

The Influence of Maternal Separation on Anxiety Symptoms Among Public School Children in Homa Bay County, Kenya

Yudah Otieno Opapa

Faculty Of Business and Economics in Partial Fulfillment of the Requirements for the Award of a Master of Arts Degree in Counselling Psychology of Tom Mboya University

DOI: <https://doi.org/10.47772/IJRISS.2026.100800703>

Received: 27 August 2026; Accepted: 01 September 2026; Published: 16 September 2026

ABSTRACT

This study examined the relationship between maternal separation and anxiety symptoms among public school children in Homa Bay County, Kenya. Guided by Bowlby's Attachment Theory and the Multi-Context Attachment Resilience Theory (MCART), the study adopted a concurrent convergent mixed-methods research design. The quantitative component comprised 240 children aged 8–17 years, consisting of 120 children who had experienced prolonged maternal separation and 120 children who had not experienced prolonged maternal separation and constituted the comparison group, drawn from 16 selected public schools in Homa Bay County. Quantitative data were collected using an adapted Screen for Child Anxiety Related Emotional Disorders (SCARED) questionnaire, while qualitative data were obtained through semi-structured interviews with 20 alternative caregivers, 10 teachers or school counsellors, and focus group discussions with 24 older children and adolescents. The adapted anxiety questionnaire demonstrated acceptable internal consistency, with a Cronbach's alpha coefficient of 0.782. The study addressed an empirical and contextual gap in the Kenyan literature, where limited evidence has specifically isolated maternal separation as an exposure and compared anxiety symptoms among children who had experienced prolonged maternal separation with those who had not. The study found that, among the children who had experienced maternal separation, labour migration was the most frequently reported pathway of separation (38.3%), followed by maternal death (26.7%), marital dissolution resulting in maternal absence (17.5%), maternal abandonment (10.8%), and maternal imprisonment (6.7%). The mean duration of maternal separation was 18.9 months (SD = 4.2). A marked difference was observed in overall anxiety symptom scores between the two quantitative groups. Children who had experienced prolonged maternal separation recorded a mean anxiety score of 58.75 (SD = 11.54), compared with 10.83 (SD = 3.00) among children in the comparison group. Among children who had experienced maternal separation, worry recorded the highest mean anxiety manifestation score (M = 16.11, SD = 3.79), followed by fear (M = 14.45, SD = 3.80), withdrawal (M = 14.34, SD = 3.99), and nervousness (M = 13.85, SD = 4.24). Within the maternal-separation group, duration of separation, caregiver arrangement, and reason for separation were not significantly associated with anxiety symptom scores. However, age was positively and significantly associated with anxiety symptoms ($r = 0.213$, $p = 0.020$). Regarding coping, 60.0% of the children reported adaptive strategies, primarily academic and peer engagement and religious involvement, while 40.0% reported maladaptive strategies, including emotional withdrawal and social isolation. Among caregivers, informal financial-support networks and community or elder counsel were the most frequently reported adaptive strategies, while 29.1% reported family silence regarding maternal absence. The study concludes that children who had experienced prolonged maternal separation reported substantially higher anxiety symptom levels than children who had not experienced prolonged maternal separation, although anxiety within the maternal-separation group varied according to developmental age rather than duration or pathway of separation. The study recommends strengthening school-based counselling and psychosocial support, caregiver-support programs, and child-welfare interventions for children affected by maternal separation in Homa Bay County.

INTRODUCTION

Background to the Study

Maternal separation refers to the physical, geographical, or emotional detachment of a child from their biological mother due to factors such as death, divorce, labor migration, incarceration, prolonged illness, or abandonment. Within developmental science and psychological framework, the early bond between a mother and her child is recognized as the foundational cornerstone for emotional regulation, cognitive mapping, and subsequent personality development. Grounded in attachment theory, early and unmitigated separation from the primary maternal caregiver disrupts the formation of secure attachment and removes the vital caregiver-buffering mechanism required to navigate environmental stressors (Bowlby, 1969; Howard et al., 2011; Callaghan et al., 2019). This disruption alters neurobiological stress pathways, leaving children vulnerable to internalizing psychological conditions, chief among them being anxiety disorders. Large-scale global epidemiological studies have consistently shown that childhood anxiety disorders constitute a substantial global burden, leading to poor academic performance, impaired socialization, and long-term psychiatric vulnerabilities in adulthood, underscoring the urgent need for context-specific empirical identification and targeted psychological interventions (Mohammadi et al., 2020).

