com/Online-first/research-design-and-methodology>
- Kaviti, L. (2018). *The New Curriculum of Education in Kenya: a Linguistic and Education Paradigm Shift*. University of Nairobi.
- Kelty, N. E., & Wakabayashi, T. (2020). Family engagement in schools: Parent, educator, and community perspectives. *Sage Open*, 10(4), 2158244020973024.

- Kempen, K. M. (2024). *A Transcendental Phenomenology on Parents' Motivational Beliefs Towards Involvement in Their Children's Education: The Lived Experiences of Parents Whose Children Have Attended a Kinder Through Fifth Grade Foreign Language Immersion Program*. Liberty University.
- Khan, M. A., & Law, L. S. (2015). An integrative approach to curriculum development in higher education in the USA: A theoretical framework. *International Education Studies*, 8(3), 66–76. doi: 10.5539/ies.v8n3p66.
- Kibaara, T. M., & Ndirangu, L. M. (2014). Parental involvement in their children's academic achievement in public secondary schools: A case of Kieni-West Sub-County, Nyeri County-Kenya. *International Journal of education and Research*, 2(11), 411-422.
- KICD (2017). *Basic education curriculum framework*. <https://www.kicd.ac.ke/images/downloads/CURRICULUMFRAMEWORK.pdf>.
- KICD. (2019). *Competency Based Curriculum: Guidelines on parental empowerment and engagement*. Nairobi, Kenya: Kenya Institute of Curriculum Development (KICD). Retrieved from <https://kicd.ac.ke/wpcontent/uploads/2020/03/PARENTAL-GUIDE-LINES-2.pdf>
- Kigobe, J., Ghesquière, P., Ng'Umbi, M., & Van Leeuwen, K. (2019). Parental involvement in educational activities in Tanzania: understanding motivational factors. *Educational Studies*, 45(5), 613-632.
- Kilile, J. M., Mwalw'a, S. N., & Nduku, E. (2019). Challenges facing early childhood development education centres in the implementation of the competency based curriculum in mwingi west sub-county, kitui county. *International Journal of Educational Theory and Practice*, 2(3), 36-37.
- Kim, E. M., Sheridan, S. M., Kwon, K., & Koziol, N. (2013). Parent beliefs and children's social-behavioral functioning: The mediating role of parent–teacher relationships. *Journal of School Psychology*, 51(2), 175-185.
- Kim, S. (2022). Fifty years of parental involvement and achievement research: A second-order meta-analysis. *Educational Research Review*, 37, 100463.
- Kim, S. W. (2019). Left-behind children: Teachers' perceptions of family school relations in rural China. *Compare: A Journal of Comparative and International Education*, 49(4), 584–601. doi.org/<https://doi.org/10.1080/03057925.2018.1438885>.
- Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American journal of health-system pharmacy*, 65(23), 2276-2284.
- Kimu, A. M. (2012). *Parent involvement in public primary schools in Kenya* (Doctoral dissertation, University of South Africa).
- Kong, S. C., & Wang, Y. Q. (2021). The influence of parental support and perceived usefulness on students' learning motivation and flow experience in visual programming: Investigation from a parent perspective. *British Journal of Educational Technology*, 52(4), 1749-1770.

- Konjengbam, Henry & Meitei, Sanjenbam Yaiphaba. (2020). Test and Retest in Anthropological Research. *American Journal of Human Biology*, 34(4), e23675
- Korang, T., Alzaid, A., & Parra, J. (2020). Using social media to engage culturally diverse parent, family, community in education. *MR Simonson & DJ Seepersaud, proceedings of the 2020 Association for Educational Communications and Technology*, 38-48.
- Koskei, B. K. (2014). Influence of parental involvement on students' academic performance of public mixed day secondary schools in Kuresoi sub-county, Nakuru County, Kenya. *International Journal of Education and Research*, 2(12), 505-516.
- Koskei, B. K., & Chepchumba, E. (2020). Teachers' competency as a cornerstone on the implementation of competency-based curriculum in Kenya. A case of lower primary schools in Nakuru county. *International Journal of Education and Research*, 8(2), 1-10.
- Kothari, C. R. (2018). *Research methodology: Methods and techniques*. New Delhi, India: New Age International.
- Kuria, A. W. (2022). *Relationship Between School Preparedness and Effective Implementation of the Competency Based Curriculum: A Study of Teacher's Knowledge in Nairobi County* (Doctoral dissertation, University of Nairobi).
- Kuteli, C. N., Waweru, S. N., & Okech, D. O (2021). Principals' Communication Strategies as Determinants of Parental Involvement in Academic Programmes in Public Secondary Schools in Nairobi City County, Kenya.
- Kvale, S. (2007). *Learning the Craft of Interviewing*.
- Ladson-Billings, G. (2021). *Culturally relevant pedagogy: Asking a different question*. Teachers College Press.
- Lagoke, O., Adesola, S., & Soname, S. (2020). Social network analysis as a methodological tool to understand university-industry dynamism in enhancing the HEI curriculum—a case of the Nigerian oil industry. *Studies in Higher Education*, 1–14. <https://doi.org/10.1080/03075079.2020.1723529>
- Lambert, V., & Glacken, M. (2011). Engaging with children in research: Theoretical and practical implications of negotiating informed consent/assent. *Nursing Ethics*, 18(6), 781-801.
- Landry, S. H., Smith, K. E., Swank, P. R., Zucker, T., Crawford, A. D., & Solari, E. F. (2012). The effects of a responsive parenting intervention on parent–child interactions during shared book reading. *Developmental psychology*, 48(4), 969.
- Langputeh, S., & Embong, R. (2022). The Level of Parents' Motivational Beliefs, Parental Involvement and Moral Values of Muslim Children in Southern Thailand. *Global Journal of Educational Research and Management*, 2(4), 411-427.

- Langputeh, S., Embong, R., & Mansor, N. (2023). Parents Motivational Beliefs and Parental Involvement on Moral Values Cultivation of Muslim Children in Southern Thailand. *BITARA International Journal of Civilizational Studies and Human Sciences (e-ISSN: 2600-9080)*, 6(2), 148-168.
- Leavy, P. (2022). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford publications.
- Leedy, P. D., & Ormrod, J. E. (2013). The nature and tools of research. *Practical research: Planning and design*, 1, 1-26.
- Letwinsky, K. M. (2017). Examining the Relationship between Secondary Mathematics Teachers' Self-Efficacy, Attitudes, and Use of Technology to Support Communication and Mathematics Literacy. *International Journal of Research in Education and Science*, 3(1), 56-66.
- Levine, D. S. (2018). *Role construction, self-efficacy, and achievement goal values as predictors of parental involvement*. Fordham University.
- Levinthal, C., Kuusisto, E., & Tirri, K. (2021). Finnish and Portuguese parents' perspectives on the role of teachers in parent-teacher partnerships and parental engagement. *Education Sciences*, 11(6), 306.
- Li, J., Sun, Z., Wang, X., Li, W., Ding, W., & Xie, R. (2023). Parental involvement and Chinese children's learning engagement: Promotion and arousal. *Learning and Individual Differences*, 106, 102325.
- Li, X., Yang, H., Wang, H., & Jia, J. (2020). Family socioeconomic status and home-based parental involvement: A mediation analysis of parental attitudes and expectations. *Children and Youth Services Review*, 116, 105111.
- Lincoln, Y. S., & Guba, E. G. (1982). *Establishing dependability and confirmability in naturalistic inquiry through an audit* (ERIC Document No. ED216019). ERIC. <https://eric.ed.gov/?id=ED216019>.
- Liu, X., Zhao, L., & Su, Y. S. (2022). Impact of parents' attitudes on learning ineffectiveness: The mediating role of parental self-efficacy. *International journal of environmental research and public health*, 19(1), 615.
- Liu, Y., & Leighton, J. P. (2021, March). Parental self-efficacy in helping children succeed in school favors math achievement. In *Frontiers in education* (Vol. 6, p. 657722). Frontiers Media SA.
- Lorelli, S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13.
- MacKinnon, D. (2012). *Introduction to statistical mediation analysis*. Routledge.
- Madondo, F. (2021). Perceptions on curriculum implementation: A Case for rural Zimbabwean early childhood development teachers as agents of change. *Journal of Research in Childhood Education*, 35(3), 399-416.
- Magara, P. (2023). *Parental Empowerment and Engagement Baseline Report*. Regional Education Learning Initiative Africa (RELI-Africa).

- Mahajan, D. S. (2020). *The development and validation of a work-flow scale*. Kansas State University.
- Mahuro, G. M., & Hungi, N. (2016). Parental participation improves student academic achievement: A case of Iganga and Mayuge districts in Uganda. *Cogent Education*, 3(1), 1264170.
- Makena, E. (2023). *Participatory Communication in Enhancing Stakeholder Involvement in Competency-based Curriculum Reforms: a Case of Selected Private Schools in Kasarani Sub-county* (Doctoral dissertation, University of Nairobi).
- Makunja, G. (2016). Challenges facing teachers in implementing competence-based curriculum in Tanzania: the case of community secondary schools in Morogoro municipality. *International Journal of Education and Social Science*, 3(5), 30-37.
- Manzon, M., Miller, R. N., Hong, H., & Khong, L. Y. L. (2015). Parent engagement in education.
- Manzon, M., Miller, R., Hong, H., & Khong, L. (2015). Parent engagement in education. *National Institute of Education*, 7.
- Marchand, A. D., Vassar, R. R., Diemer, M. A., & Rowley, S. J. (2019). Integrating race, racism and critical consciousness in Black parents' engagement with schools. *Journal of Family Theory & Review*, 11(3), 367–384. <https://doi.org/10.1111/jftr.12344>
- Masika, S. J. (2020). *Competence based curriculum implementation: Assessing Kenya's readiness and preparedness*.
- Matkovic, P., Tumbas, P., & Sakal, M. (2014). University Stakeholders in the Analysis Phase of Curriculum Development Process Model. *Proceedings of ICERI2014 Conference*, November, 2271–2277.
- McLeod, J. (2011). *Qualitative research in counselling and psychotherapy*. Sage.
- McWayne, C. M., Melzi, G., & Mistry, J. (2022). A home-to-school approach for promoting culturally inclusive family–school partnership research and practice. *Educational Psychologist*, 57(4), 238-251.
- Meca Williams-Johnson & Alyssa R. Gonzalez-DeHass (2022) Parental role construction leading to parental involvement in culturally distinct communities, *Educational Psychologist*, 57:4, 231-237, DOI: 10.1080/00461520.2022.2131554
- Mendez, J. L. (2010). How can parents get involved in preschool? Barriers and engagement in education by ethnic minority parents of children attending Head Start. *Cultural diversity & ethnic minority psychology*, 16(1), 26.
- Middleton, F. (2023, January 30). The 4 Types of Reliability in Research | Definitions & Examples. Scribbr. <https://www.scribbr.com/methodology/types-of-reliability/>

- Milner-Bolotin, M., & Marotto, C. C. (2018). Parental engagement in children's STEM education. Part I: Meta-analysis of the literature. *LUMAT: International Journal on Math, Science and Technology Education*, 6(1), 41-59.
- Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Haret University. Economic Series*, 17(4), 59-82.
- Momanyi, J. M., & Rop, P. K. (2019). Teacher preparedness for the implementation of competency based curriculum in Kenya: A survey of early grade primary school teachers' in Bomet East Sub-County. *Cradle of Knowledge: African Journal of Educational and Social Science Research (The)*, 7(1), 10-15.
- Momanyi, J. M., & Rop, P. K. (2020). Teacher preparedness for the implementation of competency-based curriculum in Kenya: a survey of early grade primary school teachers' in Bomet East Sub-County. *The Cradle of Knowledge: African Journal of Educational and Social Science Research*, 7(1), 10-15.
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of mixed methods research*, 1(1), 48-76.
- Mote, B. C. (2023). *Parents and School Engagement: An Intrinsic Case Study of Parental Perceptions of Engaging in School*. Texas A&M University-Texarkana.
- Muchira, J. M., Morris, R. J., Wawire, B. A., & Oh, C. (2023). Implementing Competency Based Curriculum (CBC) in Kenya: Challenges and Lessons from South Korea and USA. *Journal of Education and Learning*, 62-77.
- Mujtaba, S. J., Kigobe, J., & Van Leeuwen, K. (2024). Parental involvement in primary schools in Tanzania: Effects of a pre-and in-service teacher training. *Teaching and Teacher Education*, 140, 104459.
- Mulenga, I. M., & Kabombwe, Y. M. (2019). A competency-based curriculum for Zambian primary and secondary schools: learning from theory and some countries around the world.
- Munje, P. N., & Mncube, V. (2018). The lack of parent involvement as hindrance in selected public primary schools in South Africa: The voices of educators.
- Murumbe, W. M. (2021). *School-related strategies for enhancing girls' participation in education in public primary schools in Kajiado West sub-county, Kenya* (Doctoral dissertation, Moi University).
- Mutisya, S. M. (2019). Tessa open education resources: A springboard for Kenya's competency based curriculum.
- Mwang'ombe, A. M. (2021). Competency Based Curriculum (CBC) in Kenya: Teachers understanding and skills, reality on the ground, successes, challenges and recommendations on the implementation of Competency-Based Curriculum (CBC) in the Kenyan schools.
- Mwarari, C. N., Githui, P., & Mwenje, M. (2020). Parental involvement in the implementation of competency-based curriculum in Kenya: Perceived challenges and opportunities. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(3), 201-208.