Globally, the landscape of maternal separation has evolved rapidly due to shifting macroeconomic dynamics, increased female labor participation, and cross-border migration. In high-income settings, maternal separation is frequently driven by divorce, maternal career obligations, or institutional state interventions, which have been robustly linked to elevated spikes in generalized anxiety and school refusal behaviors among children. Conversely, in low- and middle-income countries (LMICs), maternal separation is primarily structural, driven by circular labor migration where mothers leave rural homesteads for urban centers or overseas domestic employment. Systematic reviews focusing on these "left-behind" children in regions such as Asia and Latin America consistently document severe mental health disparities, including profound clinical anxiety, emotional withdrawal, and deep-seated feelings of abandonment, representing a critical global developmental crisis (Fellmeth et al., 2018).

Regionally, Sub-Saharan Africa presents a unique socio-cultural framework where maternal separation is highly prevalent but historically masked by traditional kinship care systems. Economic distress, high maternal mortality rates, civil conflicts, and pandemic health crises such as HIV/AIDS have systematically fragmented the nuclear family structure. While child-fostering and extended family care networks are culturally normative in many African societies, empirical psychological evidence indicates that these alternative caregiving arrangements often lack the emotional intimacy and consistency inherent in the primary mother-child dyad. Left-behind children frequently navigate ambiguous loss, where the mother is physically absent but psychologically present, generating chronic emotional instability and manifest anxiety symptoms that remain unaddressed by overcrowded or economically strained extended family networks.

In Kenya, youth mental health has increasingly emerged as a public health priority. Recent national epidemiological estimates indicate that approximately 12.1% of children and adolescents are living with a diagnosable mental health disorder at any given time, with anxiety and depressive symptoms forming the bulk of these presentations (Erskine et al., 2024). Kenya-specific studies have documented substantial internalizing symptoms among children in community and school samples.

For instance, a population-based study conducted in Kilifi found that internalizing problems affected 22% of preschool children, with anxiety emerging as the most dominant DSM-oriented syndrome (Kariuki et al., 2017). Similarly, assessments in urban and peri-urban public schools have reported elevated emotional and behavioral problems among learners relative to international multicultural norms (Magai et al., 2018). However, a critical empirical gap persists within these Kenyan studies: the vast majority have treated childhood anxiety as a generic product of poverty or general orphanhood, failing to isolate maternal separation as a distinct, independent exposure variable. Consequently, there is an absence of clear empirical literature demonstrating how the specific disruption of the maternal bond influences the manifestation of anxiety disorders among school-going children in rural Kenyan setups.

At the county level, Homa Bay County presents an environment characterized by intersecting social, economic, and health-related stressors. Homa Bay County has historically experienced substantial HIV/AIDS-related vulnerability, which has contributed to maternal illness, death, and child vulnerability (NACC, 2016). The economic landscape of Homa Bay, including livelihoods linked to Lake Victoria, also exposes some households to maternal migration for fish trading, informal domestic labour, and other income-generating activities. Evidence from local learning institutions indicates notable emotional and behavioural challenges among learners. A regional study reported high prevalence rates of depression and anxiety among public school students within Homa Bay County (Nyayieka, Nyagwencha, & Nzyuko, 2020). Despite these indicators, there remains limited localized empirical evidence that isolates maternal separation as the principal exposure and examines its relationship with anxiety symptoms among public school children in the county. The contextual gap is particularly important because maternal separation may occur through different pathways and within different caregiving environments. The methodological gap is also evident because few studies combine a quantitative anxiety assessment, a comparison group of children who have not experienced prolonged maternal separation, and qualitative evidence from children, caregivers, and school teachers.