- Mwenje, M., Githui, P., & Mwarari, C. (2020). Assessment of parental involvement in home-based learning activities in public primary schools: A case of children in early years of learning in Nyeri and Nairobi counties, Kenya.
- Nakiyaga, D., Serem, D. K., & Ssentamu, P. N. (2021). Stakeholders' Participation in School Management and Enhancement of Learners' Academic Achievement in Government-Aided Secondary Schools in Uganda. *The International Journal of Business & Management*, 9(5).
- Nancy E. Hill (2022) Parental involvement in education: Toward a more inclusive understanding of parents' role construction, *Educational Psychologist*, 57:4, 309-314, DOI: 10.1080/00461520.2022.2129652.
- Natasha, F. (2024). Influence of Parental Involvement on Implementation of the Competency Based Curriculum in Public Primary Schools in Likuyani Sub-County, Kenya.
- Neuenschwander, M. P. (2020). Information and trust in parent-teacher cooperation—connections with educational inequality. *Central European Journal of Educational Research*, 2(3), 19-28.
- Neuman, W. L. (2013). *Social Research Methods: Pearson New International Edition: Qualitative and Quantitative Approaches* (Pearson new international edition. ed.).
- Ng, F. F.-Y., & Wei, J. (2020). Delving into the minds of Chinese parents: What beliefs motivate their learning-related practices? *Child Development Perspectives*, 14(1), 61–67. <https://doi.org/10.1111/cdep.12358>
- Ng, S. W., & Yuen, W. K. G. (2015). The micro-politics of parental involvement in school education in Hong Kong: ethnocentrism, utilitarianism or policy rhetoric! *Educational Review*, 67(2), 253-271.
- Ngeno, B., Mwoma, T., & Mweru, M. (2021). Teachers' Attitude Towards Implementation of the Competence-Based Curriculum in Primary Schools in Kericho County. *East African Journal of Education Studies*, 3(1), 116-129.
- Ngozwana, N., Machobane, A. M., Chauke, T. A., & Lepholletse, M. A. (2024). Parents' perceptions on parental involvement in their children's education in Giyani municipality rural-based schools, limpopo province, South Africa. *Australian and International Journal of Rural Education*, 34(1), 93-107.
- Ngussa, B. M., & Rehema, C. (2019). Perception of students regarding the role of teachers and parents on career choice preparedness: A case of secondary schools in Meru District, Tanzania. *Integrity Journal of Education and Training*, 3(4), 60-72.
- Ngwacho, A. G. (2019). Competence and competency-based learning curriculum for greening sustainable development in Kenya: Challenges and panaceas. *Journal of Research Innovation and Implications in Education*, 3(2), 53-62.

- Njeru, A. I., & Kirimi, J. (2023). Assessment of parent's engagement in implementation of Competency-based curriculum in private primary schools in Tharaka south sub-county of Tharaka-Nithi county, Nithi county, Kenya. *European Journal of Education Studies*, 10(7).
- Njeru, A. I., & Kirimi, J. (2023). Assessment of Parent's Engagement in Implementation of Competency-Based Curriculum in Private Primary Schools in Tharaka South Sub-County of Tharaka-Nithi County, Nithi County, Kenya. *European Journal of Education Studies*, 10(7).
- Njeru, M. (2015). Parents as participants in their children's learning: A tall order for parents in rural Kenya. *Journal of Adolescent & Adult Literacy*, 58(5), 368-371.
- Nkya, H., & Huang, F. (2019). Community Awareness for Competency Based Curriculum, A Case of Parents of Public Secondary School Students in Arusha Tanzania. *International Journal of Academic Management Science Research*, 3(3), 19-23.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1609406917733847. <https://doi.org/10.1177/1609406917733847>.
- Nthontho, M. A. (2017). Unleashing student potential through democratic participation in decision making: controversies and prospects. *Africa Education Review*, 14(3-4), 158-174.
- Nyaboke, R., Kereri, D., & Nyabwari, L. (2021). Competence-based curriculum (CBC) in Kenya and the challenge of vision 2030. *International Journal of Education, Technology and Science*, 1(4), 155-169.
- Nyamai, D. V. (2021). Curriculum Development: Parents Participation in Curriculum Development. *Academia Letters*. <https://doi.org/10.20935/AL1331>
- Nyatuka, B. O. (2015). *Assessment of the effectiveness of family-school-community partnerships in Kenya's child friendly schools* (Doctoral dissertation, University of South Africa).
- O'brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & quantity*, 41, 673-690.
- Odongo, G. (2018). Barriers to parental/family participation in the education of a child with disabilities in Kenya. *International journal of special education*, 33(1), 21-33.
- Oketch, M., Rolleston, C., & Rossiter, J. (2020). Teacher value-added with Ethiopia school survey data.
- Olibie, E. I. (2014). Parental Involvement in Curriculum Implementation as Perceived by Nigeria Secondary School Principals. *Journal of Education and Learning*, 3(1), 40-51.
- Omariba, A. (2022). Challenges Faced by Parents in Implementing Competence Based Curriculum in Primary Schools: Kenya Perspective.

- Ondimu, S. M. (2018). *Teachers' preparedness for implementation of the competency based curriculum in private pre-schools in Dagoretti North sub-county, Nairobi City County* (Doctoral dissertation, university of nairobi).
- Onwuegbuzie, A. J., & Frels, R. (2016). *Seven steps to a comprehensive literature review: A multimodal and cultural approach*. Sage.
- Owala, J. R. O. (2021). Successes and challenges of implementing the competency based curriculum in Kenya. Retrieved from <http://www.researchgate.net>
- Park, S., & Holloway, S. (2018). Parental Involvement in Adolescents' Education: An Examination of the Interplay among School Factors, Parental Role Construction, and Family Income. *School Community Journal*, 28(1), 9-36.
- Parvez, G. S., Mufti, O., & Wahab, M. (2016). Pragmatism for mixed method research at higher education level. *Business & Economic Review*, 8(2), 67-79.
- Patrikakou, E. N. (2016). Parent Involvement, Technology, and Media: Now What? *School Community Journal*, 26(2), 9-24.
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications.
- Paudel, P. (2024). Examining paradigmatic shifts: Unveiling the philosophical foundations shaping social research methodologies. *Journal of the University of Ruhuna*, 12(1).
- Paulynice, R. (2020). *A Comparative study on parental involvement* (Doctoral dissertation, Nova Southeastern University).
- Pavlicevic, V., Tumbas, P., Matkovic, P., & Sakal, M. (2015). Innovative approach to business informatics curriculum redesign. In *INTED2015 Proceedings* (pp. 5711-5717). IATED.
- Pearlson, K. E., Saunders, C. S., & Galletta, D. F. (2024). *Managing and using information systems: A strategic approach*. John Wiley & Sons.
- Piliyesi, S. D. E., Ogada, E. O., & Ochieng, R. J. (2020). Practical approaches to parental engagement and resource provision in curriculum implementation. *African Journal of Emerging Issues*, 2(2), 70-95.
- Pitney, W. A. (2004). Strategies for establishing trustworthiness in qualitative research. *Athletic Therapy Today*, 9(1).
- Posey-Maddox, L., Mckinney de Royston, M., Holman, L., Rall, R., & Johnson, R. (2021). No choice is the "right" choice: Black parents' educational decision-making in their search for a "good" school. *Harvard Educational Review*, 91(1), 38–61. <https://doi.org/10.17763/1943-5045-91.1.38>.
- Presidential Working Party on Education Reform. (2023). *Report of the Presidential Working Party on Education Reform: Transforming Education, Training and Research for Sustainable Development in Kenya*. Government of Kenya.
- Pulliam, J. D., & Van Patten, J. J. (2007). *History of education in America* (9th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

- Qin, D. B., & Han, E. J. (2014). Tiger parents or sheep parents? Struggles of parental involvement in working-class Chinese immigrant families. *Teachers College Record*, 116(8), 1-32.
- Ramirez, F. (2001). Technology and parental involvement. *The Clearing House*, 75(1), 30-31.
- Rattenborg, K., MacPhee, D., Walker, A. K., & Miller-Heyl, J. (2019). Pathways to parental engagement: Contributions of parents, teachers, and schools in cultural context. *Early Education and Development*, 30(3), 315-336.
- Reece, C. A., Staudt, M., & Ogle, A. (2013). Lessons learned from a neighborhood-based collaboration to increase parent engagement. *School Community Journal*, 23(2), 207-226.
- Reinke, W. M., Smith, T. E., & Herman, K. C. (2019). Family-school engagement across child and adolescent development. *School Psychology*, 34(4), 346.
- Ridley, A. (2016). Why ethics and aesthetics are practically the same. *The Philosophical Quarterly*, 66(262), 102-121.
- Roberts, J., Rosborough, A., Freire, J., & Wimmer, J. (2024, June). Perspectives and Experiences of Emergent Bilingual Parents Concerning Their Engagement with Their Child's Teachers and School. In *Conference Proceedings. The Future of Education 2024*.
- Robinson, D. V. (2017). Collaborative partnerships between high poverty and minority parents and educational leaders: Reversing the school and home divide. *Journal for Multicultural Education*, 11(1), 2-18.
- Rodríguez Del Águila, M., & González-Ramírez, A. (2014). Sample size calculation. *Allergologia et immunopathologia*, 42(5), 485-492. <https://doi.org/10.1016/j.aller.2013.03.008>
- Roggema, R. (2014). Introduction, methodology, limitations. In *Swarm Planning. Springer Theses* (pp. 1-30). Dordrecht, Netherlands: Springer.
- Ross, T. R. (2016). The differential effects of parental involvement on high school completion and postsecondary attendance. *Education Policy Analysis Archives*, 24, 30-30.
- Ruth, C., & Ramadas, V. (2019). The "Africanized" Competency-Based Curriculum: The Twenty-First Century Strides. *Shanlax International Journal of Education*, 7(4), 46-51.
- Sánchez, C. N. P., Montesinos, M. B., & Rodriguez, L. C. (2013). Family influences in academic achievement: A study of the Canary Islands. *Revista Internacional de Sociología*, 71(1), 169-187.
- Sarsale, M., Alonzo, D., Jumarito, M. A., Garcia, C., Molina, K., Oo, C. Z., ... & Yepes, P. I. (2024). Parental involvement in assessment: Why, how and where to? *Issues in Educational Research*, 34(1), 235-260.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.

- Saunders, Mark & Lewis, Philip & Thornhill, Adrian & Bristow, Alex. (2019). "Research Methods for Business Students" Chapter 4: Understanding research philosophy and approaches to theory development.
- Schörghofer-Queiroz, V. (2022). Identity construction of multilingual parents in the context of parental engagement. *European Journal of Applied Linguistics*, 10(2), 327-339.
- Seidman, I. (2013). *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences* (4th ed.). Teachers College Press.
- Semke, C. A., & Sheridan, S. M. (2012). Family-school connections in rural educational settings: A systematic review of the empirical literature. *School Community Journal*, 22(1), 21-47.
- Serdar, C. C., Cihan, M., Yücel, D., & Serdar, M. A. (2021). Sample size, power and effect size revisited: simplified and practical approaches in pre-clinical, clinical and laboratory studies. *Biochemia medica*, 31(1), 010502. <https://doi.org/10.11613/BM.2021.01050>
- Shannon-Baker, P. (2016). Making paradigms meaningful in mixed methods research. *Journal of mixed methods research*, 10(4), 319-334.
- Shekharan, U., & Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach* (5th Ed.). New Delhi: John Wiley.
- Sheldon, S. B., & Epstein, J. L. (2005). Involvement counts: Family and community partnerships and mathematics achievement. *The Journal of Educational Research*, 98(4), 196-207.
- Sheldon, S. B., & Turner-Vorbeck, T. A. (Eds.). (2019). *The Wiley handbook of family, school, and community relationships in education*. John Wiley & Sons.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for information*, 22(2), 63-75.
- Sheridan, S. M., & Wheeler, L. A. (2017). Building strong family–school partnerships: Transitioning from basic findings to possible practices. *Family Relations*, 66(4), 670-683.
- Sheridan, S. M., Holmes, S. R., Smith, T. E., & Moen, A. L. (2016). Complexities in field-based partnership research: Exemplars, challenges, and an agenda for the field. *Family-school partnerships in context*, 1-23.
- Sheridan, S. M., Knoche, L. L., Kupzyk, K. A., Edwards, C. P., & Marvin, C. A. (2011). A randomized trial examining the effects of parent engagement on early language and literacy: The Getting Ready intervention. *Journal of school psychology*, 49(3), 361-383.
- Sibanda, B., & Netshitangani, T. (2021). The Politics of Literacy and Societal Development: Focus on parental involvement in South African rural schools. *African Journal of Development Studies*, 2021(si2), 231.
- Sifuna, D. N., & Obonyo, M. M. (2019). Competency Based Curriculum in Primary Schools in Kenya-Prospects and Challenges of Implementation. *Journal of Popular Education in Africa*, 3(7), 39-50.

- Simiyu, G. (2021). *Social media use, University brand personality, attitude and students' behavioral intentions to enroll for postgraduate studies in selectrd Universities in Kenya* (Doctoral dissertation, Moi University).
- Simões, C., Santos, A. C., Lebre, P., Daniel, J. R., Branquinho, C., Gaspar, T., & Matos, M. G. D. (2021). Assessing the impact of the European resilience curriculum in preschool, early and late primary school children. *School Psychology International, 42*(5), 539-566.
- Singh, P., Mbokodi, S. M., & Msila, V. T. (2004). Black parental involvement in education. *South African journal of education, 24*(4), 301-307.
- Smith, T. E., & Sheridan, S. M. (2019). The effects of teacher training on teachers' family-engagement practices, attitudes, and knowledge: A meta-analysis. *Journal of Educational and Psychological Consultation, 29*(2), 128–157. <https://doi.org/10.1080/10474412.2018.1460725>
- Smythe-Leistico, K., & Page, L. C. (2018). Connect-text: Leveraging text-message communication to mitigate chronic absenteeism and improve parental engagement in the earliest years of schooling. *Journal of Education for Students Placed at Risk (JESPAR), 23*(1-2), 139-152.
- Souza, A. C. D., Alexandre, N. M. C., & Guirardello, E. D. B. (2017). Psychometric properties in instruments evaluation of reliability and validity. *Epidemiologia e servicos de saude, 26*, 649-659.
- Syomwene, A. (2017). Teacher Support and School Environment Factors Influencing Children's Outdoor Play in Early Childhood Curriculum in Pre-schools in Kenya. *Journal of Scientific Research and Reports, 14*(4), 1-13.
- Syomwene, A. (2022). Parental Involvement Strategies and Challenges in Development of Pupils' Literacy Skills in the Implementation of Competency Based Curriculum in Early Years Education in Kenya. *European Journal of Education and Pedagogy, 3*(2), 53-59.
- Tabaro, C., & Uwamahoro, A. (2020). Parental involvement in children's education in Rwanda: A case study of vulnerable families from Shyogwe Sector in Muhanga District. *International Journal of Contemporary Applied Researches, 7*(2), 32-61.
- Tárraga García, V., García Fernández, B., & Ruiz-Gallardo, J. R. (2018). Home-based family involvement and academic achievement: a case study in primary education. *Educational Studies, 44*(3), 361-375.
- Tazouti, Y., & Jarlégan, A. (2019). The mediating effects of parental self-efficacy and parental involvement on the link between family socioeconomic status and children's academic achievement. *Journal of Family Studies, 25*(3), 250-266.
- Teddlie, C., & Tashakkori, A. (2010). Overview of contemporary issues in mixed methods research. *Sage handbook of mixed methods in social and behavioral research, 2*, 1-44.
- Tekin, A. K. (2011). Parent involvement revisited: Background, theories, and models. *International journal of applied educational studies, 11*(1), 1-13.

- Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). Parent involvement and student academic performance: A multiple mediational analysis. *Journal of prevention & intervention in the community*, 38(3), 183-197.
- Tuli, D. M., & Tarekegne, W. M. (2019). Parental involvement in secondary school curriculum implementation: The case of East Wollega Zone, Ethiopia. *Journal of Education and Research*, 9(1), 28-45.
- Turner, S. L. (2020). *Examination of statistical methods to analyse interrupted time series studies in public health* (Doctoral dissertation, Monash University).
- Ule, M., Živoder, A., & du Bois-Reymond, M. (2015). 'Simply the best for my children': Patterns of parental involvement in education. *International Journal of Qualitative Studies in Education*, 28(3), 329-348.
- Umeana, F. P. (2017). *Parental engagement with schools and students in Nigeria*. Michigan State University.
- Uusimäki, L., Yngvesson, T. E., Garvis, S., & Harju-Luukkainen, H. (2019). Parental involvement in ECEC in Finland and in Sweden. *Nordic families, children and early childhood education*, 81-99.
- Varpio, L., Paradis, E., Uijtdehaage, S., & Young, M. (2020). The distinctions between theory, theoretical framework, and conceptual framework. *Academic medicine*, 95(7), 989-994.
- Veas, A., Castejón, J. L., Miñano, P., & Gilar-Corbí, R. (2019). Relationship between parent involvement and academic achievement through metacognitive strategies: A multiple multilevel mediation analysis. *British journal of educational psychology*, 89(2), 393-411.
- Wagner, N., Hassanein, K., & Head, M. (2008). Who is responsible for e-learning success in higher education? A stakeholders' analysis. *Educational Technology and Society*, 11(3), 26-36.
- Wairimu, N. L. (2022). *Parental involvement in the formation of school and family partnerships in the implementation of Competency Based Curriculum: a study of public primary schools in Lang'ata Sub County* (Doctoral dissertation, Strathmore University).
- Wakiuru, M. M. (2016). Influence of parents' socio-economic status on their participation in children's pre-school education in Kayole, Nairobi County, Kenya. *Kenyatta University*.
- Walker, J. M., Hoover-Dempsey, K. V., Whetsel, D. R., & Green, C. L. (2004). Parental involvement in homework. *A review of current research and its implications for teachers, after school program staff, and parent leaders*. *Harvard Family Research Project*, 15, 1-10.
- Walker, J. M., Ice, C. L., Hoover-Dempsey, K. V., & Sandler, H. M. (2011). Latino parents' motivations for involvement in their children's schooling: An exploratory study. *The Elementary School Journal*, 111(3), 409-429.
- Walker, J. M., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *The elementary school journal*, 106(2), 85-104.

- Wambua, M. E. (2019). Constraints facing successful implementation of competency-based curriculum in Machakos County, Kenya. *A research project submitted to school of education in partial fulfillment of the requirements for the award of Master degree in Kenyatta University.*
- Wang, M. T., & Sheikh-Khalil, S. (2014). Does parental involvement matter for student achievement and mental health in high school? *Child development, 85*(2), 610-625.
- Wang, Y., & Li, L. M. W. (2024). Relationships between parental involvement in homework and learning outcomes among elementary school students: The moderating role of societal collectivism–individualism. *British Journal of Educational Psychology, 94*(3), 881-896.
- Wanyera, S. O. (2004). *Collaboration between parents and educational assessment teachers and challenges faced at the centres in a Kenya city setting* (Master's thesis).
- Waweru, J. W. (2018). *Influence of teacher preparedness on implementation of competency based curriculum in public primary schools in Nyandarua North Sub-County, Kenya* (Doctoral dissertation, university of Nairobi).
- Whitaker, M., & Hoover-Dempsey, K. (2013). School influences on parents' role beliefs. *The Elementary School Journal, 114*(1), 73-99.
- Williams, K., & Williams, H. (2021). Mathematics problem-solving homework as a conduit for parental involvement in learning. Evaluation of a pilot study. *Educational Review, 73*(2), 209–228. <https://doi.org/10.1080/00131911.2019.1566210>
- Williams-Johnson, M., & Fields-Smith, C. (2022). Homeschooling among Black families as a form of parental involvement: A focus on parental role construction, efficacy, and emotions. *Educational Psychologist, 57*(4), 252-266.
- Williams-Johnson, M., & Gonzalez-DeHass, A. R. (2022). Parental role construction leading to parental involvement in culturally distinct communities. *Educational Psychologist, 57*(4), 231-237.
- Willis, L., & Exley, B. (2018). Using an online social media space to engage parents in student learning in the early-years: Enablers and impediments. *Digital Education Review, 33*, 87-104.
- Woltman, H., Feldstain, A., MacKay, J. C., & Rocchi, M. (2012). An introduction to hierarchical linear modeling. *Tutorials in quantitative methods for psychology, 8*(1), 52-69.
- Wu, Y. L., Rumble, J. N., Ruth, T. K., Lamm, A. J., & Ellis, J. D. (2021). An application of social network analysis to focus group discussions: Unobserved interaction between participants and discussion topics. *Journal of Agricultural Education, 62*(1), 184-195.
- Xaba, M. I. (2015). The empowerment approach to parental involvement in education. *Journal of sociology and social Anthropology, 6*(2), 197-208.

- Yael F., & Yifat, K. (2015) Teachers' Self-Efficacy vs. Parental Involvement: Prediction and Implementation, *Leadership and Policy in Schools*, 14:3, 279-307, DOI: 10.1080/15700763.2014.997938.
- Yamamoto, Y., Holloway, S. D., & Suzuki, S. (2016). Parental engagement in children's education: Motivating factors in Japan and the US. *School Community Journal*, 26(1), 45-66.
- Yamamoto, Y., Li, J., & Bempechat, J. (2022). Reconceptualizing parental involvement: A sociocultural model explaining Chinese immigrant parents' school-based and home-based involvement. *Educational Psychologist*, 57(4), 267-280.
- Yamamoto, Y., Li, J., Bao, H., & Suh, W. (2021). Demand and direct involvement: Chinese American and European American preschoolers' perceptions of parental involvement in children's schooling. In H. Chu & B. Thelamour (Eds.), *Conceptual and methodological approaches to navigating immigrant ecologies* (pp.199–218) Springer.
- Yamauchi, L. A., Ponte, E., Ratliffe, K. T., & Traynor, K. (2017). Theoretical and Conceptual Frameworks Used in Research on Family-School Partnerships. *School Community Journal*, 27(2), 9-34.
- Yamauchi, L., Ponte Velón, E., Ratliffe, K., & Traynor, K. (2017). Theoretical and conceptual frameworks used in research on family-school partnership.
- Yan, T., Hou, Y., & Liang, L. (2023, April). Family Socioeconomic Status and Parental Involvement in Chinese Parents of Children with Autism Spectrum Disorder: A Moderated Mediation Model. In *Healthcare* (Vol. 11, No. 9, p. 1281). MDPI.
- Yang, D., Chen, P., Wang, K., Li, Z., Zhang, C., & Huang, R. (2023). Parental involvement and student engagement: a review of the literature. *Sustainability*, 15(7), 5859.
- Yoko Yamamoto, Jin Li & Janine Bempechat (2022) Reconceptualizing parental involvement: A sociocultural model explaining Chinese immigrant parents' school-based and home-based involvement, *Educational Psychologist*, 57:4, 267-280, DOI: 10.1080/00461520.2022.2094383
- Yungungu, A. M., & Rodgers, D. (2022). Parental engagement in development of values in pupils through grade four social studies curriculum in Vihiga County, Kenya. *Sociol Int J*, 6(5), 286-290.
- Zhang, Q. (2015). Defining 'meaningfulness': Enabling preschoolers to get the most out of parental involvement. *Australasian Journal of Early Childhood*, 40(4), 112-120.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2), 197-206.
- Zhou, G., & Zhong, L. (2018). Chinese immigrant parents' involvement in their children's school-based education: Behaviours and perceptions. In Y. Guo (Ed.), *Home-school relations* (pp. 89–111). Springer. https://doi.org/10.1007/978-981-13-0324-1_6

Zhu, Q., Cheong, Y., Wang, C., & Tong, J. (2023). The impact of maternal and paternal parenting styles and parental involvement on Chinese adolescents' academic engagement and burnout. *Current Psychology*, 42(4), 2827-2840.

Zikmund, W. G., D'alessandro, S., Winzar, H., Lowe, B., & Babin, B. (2014). *Marketing research*. Sydney: Cengage Learning.

APPENDICES

Appendix I: Introductory letter/Individual informed consent form

INTRODUCTION LETTER/ INDIVIDUAL INFORMED CONSENT FORM

RESEARCH PROJECT: Mediating effect of parental role construction on the relationship between parental engagement and the implementation of the Competency-Based Education, among selected public primary schools, in Nakuru County, Kenya.

RESEARCHER'S NAME: Ranji John Karanja

MOI UNIVERSITY

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATION MANAGEMENT POLICY

P. O. BOX 3900-30100 ELDORET

Dear sir/Madam

I am a research and evaluation student from Moi University School of education undertaking the study mentioned above. You have been selected as a participant in this study because of your knowledge and expertise in education and direct involvement in the CBE implementation. I therefore seek your consent to participate in the study. Participation in this research study is voluntary. Moi University and the County, Sub-County educational officer have approved this research study.

Before agreeing to participate in this research you are strongly encouraged to read the following explanation of this study. This statement describes the purpose of the research, the study procedures, the possible risks, and discomforts as well as the benefits of the study.

Background and purpose

This study is designed to analyze the dynamics related to stakeholders' collaborative partnerships in the implementation of the CBE with an interest on the motivating factors that influences parents' engagement in its implementation through active collaboration in partnership with the school.

The purpose of the study is to investigate how far the parental empowerment and engagement in CBE implementation guidelines have been implemented, the status of the parental engagement in the CBE implementation through the collaborative partnership with the school (forms, challenges, solutions) and what really motivates parents to engage in these collaborations. Through the research findings, the stakeholders will understand the motivating factors for parental engagement in CBE implementation via the collaborative partnerships with the school, the challenges and solutions in a bid to enhance the collaborations and in turn improve the curriculum implementation.

Procedures

Participation in the study involves semi-structured individual interviews and filling of a questionnaire which will take 30-60minutes. Further FGDs will be conducted for 1-2 hrs. With your permission, I will audiotape the interviews, FGDs solely for the purpose of accurately transcribing the conversation and analysis of the data. The audiotapes will be stored securely throughout the study.

Confidentiality

The information generated during this study will remain confidential and be stored in secure places during the project. Only the researcher and the supervisors will have access to the data. There will not be any identifying names on the questionnaires and

interview transcripts. Pseudonyms will be used instead to protect your privacy and confidentiality. Your names and any other identifying detail will never be revealed in any publication of this study unless you wish to be quoted by name on anything, in particular. The results of the research will be published professional journals or presented at professional meetings.

Risks and discomforts

The study does not intend to expose participants to any risks. However, the anticipated potential risks and discomforts include getting tired from sitting during the interviews and possible emotional distress may as a result of the sensitive nature of the topic. Note that you do not have to answer any question or discuss any topic that makes you feel uncomfortable.

Benefits

There is no direct benefit involved with participation, however, the research findings could be used to improve the parent-school collaborative partnerships aimed at further enhancing the CBE implementation and ensure learners acquire intended inputs from the curriculum.

Withdraw of participation

Participation in this study is voluntary; refusal to participate will involve no penalty. Should you decide at any time during the interview or focus group discussion that you no longer wish to participate, you may withdraw your participation without prejudice.

Further Questions and follow-up

You are welcomed to ask the researcher any questions during the interview or focus group discussion. Moreover, if you have further questions or information on the study, kindly contact the researcher at any time using the contacts given below.

Statement of consent

I..... have read the above information. I freely agree to participate in this study. I understand the purpose of the research, the study procedures, the possible risks and discomforts as well as benefits of the study. I also understand that I am free to refuse to answer any question that I am not comfortable with and I got a right to withdraw from the study at any time.

Participant's signature **Date**

Researcher's signature **Date**

Researcher's contact +254719171568, email: ranjijohn5@gmail.com.

Appendix II: Survey Questionnaire for Parents.

Survey Questionnaire for Parents.

Dear respondent,

I am a Postgraduate student at Moi University School of Education pursuing a PhD degree in Educational Research and Evaluation. The purpose of this research is to examine the effect of parental engagement and role construction on the implementation of the Competency Based Education, in selected public primary schools, in Nakuru County, Kenya. This information is being sought solely for academic purposes and will be treated with utmost confidentiality. I humbly request for a few minutes of your time to respond to the questions below by ticking on the preferred choice or writing a brief statement where provided. **Please do not write your name, your institution's name or any identifying information on this paper.**

SECTION A: DEMOGRAPHIC INFORMATION

Please place a tick “√” in the box representing your appropriate choice.

1. Please indicate your gender
 - a. Male
 - b. Female
2. What is your age bracket?
 - a. Less than 20 yrs.
 - b. 20-30 yrs.
 - c. 30-40 yrs.
 - d. 40-50 yrs.
 - e. Above 50 yrs.
3. What is your highest academic qualification?
 - a. Certificate
 - b. Diploma
 - c. Bachelors
 - d. Masters/Doctorate.
 - e. Others

SECTION B: Competency-Based Education Implementation:

This section seeks to assess critical aspects of CBE implementation in public primary schools through parental engagement in collaborative partnerships with the school. Kindly respond to the following statements by stating your level of agreement or disagreement with the statements us guided by this scale: **(Please tick on choice in each row)**.

5= SA-Strongly Agree, 4= A-Agree, 3= N-Neutral, 2= D-Disagree, 1= SD-Strongly Disagree

S/N	ITEM	Rating				
		SD 1	D 2	N 3	A 4	SA 5
CBE1	I acknowledge that teacher-parent collaboration is essential for my child's success in CBE implementation.					
CBE2	My engagement in CBE implementation partnerships with the school supports my child's holistic development.					
CBE3	Active engagement in my child's education positively impacts their academic and personal outcomes.					
CBE4	Parent-school collaboration ensures proper CBE implementation.					
CBE5	My engagement in the CBE implementation partnerships enhances school retention, participation, and performance.					
CBE6	My engagement in CBE implementation partnerships fosters positive school attachment and improved school climates and programs.					
CBE7	My participation in CBE implementation partnerships improves decision-making in school matters.					
CBE8	Active CBE partnerships promote regular, effective two-way communication between parents and teachers.					

SECTION C: Parental Engagement in Competency-Based Education Implementation:

This section seeks to assess critical aspects of parental empowerment and engagement in CBE implementation in public primary schools through collaborative partnerships between the family and the school. Kindly respond to the following statements by stating your level of agreement or disagreement with the statements us guided by this scale: **(Please tick on choice in each row)**.