The present study therefore addresses these empirical, contextual, geographic, and methodological gaps by examining the prevalence and pathways of maternal separation, assessing anxiety symptoms, comparing anxiety symptom levels between the two quantitative groups, examining relationships between separation characteristics and anxiety symptoms, and documenting coping strategies among children and caregivers.

Statement of the Problem

The primary years of childhood are vital for the crystallization of emotional stability, social adaptation, and psychological resilience. A stable, secure, and nurturing mother-child relationship serves as the fundamental matrix through which a child learns emotional regulation and constructs a secure base to explore the world. When this maternal attachment is ruptured due to economic migration, marital dissolution, maternal illness, incarceration, or death, the child's primary psychological anchor is lost. This exposes them to deep-seated emotional vulnerabilities, frequently manifesting as clinical anxiety disorders, separation anxiety, and academic maladjustment.

In Kenya, structural vulnerabilities such as rural-to-urban economic migration and high mortality rates have forced millions of mothers away from their biological children, precipitating severe internalizing issues among the youth (Mutiso et al., 2018). This crisis is acutely felt in Homa Bay County, an area burdened by persistent poverty, family instability, and historical healthcare crises like HIV/AIDS, which have forced an unprecedented number of children into alternative, non-maternal care arrangements (Nyayieka et al., 2020). Statistical data from the Kenya National Bureau of Statistics (KNBS, 2019) places Homa Bay County among the leading regions in child vulnerability, high dependency ratios, and parental absence. Mothers in Homa Bay County regularly migrate to engage in the fish trading value chain along Lake Victoria, informal labor markets in major cities, or regional trade, leaving children under kinship care (Nunan, 2021). Demographic life-history data from the region confirms that high rates of early, unsupported pregnancies combined with recurrent migration cycles severely compromise family stability and consistent maternal caregiving (Xu et al., 2013).

While kinship care under the extended family system remains culturally normative within the local Luo community, contemporary economic hardships mean these households are often overcrowded and lack the emotional and psychological capacity to replace the unique attachment security provided by a biological mother (Kimani & Kombo, 2010). Consequently, primary school teachers in Homa Bay County have reported rising cases of chronic absenteeism, social withdrawal, emotional outbursts, and generalized panic symptoms among learners from maternal-absent households.

Despite these evident psychosocial and behavioural concerns in local schools, there remains limited localized empirical research that isolates maternal separation and examines its relationship with anxiety symptoms among school children. Existing institutional and community responses often address broader child vulnerability, poverty, or orphanhood without sufficiently distinguishing the psychological experiences associated with maternal separation. In addition, limited local evidence directly compares children who have experienced prolonged maternal

separation with children who have remained in regular maternal care. The present study addresses this empirical, contextual, geographic, and methodological gap by examining maternal separation and anxiety symptoms among public school children in Homa Bay County, with particular attention to the experiences of children affected by maternal separation and a comparison group of children who have not experienced prolonged maternal separation. The study further examines the pathways and duration of separation, relevant caregiving characteristics, and coping strategies in order to provide evidence that can inform targeted school-based psychological interventions and caregiver-support structures.

Purpose of the Study

To determine the influence of maternal separation on anxiety disorders among public school children in Homa Bay County, Kenya.

Objectives of the Study

The specific objectives guiding this study were to:

1. Determine the prevalence of maternal separation among public school children in Homa Bay County, Kenya.
2. Assess the levels and severity of anxiety disorders among public school children who have experienced maternal separation in Homa Bay County, Kenya.
3. Examine the relationship between maternal separation and anxiety disorders among public school children in Homa Bay County, Kenya.
4. Compare the manifestation of anxiety disorders between public school children experiencing maternal separation and those living with both parents in Homa Bay County, Kenya.
5. Identify coping strategies used by public school children and caregivers in response to maternal separation in Homa Bay County, Kenya.

Research Questions

This study sought to answer the following research questions:

1. What is the prevalence of maternal separation among public school children in Homa Bay County, Kenya?
2. What are the levels and severity of anxiety disorders among public school children who have experienced maternal separation in Homa Bay County, Kenya?
3. What is the relationship between maternal separation and anxiety disorders among public school children Homa Bay County, Kenya?
4. How does the manifestation of anxiety disorders compared between public school children experiencing maternal separation and those living with both parents in Homa Bay County, Kenya?
5. What coping strategies are used by public school children and caregivers in response to maternal separation in Homa Bay County, Kenya?

Research Hypotheses

The study tested the following null hypotheses at $\alpha = 0.05$ level of significance:

1. **(H₀₁):** There is no statistically significant relationship between maternal separation and anxiety disorders among public school children in Homa Bay County, Kenya.
2. **(H₀₂):** There is no statistically significant difference in the severity and manifestation of anxiety disorders between public school children who have experienced maternal separation and those living with both parents in Homa Bay County, Kenya.

Significance of Study

The findings of this study may be beneficial to several stakeholders:

- i. **Caregivers and Parents:** The study provides empirical evidence on the relationship between maternal separation and anxiety symptoms among children. The findings may help caregivers and parents recognize anxiety-related difficulties and adopt supportive, emotionally responsive caregiving approaches for children affected by maternal separation.
- ii. **Teachers and School Counsellors:** The findings provide context-specific evidence that may assist teachers and school counsellors in identifying children who may require psychosocial support. The comparison of anxiety symptom levels between children who have experienced maternal separation and those who have not experienced prolonged maternal separation may further assist schools in developing targeted counselling and mental health interventions.
- iii. **Government Policymakers and Child Welfare Agencies:** The findings may inform the Ministry of Education, the Department of Children's Services, and other relevant stakeholders in designing child mental-health interventions, caregiver-support programmes, child-protection measures, and psychosocial services for vulnerable children in Homa Bay County.
- iv. **The Academic Community:** The study contributes context-specific empirical evidence on maternal separation and anxiety symptoms among public school children in Kenya. By examining maternal separation as a specific caregiving experience and including a comparison group, the study may provide a useful basis for future research on child anxiety, attachment disruption, alternative caregiving, and related psychosocial outcomes.

Limitation of the Study

The study had several limitations. First, it relied partly on self-reported information obtained from children and caregivers, which may have been affected by response bias, social desirability, or inaccurate recall. Although standardized procedures and instruments were used to assess anxiety symptoms, self-report measures may not have fully captured culturally specific expressions of emotional distress among public school children in Homa Bay County, Kenya.

Second, the cross-sectional design of the study limited the ability to establish temporal or causal relationships between maternal separation and anxiety symptoms. Although the study compared children who had experienced maternal separation with those who had not experienced prolonged maternal separation, differences between the two groups may also have been influenced by other social, economic, family, or environmental factors that were not fully controlled in the study.

In addition, limitations related to time and available resources may have affected the scope of data collection and consequently limited the generalizability of the findings beyond the study area. The study also encountered potential challenges associated with mental health stigma, which may have influenced the willingness of some participants to disclose sensitive emotional experiences openly.

Despite these limitations, several measures were undertaken to minimize their effects. Research instruments were pre-tested before the main data collection exercise to enhance their clarity, suitability, and consistency. Data collectors were trained in ethical and sensitive engagement with child participants, while confidentiality, anonymity, informed consent, assent, and voluntary participation were emphasized throughout the study. The use of a comparison group also provided a basis for examining differences in anxiety symptom levels between children who had experienced maternal separation and those who had not experienced prolonged maternal separation, thereby strengthening the interpretive value of the quantitative findings.

Scope of the Study

This study was confined to school-going children aged 8–17 years enrolled in selected public primary and secondary

schools in Homa Bay County, Kenya. The quantitative component comprised two groups: children who had experienced prolonged maternal separation and children who had not experienced prolonged maternal separation and remained in regular maternal care. The study also included selected alternative caregivers or guardians, teachers or school counsellors, and older children and adolescents who participated in the qualitative component.

The study focused specifically on maternal separation, defined as disruption of a child's regular relationship and day-to-day care by the biological mother due to circumstances such as labour migration, maternal death, prolonged illness, imprisonment, abandonment, or marital dissolution resulting in maternal absence. The study examined anxiety symptoms associated with maternal separation and compared anxiety symptom levels between children who had experienced prolonged maternal separation and those who had not. Other mental-health conditions outside the study's anxiety focus were not examined in detail.