5= SA-Strongly Agree, 4= A-Agree, 3= N-Neutral, 2= D-Disagree, 1= SD-Strongly Disagree

S/N	ITEM	Rating				
		SD 1	D 2	N 3	A 4	SA 5
Parental engagement in Participatory Decision Making						
PDM1	I have opportunities to participate in key decisions about my child's education and well-being.					
PDM2	The school provides information to enhance fair parent participation in electing representatives and school development.					
PDM3	The school invites parents to discuss their child's observed behavior, academics, and career choices.					
PDM4	The school involves parents in decision-making to enhance the monitoring of children's growth and learning difficulties.					
PDM5	The school nominates family and community members for educational committees and workshops.					
Parental engagement in Resourcing, Volunteering and Linkages						
RVL1	I participate in identifying, quantifying, prioritizing, and securing school resources.					
RVL2	I participate in fundraising to improve the school facilities and services.					
RVL3	I provide my children with classroom learning materials as needed.					
RVL4	I encourage and facilitate my children to volunteer in appropriate school activities.					
RVL5	I am given opportunities to volunteer my services at the school.					

RVL6	I participate in creating linkages with government and non-government agencies for resource mobilization.					
Parental Engagement in School-Home-Based Learning and Development Strategies						
SHBLS1	The school provides information on age-grade-appropriate learning standards to help me support my child at home.					
SHBLS2	I engage my child in age-appropriate play and chores at home for their holistic development.					
SHBLS3	I provide adequate resources and an enabling environment for my child's learning and life skills.					
SHBLS4	I involve my child in safe and age-appropriate family and community activities that enhance learning.					
SHBLS5	I actively monitor and support my child's developmental milestones at home.					
SHBLS6	I actively help my children in their homework, e-learning and projects.					

SECTION D: Parental Role Construction and Engagement in CBE Implementation.

This section seeks to assess critical aspects of Parents Motivational Beliefs namely parental role construction as a major psychological factor that affect parental engagement in the CBE implementation in public primary schools through collaborative partnerships with the school. Kindly respond to the following statements by stating your level of agreement or disagreement with the statements us guided by this scale: **(Please tick on choice in each row)**.

5= SA-Strongly Agree, 4= A-Agree, 3= N-Neutral, 2= D-Disagree, 1= SD-Strongly Disagree

S/N	ITEM	Rating				
		SD 1	D 2	N 3	A 4	SA 5
Parental Role Construction						
PRC1	It is my responsibility as a parent to actively assist and guide my child's education, regardless of my socioeconomic status.					

PRC2	It is my responsibility as a parent to attend meetings with teachers or other school staff concerning my child's education.					
PRC3	It is my responsibility to attend school or class events, such as a play, dance, sports event, or science fair at my child's school.					
PRC4	It is my responsibility to regularly communicate with my child's teachers concerning their well-being, behavior, and academic progress.					
PRC5	It is my responsibility as a parent to play an active role in curriculum and school-related decisions by contributing to discussions at my child's school.					
PRC6	It is my responsibility to academically socialize my child's development which would lead toward later self-sufficiency.					
PRC7	I am entirely responsible for my child's home-based learning including assisting them through homework and school projects.					
PRC8	It is my responsibility to provide my child with the required resources for school, home-based, and e-learning activities.					
PRC9	It is my responsibility to volunteer my services and resources to the school e.g., fundraising, mobilizing well-wishers etc.					

Thank you for participating.

Appendix III: FDG Schedule for PTA chairpersons.

Dear participant,

I am a Postgraduate student at Moi University School of Education pursuing a PhD degree in Educational Research and Evaluation. **The purpose of this research is to examine the effect of parental engagement and parental role construction on the CBE implementation, in selected public primary schools, in Nakuru County, Kenya.** In this respect, I will be seeking your views on the level of parental engagement in the CBE implementation in your school, types of engagement, motivational beliefs, challenges and ways of improving them. This information is being sought solely for academic purposes and will be treated with utmost confidentiality.

Guiding Questions:**1. Introduction and Warm-Up:**

- Can you briefly introduce yourself and share your role as the PTA chairperson?
- How long have you been involved with the PTA, and what motivated you to take on this role?
- As a part of the school management, have you been trained on the importance of parental engagement and empowerment and their role in the implementation of the guidelines? Have the parental associations been trained on parental engagement and empowerment facilitation skills at school and county level? Have parents been trained on their roles and responsibility in boosting the achievement of desired learning outcomes?

2. Understanding of Competency-Based Education:

- How familiar are you with the competency-based curriculum and its implementation in our school?
- Have you noticed any changes in teaching and learning practices since the introduction of this curriculum?

3. Perceptions of Parental Engagement:

- From your perspective, what does parental engagement mean in the context of the competency-based curriculum?
- How would you describe the current level of parental engagement in our school community? According to the Parental Empowerment and Engagement guideline provided for the implementation of the CBE, parents are supposed to be engaged in the CBE implementation guidelines through the following ways, (participatory decision making, communication and collaboration, home based learning, resourcing, volunteering and linkages). How have you as part of the school board and the voice of the parents been able to go about it?

4. Motivational Beliefs - Role Construction:

- How do parents, from your observation, construct their roles in supporting their child's learning within the competency-based curriculum?
- Are there specific expectations or responsibilities that parents commonly associate with their role in this educational approach?

5. Challenges and Opportunities:

- In your experience, what challenges have parents faced in engaging with the competency-based curriculum?
- Can you identify any opportunities or strategies that have helped overcome these challenges?

6. PTA Involvement in Parental Engagement:

- How does the PTA contribute to fostering parental engagement in our school, particularly in the context of the competency-based curriculum?
- Are there any specific initiatives or programs organized by the PTA to support parents in understanding and participating in the new curriculum?

7. Communication and Collaboration:

- How is information about the competency-based curriculum communicated to parents, and how can this process be improved?
- In what ways does the PTA collaborate with teachers and school administrators to enhance parental engagement?

8. Vision for Future Engagement:

- As a PTA chairperson, what is your vision for the future of parental engagement in the competency-based curriculum?
- What steps do you think should be taken to strengthen the partnership between parents, teachers, and the school community in this regard?

Thank you for you Participation!!!!

Appendix IV: Interview guide for teachers.

Dear Participant,

I am a Postgraduate student at Moi University School of Education pursuing a PhD degree in Educational Research and Evaluation. The **purpose of this research is to examine the effect of parental engagement and parental role construction on the CBE implementation, in selected public primary schools, in Nakuru County, Kenya.** This information is being sought solely for academic purposes and will be treated with utmost confidentiality. I humbly request for a few minutes of your time to respond to the questions in this interview guide to the best of your knowledge.

1. Introduction and Background:

- Can you briefly describe your experience with the CBE and its implementation in your classroom?
- How long have you been teaching under the CBE, and in what capacity?
- Have you received any professional development or training related to fostering parental engagement in the CBE?
- In your opinion, what kind of professional development opportunities would be beneficial for teachers in this regard?

2. Understanding of Parental Engagement:

- In your opinion, what does parental engagement mean in the context of the competency-based education?
- How do you currently engage parents in the learning process of their children within the competency-based education?

3. Motivational Beliefs - Role Construction:

- How do parents construct their roles in supporting their child's learning under the CBE?
- Have you observed any changes in parental roles or responsibilities since the implementation of the CBE?

4. Challenges and Solutions:

- What challenges have you faced in fostering parental engagement within CBE?
- How have you addressed or overcome these challenges, and what strategies have you found effective?

5. Success Stories:

- Can you share a success story or positive outcome that resulted from effective parental engagement in the CBE?

6. Future Outlook:

- What improvements or changes would you like to see in terms of parental engagement within the competency-based curriculum?
- How do you envision the role of parents evolving as the competency-based curriculum continues to develop?

Thank you for you Participation!!!!

Appendix V: Introductory Letter-University Permit.



MOI UNIVERSITY
Office of the Dean School of Education

Tel. Eldoret (053) 43001-8/43620
Fax No. (053) 43047

P.O. Box 3900
Eldoret, Kenya

REF: EDU/D.PHILERE/4836/23

DATE: 13th December, 2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: RESEARCH PERMIT IN RESPECT OF RANJI JOHN
KARANJA – EDU/DPHILERE/4836/23

The above named is a 2nd year PhD Student at Moi University, School of Education, Department of Educational Management and Policy Studies.

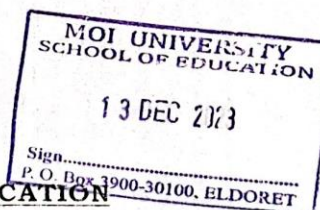
It is required of his PhD studies to conduct a research project and produce a research report. His research topic is entitled:

“Parental Engagement and Parents’ Motivational Beliefs in the Competency Based Curriculum Implementation – Among Selected Public Primary Schools – in Nakuru County, Kenta.”

Any assistance given to enable him conduct research successfully will be highly appreciated.

Yours faithfully,


PROF. ANNE S. KISILU
DEAN, SCHOOL OF EDUCATION



Appendix VI: NACOSTI Permit.


REPUBLIC OF KENYA


NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 474742 Date of Issue: 22/December/2023


RESEARCH LICENSE



This is to Certify that Mr.. John karanja ranji of Moi University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nakuru on the topic: PARENTAL ENGAGEMENT AND PARENTS' MOTIVATIONAL BELIEFS IN THE COMPETENCY BASED CURRICULUM IMPLEMENTATION - AMONG SELECTED PUBLIC PRIMARY SCHOOLS - IN NAKURU COUNTY, KENYA. for the period ending : 22/December/2024.

License No: NACOSTI/P/23/32179

474742
Applicant Identification Number


Director General
NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION

Verification QR Code



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See overleaf for conditions

Appendix VII: Nakuru County Research Permit.



MINISTRY OF EDUCATION
State Department for Basic Education

Telephone: 0722810864
 Email: cdenakurucounty@gmail.com

COUNTY DIRECTOR OF EDUCATION,
 NAKURU COUNTY
 P.O BOX 259
NAKURU

When replying please Quote:

Ref No. CDE/NKU/GEN/4/1/21 VOL IV/III

Date: 15th January, 2024

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION – MR. JOHN KARANJA RANJI

Reference is made to the above named individual letter dated 13th December, 2023 seeking permission to conduct research in Nakuru County having been approved by NACOSTI through Research Reference No. 474742 and license No. NACOSTI/P/23/32179 dated 22nd November, 2023.

Permission is hereby granted to him to carry out research on topic "PARENTAL ENGAGEMENT AND PARENTS' MOTIVATIONAL BELIEFS IN THE COMPETENCY BASED CURRICULUM IMPLEMENTATION – AMONG SELECTED PUBLIC PRIMARY SCHOOLS – IN NAKURU COUNTY, KENYA" for the period ending 22nd December, 2024.

The findings of the research to be shared with this office when through with the research.

Kindly accord him the necessary assistance

**For: COUNTY DIRECTOR
 OF EDUCATION
 NAKURU**

Lilian Anode

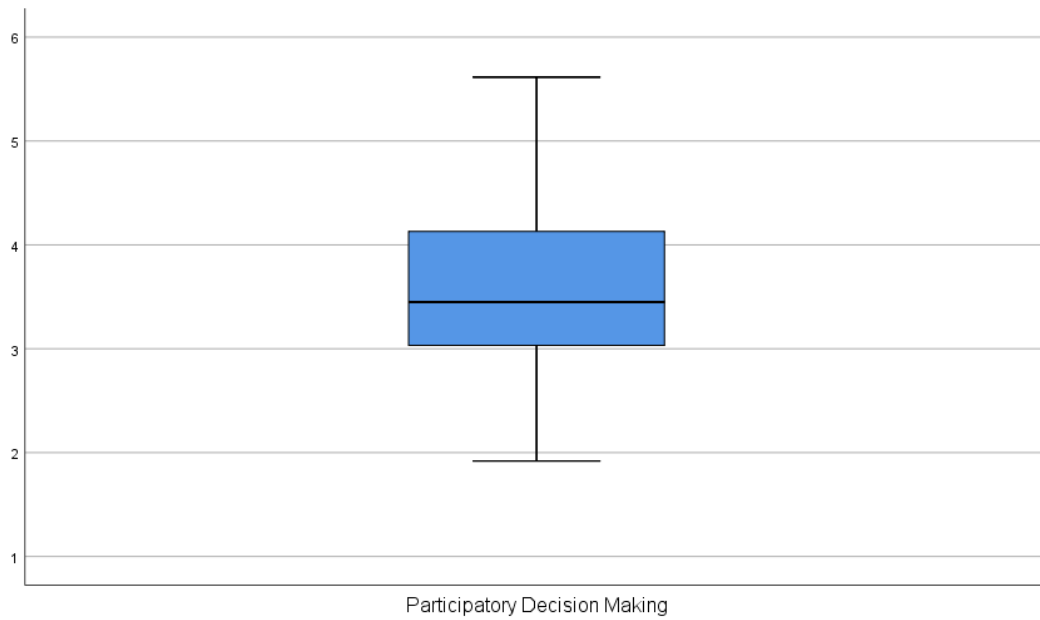
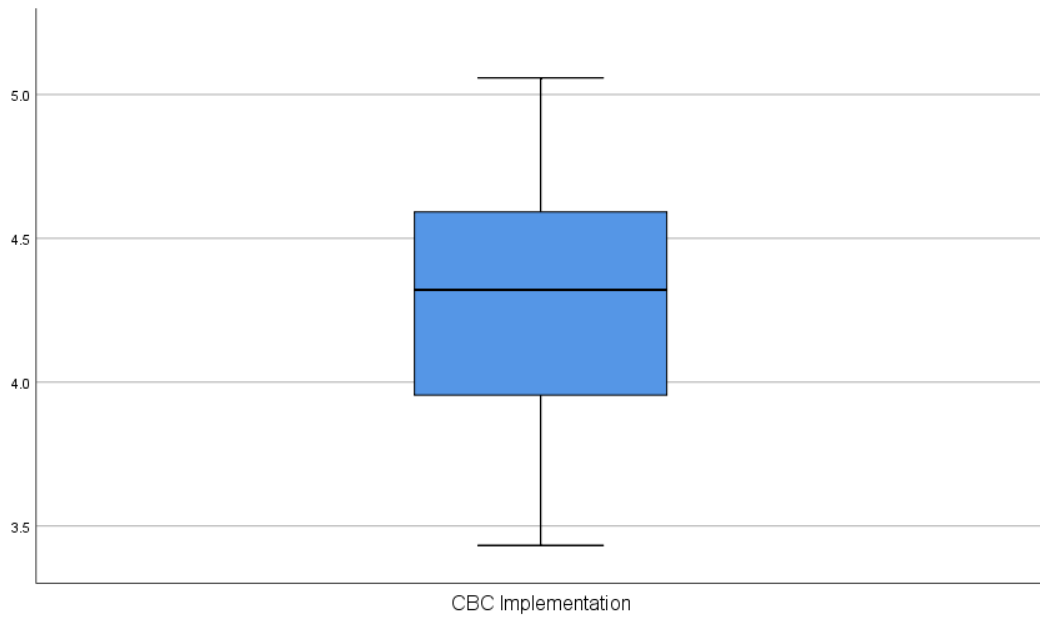
LILIAN ANODE
 For COUNTY DIRECTOR OF EDUCATION
 NAKURU

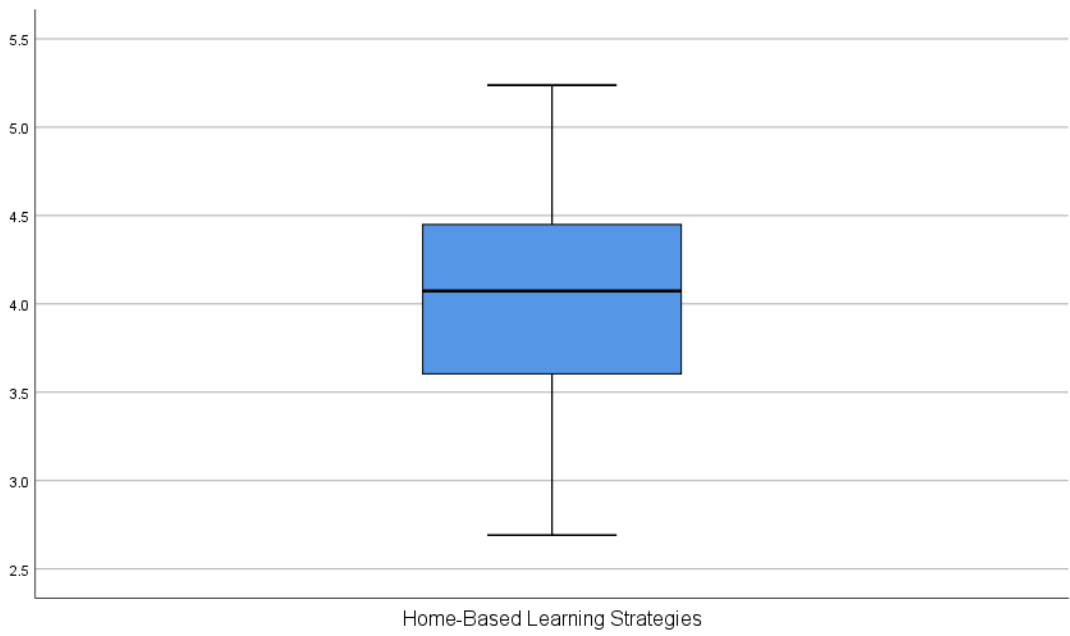
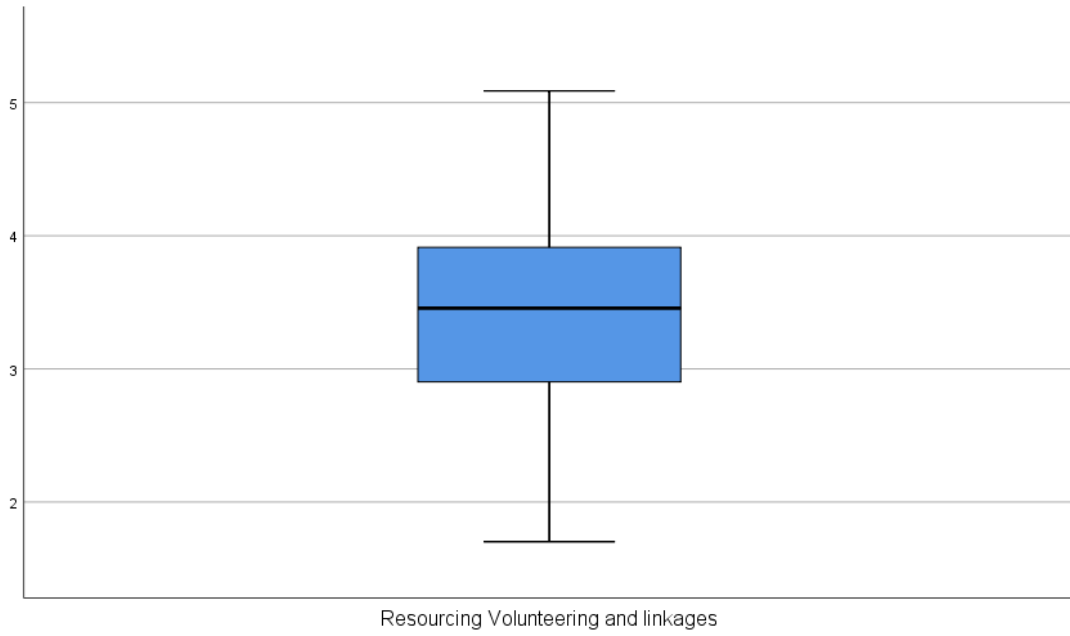
Appendix VIII: Krejcie and Morgan (1970) sample determination table.

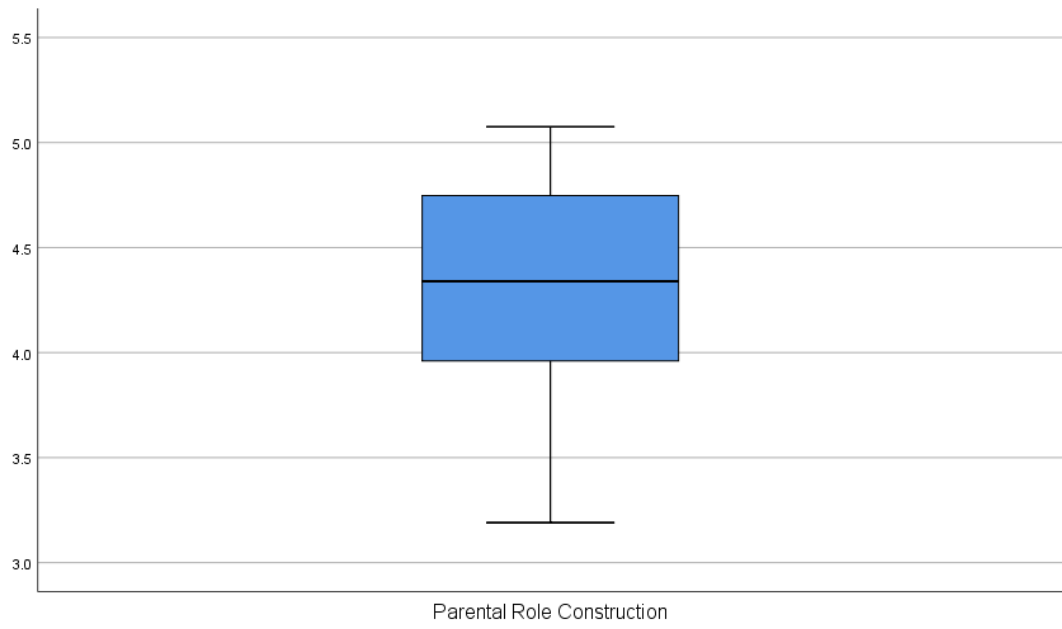
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	26	140	103	340	181	1000	276	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	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" is Population Size
"S" is Sample Size.

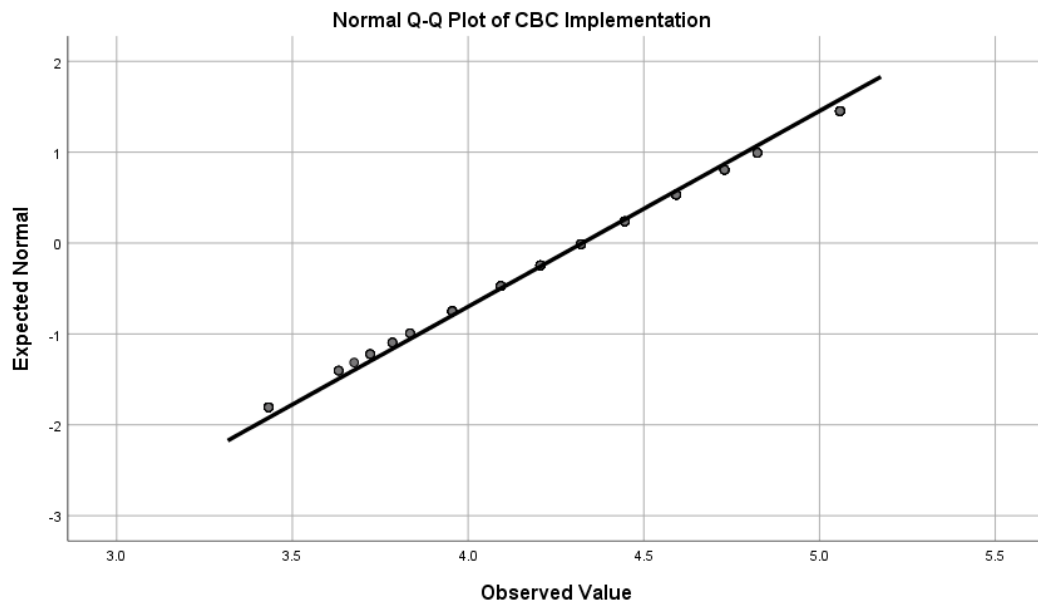
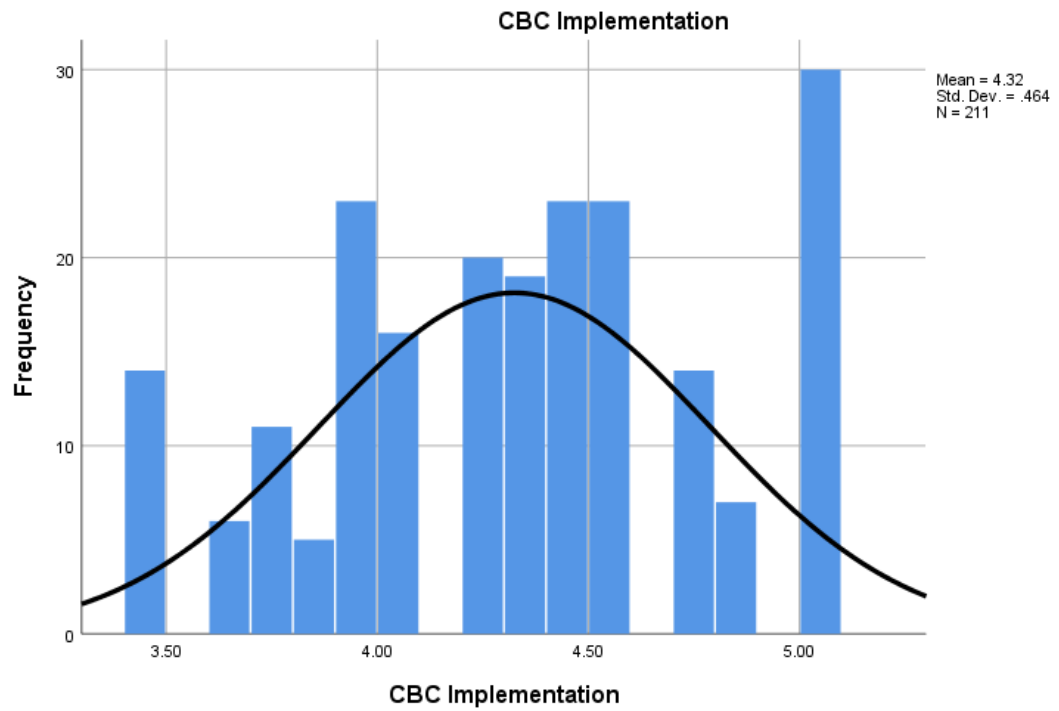
Source: Krejcie and Morgan (1970).

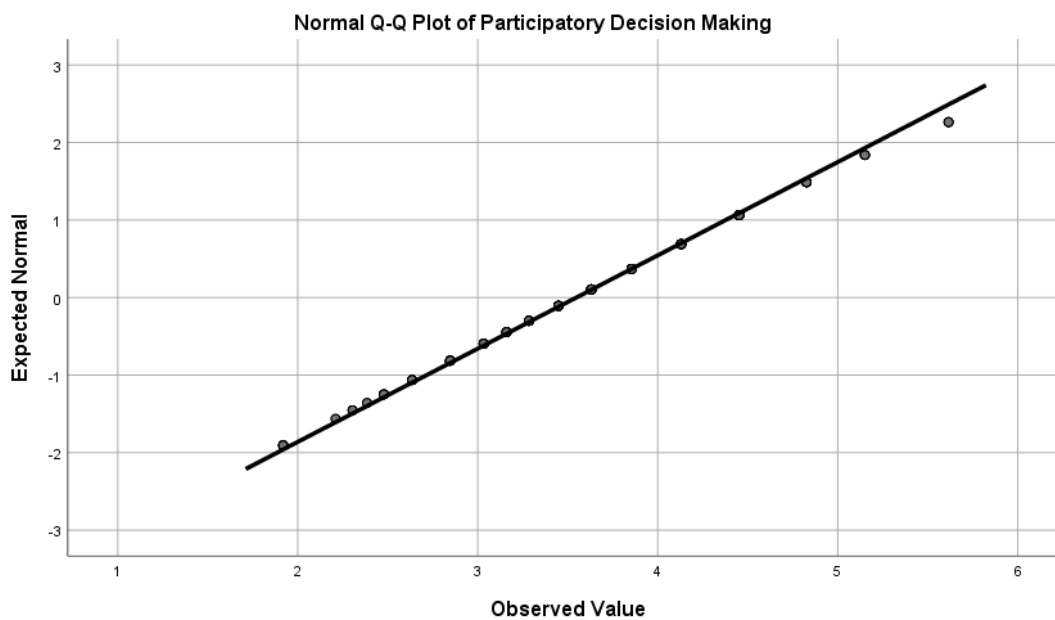
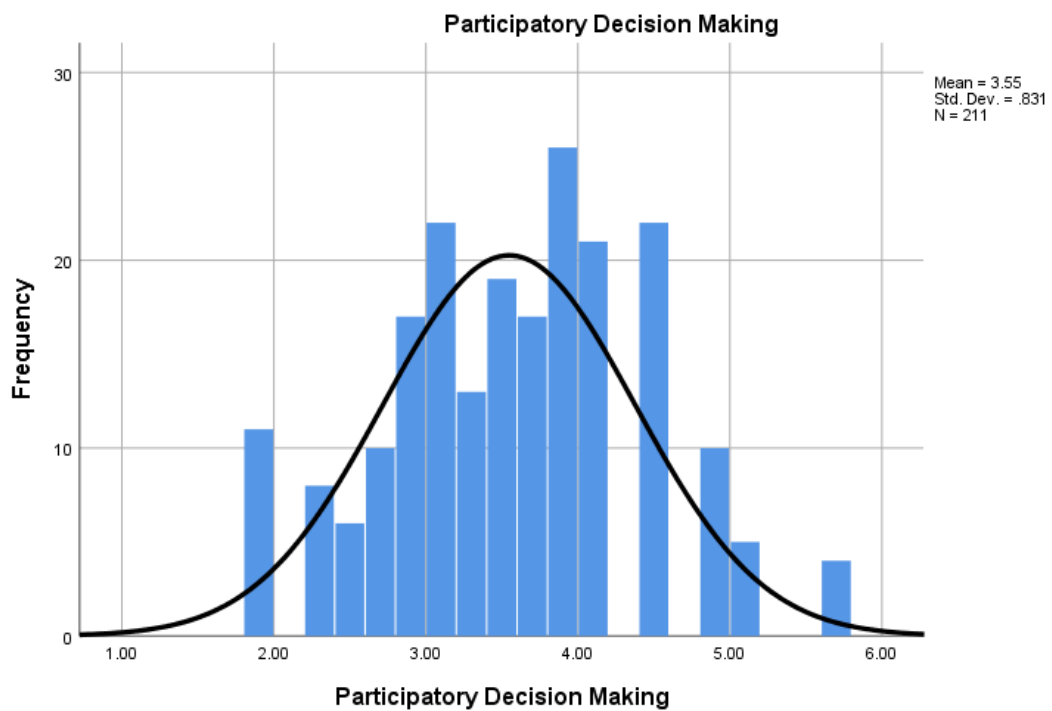
Appendix IX: Stem and Leaf Box plots.