The study further examined selected characteristics of maternal separation, including the pathway and duration of separation, and considered caregiver support, socio-economic conditions, and access to psychosocial services as contextual factors relevant to children's adjustment. The qualitative component also explored the coping strategies used by children and caregivers in response to maternal separation.

Geographically, the study was limited to selected public schools and communities within Homa Bay County. The literature review focused primarily on maternal separation, childhood anxiety symptoms, alternative caregiving, psychosocial support, and coping strategies. These delimitations were necessary to maintain a manageable and focused investigation within the available time and resources and may limit the generalizability of the findings to populations outside the study setting.

Assumptions

The study was based on the following assumptions:

1. That anxiety symptoms among school-age children can be measured using the validated and appropriately adapted research instruments employed in the study.
2. That children who had experienced maternal separation and those who had not experienced prolonged maternal separation would provide responses that accurately reflected their experiences and anxiety-related symptoms.
3. That the children, caregivers, teachers, and school counsellors participating in the study would provide honest and cooperative responses during data collection.
4. That the research instruments used in the study were sufficiently clear, culturally appropriate, and suitable for use among public school children in Homa Bay County, Kenya.

Theoretical and Conceptual Framework

Theoretical Framework

This study was guided by the Multi-Context Attachment Resilience Theory (MCART). Although John Bowlby's Attachment Theory (1969) emphasizes the psychological risks associated with disrupted maternal bonds, the theory primarily focuses on the mother-child dyad and does not fully account for the broader social and ecological realities affecting children in Homa Bay County, Kenya. Within this context, children's psychological outcomes may be influenced not only by maternal attachment relationships, but also by alternative caregiving arrangements, peer relationships, school environments, and prevailing socio-economic conditions.

MCART proposes that the psychological consequences of maternal separation are shaped through the interaction of three interrelated domains. The first domain, Attachment Foundations, suggests that early maternal attachment relationships establish the child's baseline emotional security and capacity for emotional regulation. The second domain, Relational Buffers, includes alternative protective relationships such as extended family caregivers, teachers, peers, and other supportive social networks that may compensate for or reinforce attachment security

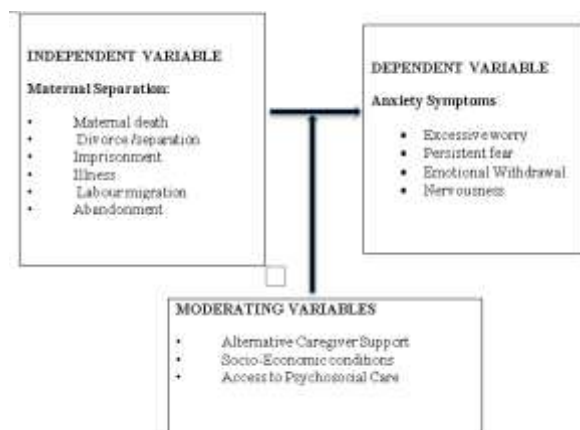
following maternal separation. The third domain, Ecological Conditions, encompasses broader environmental factors including household stability, poverty, community support systems, and access to psychosocial services.

By integrating these domains, MCART provides a broader explanatory framework for understanding why maternal separation may not result in uniform psychological outcomes among children. Some children who experience maternal separation may develop elevated anxiety symptoms and emotional distress, whereas others may demonstrate resilience because of supportive caregiving relationships and favourable ecological conditions. The framework also provides a basis for understanding why children who remain in regular maternal care may differ in their anxiety symptom levels from children who have experienced prolonged maternal separation.

In this study, maternal separation constitutes the principal condition of interest, while anxiety symptoms represent the psychological outcome. Caregiver support, socio-economic conditions, and access to psychosocial services are considered contextual factors that may influence the relationship between maternal separation and anxiety symptoms. The theory therefore provides the basis for examining both the differences in anxiety symptoms between children who have experienced maternal separation and those who have not experienced prolonged maternal separation and the variation in anxiety symptoms associated with different maternal-separation experiences.

CONCEPTUAL FRAMEWORK

The relationship between the study variables is diagrammed in the schematic layout below:



In this framework, maternal separation status constitutes the independent variable and distinguishes between children who have experienced prolonged maternal separation and children who have not experienced prolonged maternal separation and therefore constitute the comparison group. Among children who have experienced maternal separation, the study further considers the duration and pathway of separation and the caregiver arrangement as relevant characteristics.

Maternal separation refers to the physical or emotional absence of the biological mother resulting from circumstances such as labour migration, maternal death, prolonged illness, imprisonment, abandonment, or marital dissolution resulting in maternal absence.

The dependent variable is anxiety symptoms among children, operationalized through indicators including excessive worry, persistent fear, emotional withdrawal, and nervousness, as assessed using the adapted Screen for Child Anxiety Related Emotional Disorders (SCARED) scale.

The relationship between maternal separation status and anxiety symptoms is considered in the context of three moderating variables: alternative caregiver support, socio-economic conditions, and access to psychosocial services. Alternative caregiver support refers to the emotional availability, consistency, stability, and responsiveness of substitute caregivers, such as grandparents, guardians, or other extended-family caregivers. Socio-economic conditions refer to household circumstances such as economic stability, poverty, and availability of basic resources. Access to psychosocial services refers to the availability and use of counselling, school-based

psychological support, and other relevant mental-health services.

Operational Definition of Terms

Access to Psychosocial Services: The availability, accessibility, and utilization of counselling, school-based psychological support, and other relevant mental health and psychosocial support services available to public school children within Homa Bay County.

Anxiety Symptoms: Emotional, cognitive, behavioural, and physiological manifestations of anxiety among children, assessed in this study using the adapted Screen for Child Anxiety Related Emotional Disorders (SCARED) scale. The symptoms examined include excessive worry, persistent fear, emotional withdrawal, nervousness, and other anxiety-related manifestations measured by the adapted instrument.

Caregiver Support: The emotional availability, stability, responsiveness, and practical support provided to a child by an alternative caregiver following maternal separation.

Such caregivers may include grandparents, aunts, uncles, elder siblings, guardians, or other persons responsible for the child's day-to-day care.

Maternal Separation: The physical or emotional disruption of a child's regular relationship and day-to-day care by the biological mother due to circumstances such as maternal death, labour migration, prolonged illness, imprisonment, abandonment, or marital dissolution resulting in maternal absence.

Maternal Separation Status: The classification of a child according to whether the child has experienced prolonged maternal separation or has not experienced prolonged maternal separation. Children who have not experienced prolonged maternal separation constitute the comparison group in the study.

Prolonged Maternal Separation: Separation of a child from the biological mother for the minimum period specified in the study inclusion criteria.

Public School Children: Primary and secondary school learners aged between 8 and 17 years who are formally enrolled in public schools within Homa Bay County, Kenya.

Socio-economic Conditions: The material and household circumstances affecting the child's psychosocial environment, including household economic stability, poverty, availability of basic resources, and related living conditions.

LITERATURE REVIEW

Introduction

This chapter reviews literature relevant to maternal separation and anxiety symptoms among public school children. The review is organized around the major variables and concepts of the study, with maternal separation status as the independent variable and anxiety symptoms as the dependent variable. The review also examines the contextual factors identified in the conceptual framework, namely alternative caregiver support, socio-economic conditions, and access to psychosocial services, which may influence the relationship between maternal separation and anxiety symptoms.

The chapter begins by examining the concept of maternal separation and the circumstances through which separation from the biological mother may occur, including labour migration, maternal death, prolonged illness, imprisonment, abandonment, and marital dissolution resulting in maternal absence. It then reviews literature on childhood anxiety symptoms and their major manifestations, including excessive worry, persistent fear, emotional withdrawal, and nervousness. The chapter further examines the role of alternative caregiving, socio-economic conditions, and psychosocial support in children's adjustment following maternal separation.