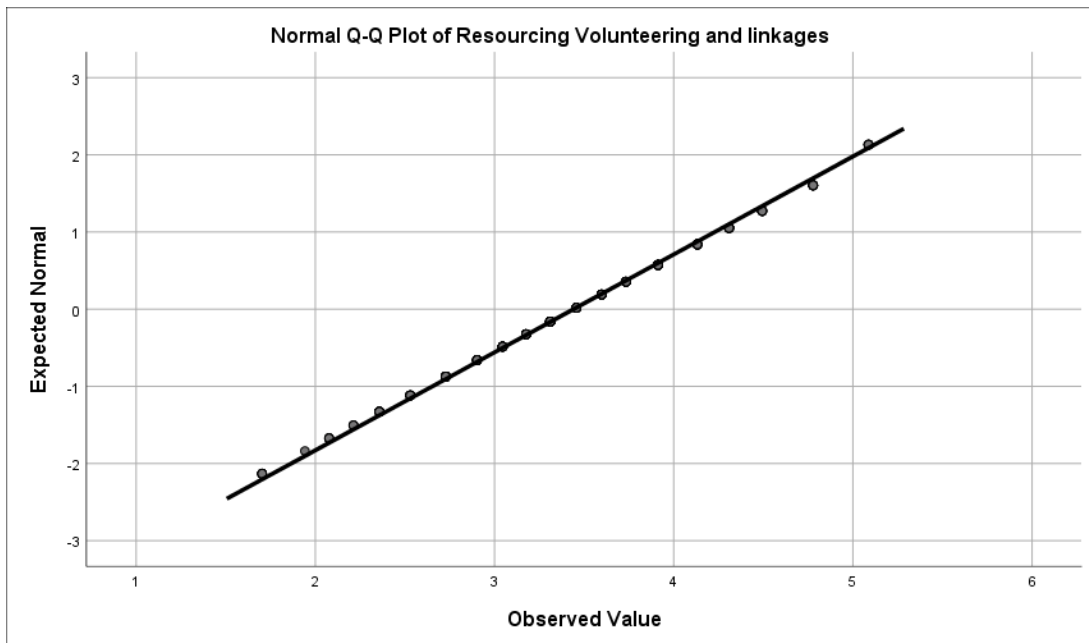
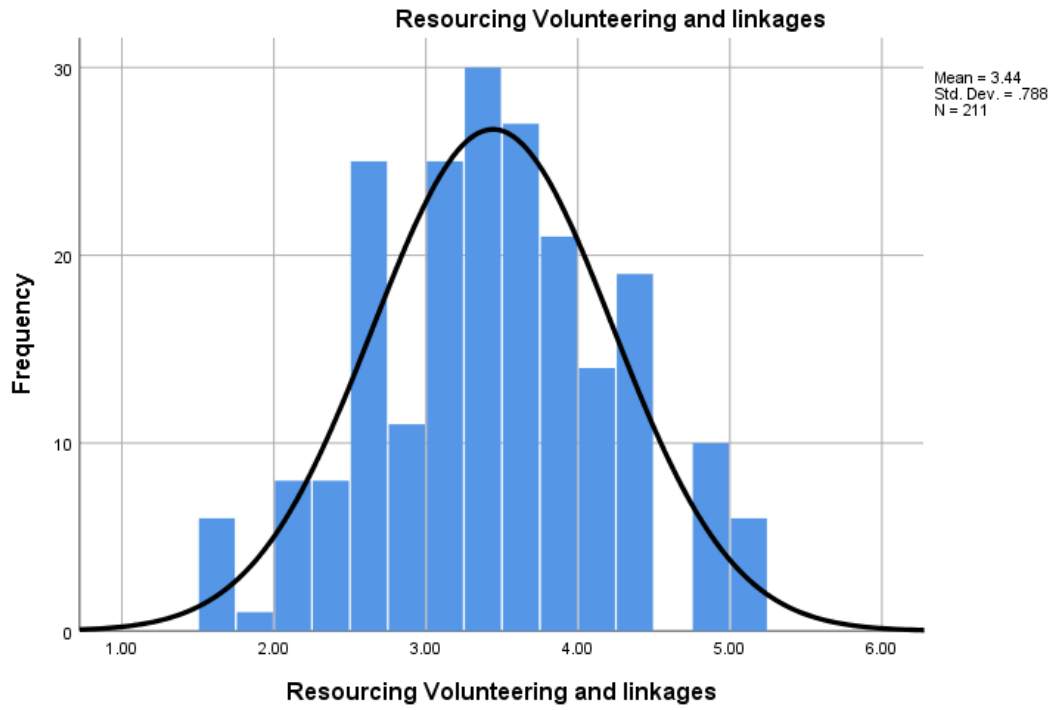


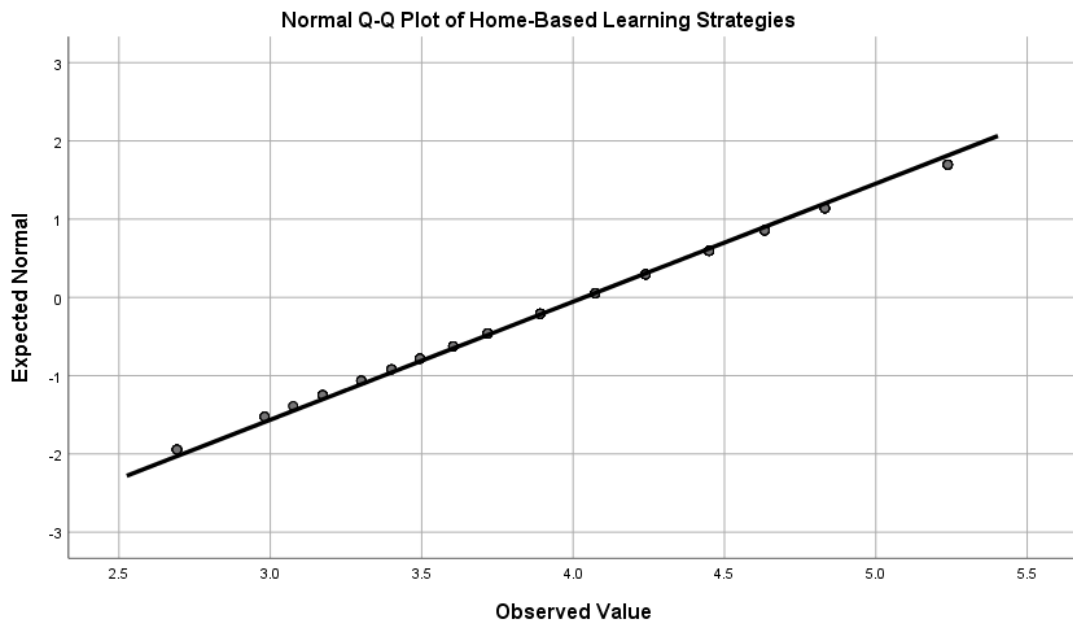
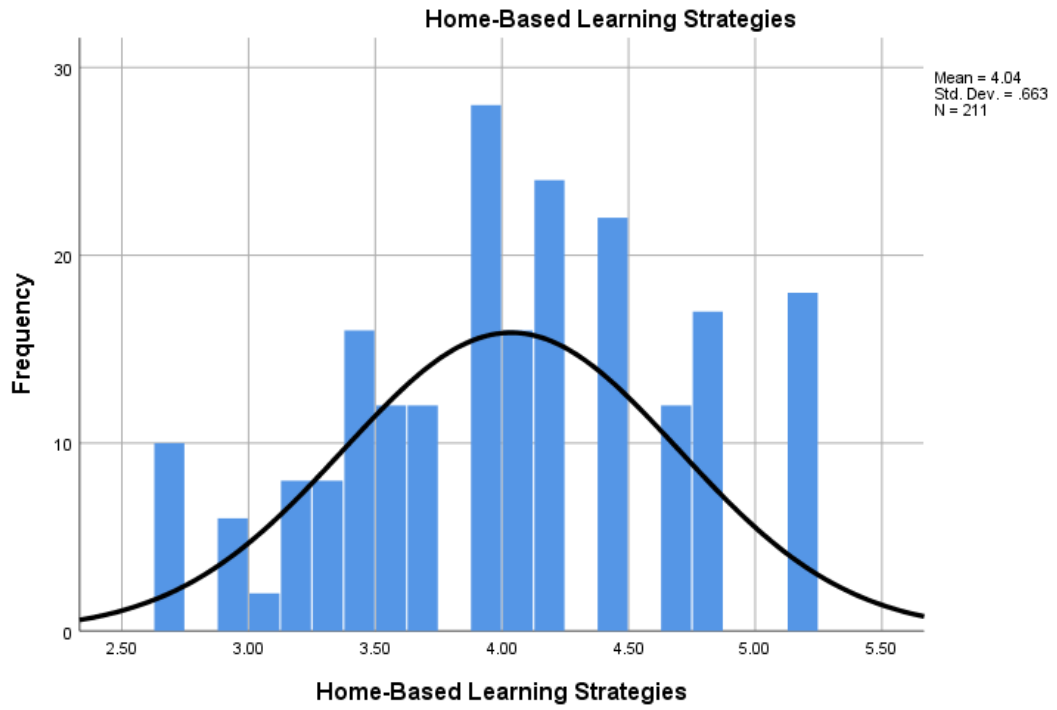


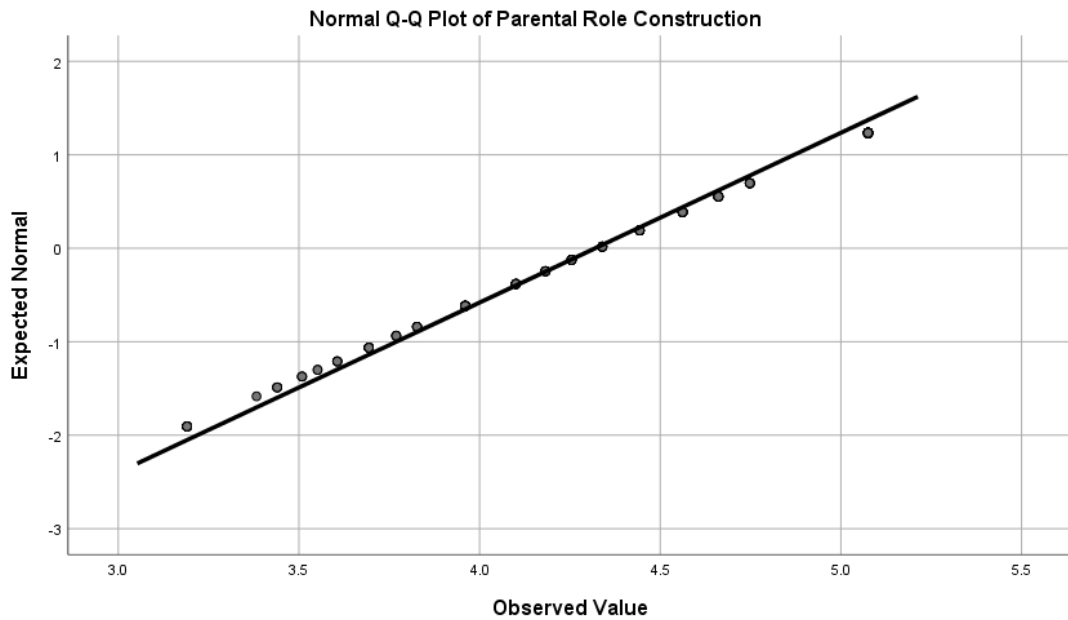
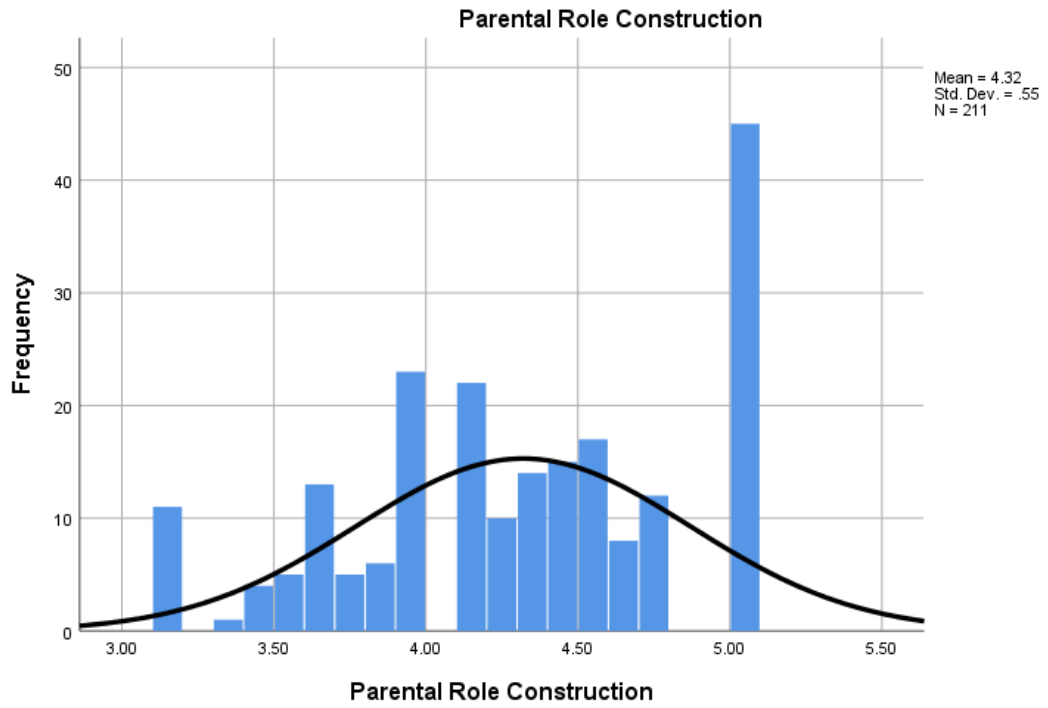
Appendix X: Normality (Normal Q-Q) plots for Study Variables.











Appendix XI: Mahalanobis Distance Multivariate Outliers' Analysis.

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.3333	4.8167	4.2844	.39414	211
Std. Predicted Value	-4.950	1.351	.000	1.000	211
Standard Error of Predicted Value	.033	.187	.069	.026	211
Adjusted Predicted Value	2.4531	4.8206	4.2834	.39322	211
Residual	-1.56287	.99942	.00000	.47420	211
Std. Residual	-3.264	2.087	.000	.990	211
Stud. Residual	-3.283	2.254	.001	1.007	211
Deleted Residual	-1.58086	1.17194	.00097	.49100	211
Stud. Deleted Residual	-3.364	2.276	-.001	1.015	211
Mahal. Distance	.013	30.975	3.981	4.488	211
Cook's Distance	.000	.247	.007	.024	211
Centered Leverage Value	.000	.147	.019	.021	211

a. Dependent Variable: CBC_IMP

Appendix XII: Exploratory Factor Analysis Outputs.

Parental Engagement

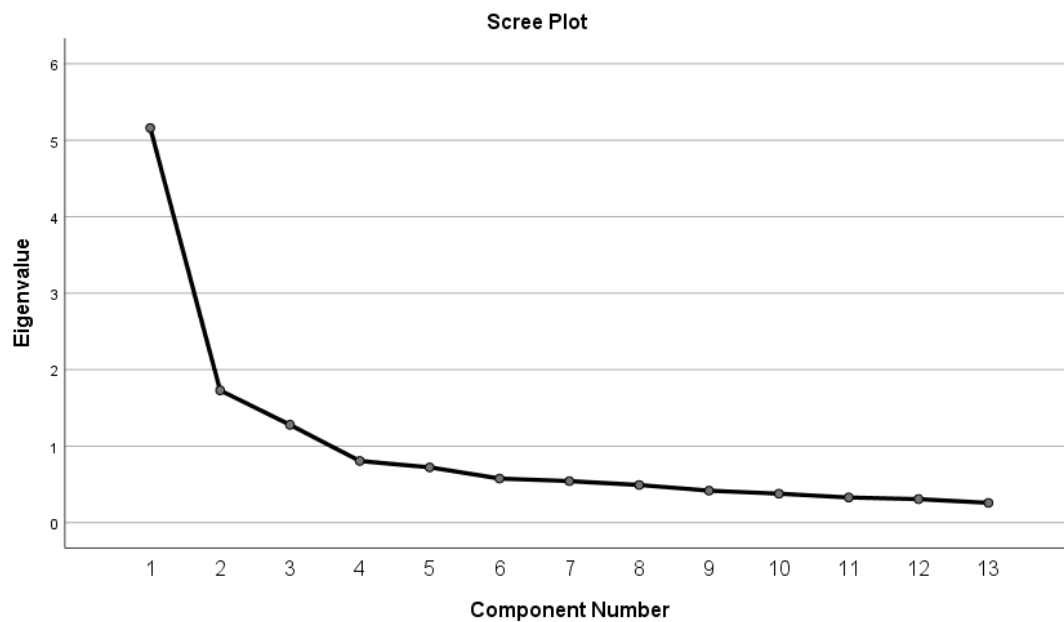
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.866
Bartlett's Test of Sphericity	Approx. Chi-Square	1119.978
	df	78
	Sig.	.000

Total Variance Explained

Component	Total	Initial Eigenvalues		Rotation Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.161	39.699	39.699	3.066	23.582	23.582
2	1.730	13.307	53.006	2.678	20.601	44.183
3	1.279	9.841	62.846	2.426	18.663	62.846
4	.806	6.202	69.048			
5	.722	5.555	74.604			
6	.576	4.432	79.036			
7	.543	4.177	83.212			
8	.492	3.787	87.000			
9	.418	3.212	90.212			
10	.378	2.909	93.121			
11	.328	2.527	95.648			
12	.307	2.363	98.011			
13	.259	1.989	100.000			

Extraction Method: Principal Component Analysis.



Rotated Component Matrix^a

	Component		
	1	2	3
HBLS4	.840		
HBLS2	.802		
HBLS3	.799		
HBLS6	.649		
HBLS5	.628		
PDM2		.808	
PDM3		.798	
PDM1		.676	
PDM4		.645	
RVL5			.798
RVL6			.767
RVL1			.705
RVL2			.644

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

Parental Role construction

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.904
Bartlett's Test of Sphericity	Approx. Chi-Square	1105.106
	df	36
	Sig.	.000

Communalities

	Initial	Extraction
PRC1	1.000	.608
PRC2	1.000	.639
PRC3	1.000	.460
PRC4	1.000	.616
PRC5	1.000	.635
PRC6	1.000	.701
PRC7	1.000	.569
PRC8	1.000	.708
PRC9	1.000	.401

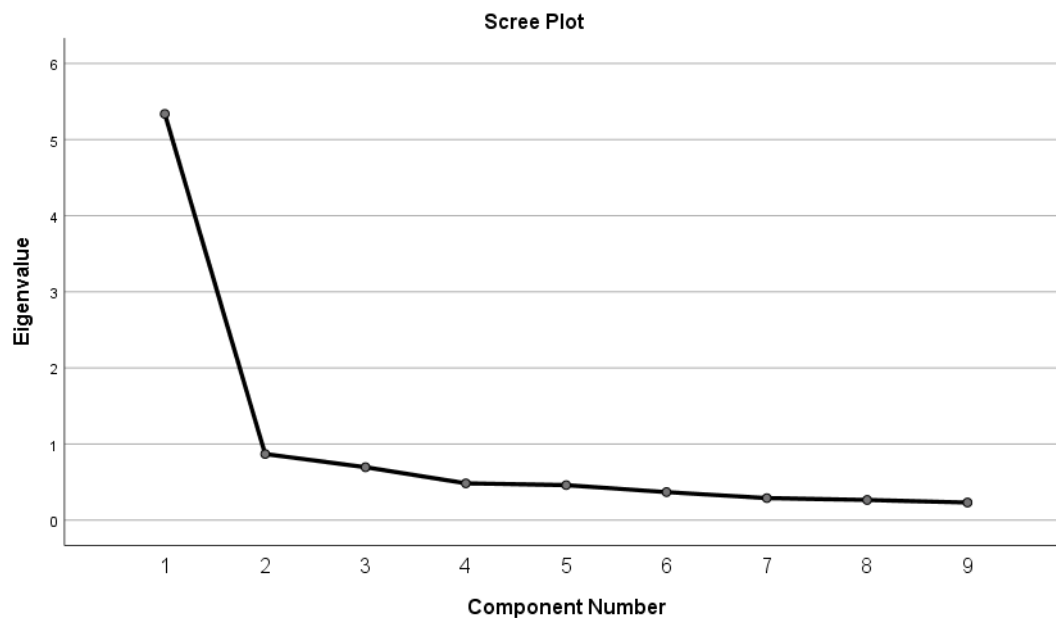
Extraction Method: Principal

Component Analysis.

Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.337	59.303	59.303	5.337	59.303	59.303
2	.869	9.656	68.959			
3	.695	7.725	76.683			
4	.484	5.378	82.061			
5	.460	5.110	87.171			
6	.368	4.092	91.263			
7	.290	3.218	94.481			
8	.265	2.948	97.429			
9	.231	2.571	100.000			

Extraction Method: Principal Component Analysis.



**Component
Matrix^a**

	Component 1
PRC8	.841
PRC6	.837
PRC2	.800
PRC5	.797
PRC4	.785
PRC1	.780
PRC7	.754
PRC3	
PRC9	

Extraction Method:
Principal Component
Analysis.

a. 1 components
extracted.

CBE Implementation

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.911
Bartlett's Test of Sphericity	Approx. Chi-Square	724.897
	df	28
	Sig.	.000

Communalities

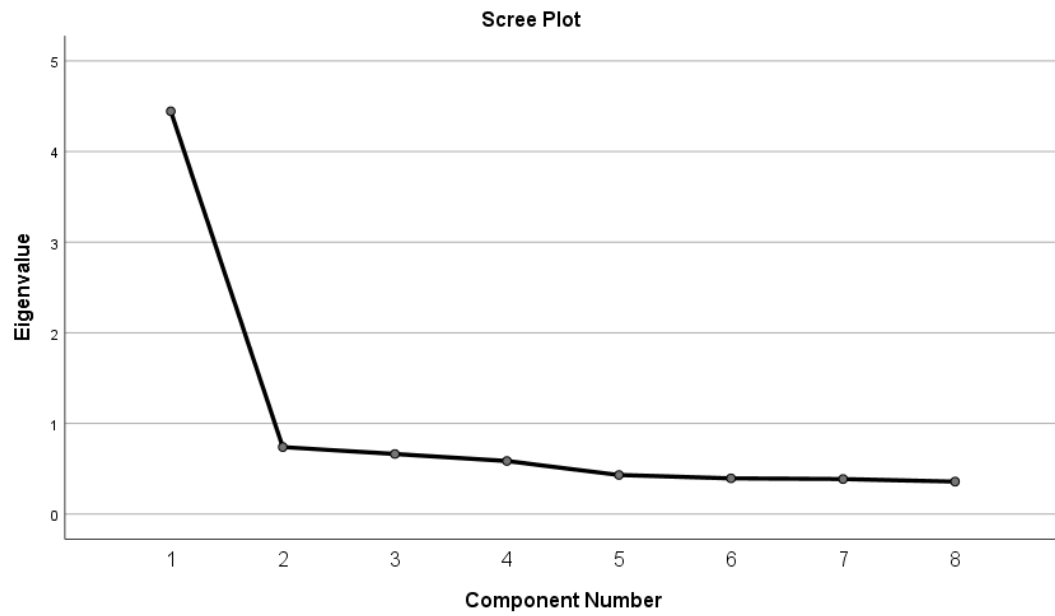
	Initial	Extraction
CBC1	1.000	.423
CBC2	1.000	.616
CBC3	1.000	.576
CBC4	1.000	.536
CBC5	1.000	.591
CBC6	1.000	.498
CBC7	1.000	.569
CBC8	1.000	.636

Extraction Method: Principal
Component Analysis.

Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.444	55.554	55.554	4.444	55.554	55.554
2	.739	9.237	64.791			
3	.662	8.280	73.071			
4	.585	7.314	80.385			
5	.431	5.391	85.776			
6	.394	4.921	90.696			
7	.386	4.829	95.525			
8	.358	4.475	100.000			

Extraction Method: Principal Component Analysis.



**Component
Matrix^a**

	Component 1
CBC8	.798
CBC2	.785
CBC5	.769
CBC3	.759
CBC7	.754
CBC4	.732
CBC6	.705
CBC1	

Extraction Method:

Principal Component

Analysis.

a. 1 components

extracted.

Appendix XIII: Regression Analysis for Covariates SPSS Output.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F Change	df1	df2		
1	.147 ^a	.022	.008	.46250	.022	1.533	3	207	.207	1.829

a. Predictors: (Constant), Acadmc, Age, Gender

b. Dependent Variable: CBC Implementation

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.984	3	.328	1.533	.207 ^b
	Residual	44.279	207	.214		
	Total	45.263	210			

a. Dependent Variable: CBC Implementation

b. Predictors: (Constant), Acadmc, Age, Gender

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error				Beta	Zero-order	Partial	Part	Tolerance
1	(Constant)	4.576	.217		21.049	.000					
	Gender	-.089	.073	-.086	-1.221	.224	-.101	-.085	-.084	.949	1.054
	Age	-.051	.039	-.089	-1.294	.197	-.089	-.090	-.089	1.000	1.000
	Acadmc	.034	.038	.063	.893	.373	.082	.062	.061	.949	1.054

a. Dependent Variable: CBC Implementation

Appendix XIV: Hierarchical Multiple Linear Regression Analysis (SPSS Output).

a) Participatory Decision Making

Regression coefficients

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F Change	df1	df2		
1	.147 ^a	.022	.008	.46250	.022	1.533	3	207	.207	
2	.384 ^b	.148	.131	.43277	.126	30.421	1	206	.000	2.066

a. Predictors: (Constant), Acadmc, Age, Gender

b. Predictors: (Constant), Acadmc, Age, Gender, Participatory Decision Making

c. Dependent Variable: CBC Implementation

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.984	3	.328	1.533	.207 ^b
	Residual	44.279	207	.214		
	Total	45.263	210			
2	Regression	6.681	4	1.670	8.918	.000 ^c
	Residual	38.582	206	.187		
	Total	45.263	210			

a. Dependent Variable: CBC Implementation

b. Predictors: (Constant), Acadmc, Age, Gender

c. Predictors: (Constant), Acadmc, Age, Gender, Participatory Decision Making

Model		Coefficients ^a									
		Unstandardized		Standardized			Correlations			Collinearity	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.576	.217		21.049	.000					
	Gender	-.089	.073	-.086	-1.221	.224	-.101	-.085	-.084	.949	1.054
	Age	-.051	.039	-.089	-1.294	.197	-.089	-.090	-.089	1.000	1.000
	Acadmc	.034	.038	.063	.893	.373	.082	.062	.061	.949	1.054
2	(Constant)	3.824	.245		15.617	.000					
	Gender	-.109	.069	-.105	-1.589	.114	-.101	-.110	-.102	.947	1.057
	Age	-.022	.037	-.039	-.602	.548	-.089	-.042	-.039	.981	1.020
	Acadmc	.024	.036	.044	.662	.509	.082	.046	.043	.946	1.057
	Participatory Decision Making	.201	.036	.359	5.516	.000	.362	.359	.355	.977	1.024

a. Dependent Variable: CBC Implementation

b) Resourcing Volunteering and Linkages

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson
						F Change	df1	df2	
1	.147 ^a	.022	.008	.46250	.022	1.533	3	207	.207
2	.328 ^b	.108	.090	.44279	.086	19.841	1	206	.000

a. Predictors: (Constant), Acadmc, Age, Gender

b. Predictors: (Constant), Acadmc, Age, Gender, Resourcing Volunteering and linkages

c. Dependent Variable: CBC Implementation

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.984	3	.328	1.533	.207 ^b
	Residual	44.279	207	.214		
	Total	45.263	210			
2	Regression	4.874	4	1.218	6.215	.000 ^c
	Residual	40.389	206	.196		
	Total	45.263	210			

a. Dependent Variable: CBC Implementation

b. Predictors: (Constant), Acadmc, Age, Gender

c. Predictors: (Constant), Acadmc, Age, Gender, Resourcing Volunteering and linkages

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error				Beta	Zero-order	Partial	Part	Tolerance
1	(Constant)	4.576	.217		21.049	.000					
	Gender	-.089	.073	-.086	-1.221	.224	-.101	-.085	-.084	.949	1.054
	Age	-.051	.039	-.089	-1.294	.197	-.089	-.090	-.089	1.000	1.000
	Acadmc	.034	.038	.063	.893	.373	.082	.062	.061	.949	1.054
2	(Constant)	3.928	.254		15.464	.000					
	Gender	-.108	.070	-.104	-1.542	.125	-.101	-.107	-.101	.946	1.058
	Age	-.021	.038	-.037	-.559	.577	-.089	-.039	-.037	.970	1.031
	Acadmc	.023	.037	.042	.622	.535	.082	.043	.041	.944	1.059
	Resourcing Volunteering and linkages	.176	.040	.299	4.454	.000	.303	.296	.293	.964	1.038

a. Dependent Variable: CBC Implementation

c) Home-Based Learning Strategies

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F Change	df1	df2		
1	.147 ^a	.022	.008	.46250	.022	1.533	3	207	.207	
2	.381 ^b	.145	.129	.43331	.124	29.833	1	206	.000	1.919

a. Predictors: (Constant), Acadmc, Age, Gender

b. Predictors: (Constant), Acadmc, Age, Gender, Home-Based Learning Strategies

c. Dependent Variable: CBC Implementation

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.984	3	.328	1.533	.207 ^b
	Residual	44.279	207	.214		
	Total	45.263	210			
2	Regression	6.585	4	1.646	8.768	.000 ^c
	Residual	38.678	206	.188		
	Total	45.263	210			

a. Dependent Variable: CBC Implementation

b. Predictors: (Constant), Acadmc, Age, Gender

c. Predictors: (Constant), Acadmc, Age, Gender, Home-Based Learning Strategies

		Coefficients ^a										
		Unstandardized		Standardized				Correlations			Collinearity	
		Coefficients		Coefficients						Statistics		
Model		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	4.576	.217		21.049	.000						
	Gender	-.089	.073	-.086	-1.221	.224	-.101	-.085	-.084	.949	1.054	
	Age	-.051	.039	-.089	-1.294	.197	-.089	-.090	-.089	1.000	1.000	
	Acadmc	.034	.038	.063	.893	.373	.082	.062	.061	.949	1.054	
2	(Constant)	3.429	.293		11.721	.000						
	Gender	-.094	.069	-.090	-1.367	.173	-.101	-.095	-.088	.949	1.054	
	Age	-.007	.037	-.012	-.187	.852	-.089	-.013	-.012	.955	1.048	
	Acadmc	.028	.036	.051	.776	.439	.082	.054	.050	.948	1.055	
	Home-Based Learning Strategies	.252	.046	.360	5.462	.000	.364	.356	.352	.954	1.048	

a. Dependent Variable: CBC Implementation

Appendix XV: Mediation Analysis outputs.

a) Parental engagement (Participatory decision making)

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 beta *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4
Y : CBC
X : PDM
M : PRC

Covariates:
Gender Age Acadmc

Sample
Size: 211

OUTCOME VARIABLE:

PRC

Model Summary

R	R-sq	MSE	F	df1	df2	p
.3004	.0903	.2810	5.1098	4.0000	206.0000	.0006

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.6953	.2999	12.3213	.0000	3.1040	4.2866
PDM	.1955	.0446	4.3884	.0000	.1077	.2834
Gender	.0048	.0840	.0568	.9547	-.1609	.1704
Age	-.0194	.0452	-.4282	.6690	-.1084	.0697
Acadmc	-.0045	.0437	-.1026	.9184	-.0907	.0817

OUTCOME VARIABLE:

CBC

Model Summary

R	R-sq	MSE	F	df1	df2	p
.6003	.3603	.1412	23.0938	5.0000	205.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.3170	.2802	8.2677	.0000	1.7644	2.8695
PDM	.1209	.0330	3.6597	.0003	.0558	.1860
PRC	.4078	.0494	8.2561	.0000	.3104	.5052
Gender	-.1109	.0596	-1.8625	.0640	-.2284	.0065
Age	-.0143	.0321	-.4471	.6553	-.0775	.0489
Acadmc	.0254	.0310	.8210	.4126	-.0357	.0866

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

CBC

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.3842	.1476	.1873	8.9185	4.0000	206.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.8240	.2449	15.6173	.0000	3.3413	4.3068
PDM	.2006	.0364	5.5155	.0000	.1289	.2723
Gender	-.1090	.0686	-1.5890	.1136	-.2442	.0262
Age	-.0222	.0369	-.6023	.5476	-.0950	.0505
Acadmc	.0236	.0357	.6618	.5089	-.0467	.0940

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.2006	.0364	5.5155	.0000	.1289	.2723

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.1209	.0330	3.6597	.0003	.0558	.1860

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
PRC	.0797	.0212	.0391	.1220

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

----- END MATRIX -----

b) Parental Engagement (Volunteering Resourcing and Linkages)

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 beta *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4
Y : CBC
X : RVL
M : PRC

Covariates:
Gender Age Acadmc

Sample
Size: 211

OUTCOME VARIABLE:
PRC

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.3131	.0980	.2786	5.5961	4.0000	206.0000	.0003

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.6292	.3027	11.9881	.0000	3.0324	4.2261
RVL	.2168	.0471	4.6036	.0000	.1239	.3096
Gender	.0006	.0837	.0072	.9942	-.1644	.1656
Age	-.0108	.0452	-.2394	.8110	-.1000	.0784
Acadmc	-.0082	.0436	-.1893	.8500	-.0942	.0777

 OUTCOME VARIABLE:
 CBC

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.5799	.3362	.1466	20.7696	5.0000	205.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.3866	.2861	8.3420	.0000	1.8225	2.9506
RVL	.0839	.0359	2.3397	.0203	.0132	.1546
PRC	.4246	.0505	8.4019	.0000	.3250	.5242
Gender	-.1085	.0607	-1.7879	.0753	-.2282	.0112
Age	-.0166	.0328	-.5066	.6130	-.0813	.0481
Acadmc	.0262	.0316	.8301	.4075	-.0361	.0885

***** TOTAL EFFECT MODEL *****
 OUTCOME VARIABLE:
 CBC

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	.3281	.1077	.1961	6.2146	4.0000	206.0000	.0001

Model

	coeff	se	t	p	LLCI	ULCI
constant	3.9275	.2540	15.4644	.0000	3.4268	4.4282
RVL	.1760	.0395	4.4543	.0000	.0981	.2538
Gender	-.1083	.0702	-1.5421	.1246	-.2467	.0302
Age	-.0212	.0380	-.5592	.5766	-.0961	.0536
Acadmc	.0227	.0366	.6219	.5347	-.0493	.0948

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI
.1760	.0395	4.4543	.0000	.0981	.2538

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.0839	.0359	2.3397	.0203	.0132	.1546

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
PRC .0920	.0219	.0499	.1373

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
 5000

----- END MATRIX -----

c) Parental Engagement (Home-Based Learning Strategies)

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 beta *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4
Y : CBC
X : HBLS
M : PRC

Covariates:
Gender Age Acadmc

Sample
Size: 211

OUTCOME VARIABLE:

PRC

Model Summary

R	R-sq	MSE	F	df1	df2	p
.4606	.2121	.2433	13.8667	4.0000	206.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.6695	.3330	8.0155	.0000	2.0129	3.3261
HBLS	.3869	.0526	7.3555	.0000	.2832	.4906
Gender	.0172	.0781	.2201	.8260	-.1368	.1711
Age	.0198	.0426	.4644	.6429	-.0642	.1038
Acadmc	-.0040	.0406	-.0987	.9215	-.0841	.0761

OUTCOME VARIABLE:

CBC

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5762	.3320	.1475	20.3770	5.0000	205.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.3333	.2970	7.8569	.0000	1.7478	2.9188
HBLS	.0936	.0460	2.0339	.0433	.0029	.1843
PRC	.4104	.0542	7.5655	.0000	.3034	.5173
Gender	-.1008	.0608	-1.6579	.0989	-.2207	.0191
Age	-.0151	.0332	-.4557	.6491	-.0806	.0503
Acadmc	.0294	.0316	.9276	.3547	-.0330	.0917

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

CBC

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.3814	.1455	.1878	8.7682	4.0000	206.0000	.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	3.4288	.2925	11.7208	.0000	2.8521	4.0056
HBSL	.2524	.0462	5.4620	.0000	.1613	.3435
Gender	-.0937	.0686	-1.3667	.1732	-.2290	.0415
Age	-.0070	.0374	-.1872	.8517	-.0808	.0668
Acadmc	.0277	.0357	.7761	.4386	-.0427	.0981

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y						
	Effect	se	t	p	LLCI	ULCI
	.2524	.0462	5.4620	.0000	.1613	.3435

Direct effect of X on Y						
	Effect	se	t	p	LLCI	ULCI
	.0936	.0460	2.0339	.0433	.0029	.1843

Indirect effect(s) of X on Y:				
	Effect	BootSE	BootLLCI	BootULCI
PRC	.1588	.0305	.1027	.2235

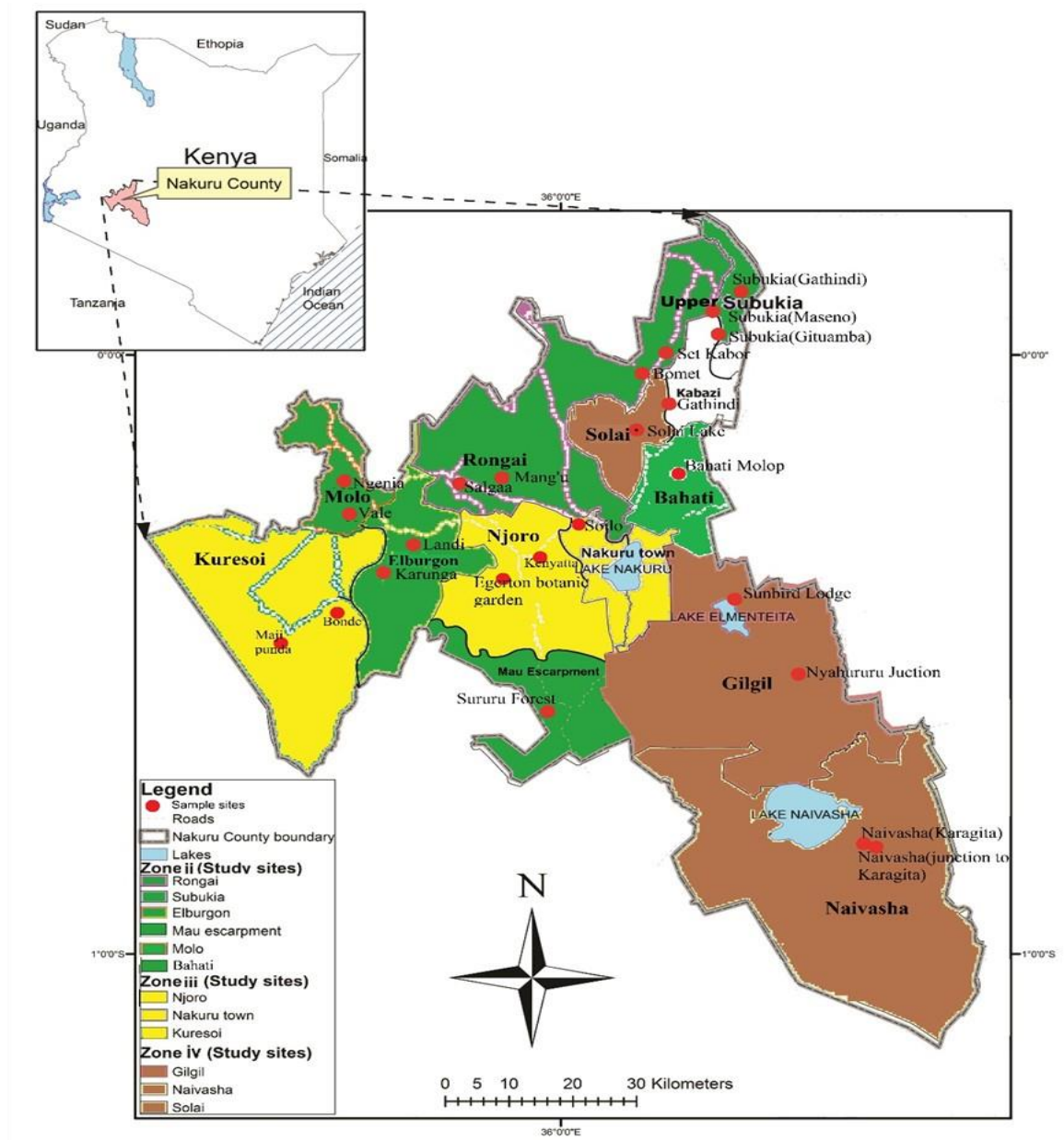
***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

----- END MATRIX -----

Appendix XVI: Map of Nakuru County.



Source: www.kubwaadvocates.com

Appendix XVII: Plagiarism Awareness Certificate



SR908

ISO 9001:2019 Certified Institution

THESIS WRITING COURSE

PLAGIARISM AWARENESS CERTIFICATE

This certificate is awarded to

RANJI JOHN KARANJA

EDU/DPHILERE/4836/23

In recognition for passing the University's plagiarism

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Word count:53909

Awarded by

Prof. Anne Syomwene Kisilu

CERM-ESA Project Leader Date: 08/07/2025