The review also considers empirical evidence from international, African, and Kenyan contexts, with particular attention to evidence relevant to Homa Bay County. In addition, the literature is examined in relation to differences

in anxiety symptoms between children who have experienced prolonged maternal separation and children who have not experienced prolonged maternal separation. This comparison is important in establishing whether maternal separation is associated with differences in anxiety symptom severity rather than assuming that anxiety among separated children is attributable solely to maternal separation.

Finally, the chapter identifies the empirical, contextual, and methodological gaps in existing literature that the present study sought to address. The review therefore provides the theoretical and empirical foundation for examining the relationship between maternal separation and anxiety symptoms among public school children in Homa Bay County, Kenya, and for understanding the contextual factors and coping processes associated with children's experiences of maternal separation.

Maternal Separation

Maternal separation refers to the disruption of the mother–child relationship resulting from circumstances such as maternal migration, death, imprisonment, prolonged illness, abandonment, or marital dissolution that results in the mother no longer providing regular day-to-day care.

Existing literature has associated disruption of the maternal–child relationship with emotional, cognitive, behavioural, and developmental difficulties among children (Bowlby, 1969; Bernard, Hostinar, & Dozier, 2019). According to Bowlby's Attachment Theory, secure early attachment relationships contribute to emotional regulation, psychological security, and social competence, whereas disruption of an established attachment relationship may increase children's vulnerability to anxiety-related symptoms and other internalizing difficulties (Rutter, 1981).

Different forms of maternal separation may have different psychological implications for children. Maternal migration, for example, may result in children being left in the care of grandparents, relatives, or other alternative caregivers. Although such arrangements may provide continuity of physical care, they may not always provide the same degree of emotional availability and attachment support associated with regular maternal care. Evidence on children left behind by migrating parents has reported emotional insecurity, loneliness, and anxiety-related difficulties, particularly where caregiving arrangements are inconsistent or emotionally unsupportive (Fellmeth et al., 2018; Nunan, 2021; Xu, Mberu, Goldberg, & Luke, 2013). In the context of the present study, such evidence provides a basis for examining whether children who have experienced prolonged maternal separation differ in anxiety symptom levels from children who have remained in regular maternal care.

Maternal death represents another form of separation because it results in permanent loss of the maternal attachment relationship. Studies have associated maternal loss with grief-related distress, emotional instability, and psychological difficulties, particularly when subsequent caregiving arrangements are inconsistent or unstable (Bernard, Hostinar, & Dozier, 2019; Atwine, Cantor-Graae, & Bajunirwe, 2005). Maternal imprisonment may similarly disrupt established caregiving routines and attachment relationships while introducing additional experiences of stigma, uncertainty, fear, and emotional distress (Barker, Bukowski, & Deater-Deckard, 2021; Smith, White, Hagan, & Fox, 2020). Maternal abandonment or prolonged voluntary absence may further affect children's sense of security, trust, and belonging, with the psychological consequences potentially becoming more pronounced under conditions of socio-economic hardship and family instability (Chase-Lansdale & Owen, 1987; Kim, Lee, & Kim, 2019).

The psychological consequences of maternal separation, however, are not necessarily uniform across children. The availability and quality of alternative caregiving, the level of household economic stability, and access to psychosocial support may influence how children adjust to the absence of their mothers (Miller, Vaillancourt, & Boyle, 2021; Howard, Martin, Berlin, & Brooks-Gunn, 2011). A supportive and responsive alternative caregiver may provide emotional security and continuity of care, whereas inconsistent or emotionally unavailable care may increase children's vulnerability to anxiety and withdrawal. Similarly, socio-economic difficulties may compound the emotional demands associated with maternal separation, while access to counselling and other psychosocial services may provide additional support for affected children. These considerations are particularly relevant in rural

Kenyan settings, where extended-family and kinship-care arrangements may assume an important role when mothers are absent. The available literature therefore supports the need to examine maternal separation as a distinct child-caregiving experience while also considering the contextual conditions under which it occurs.

However, existing literature provides limited context-specific evidence directly comparing anxiety symptom levels between children who have experienced prolonged maternal separation and children who have remained in regular maternal care. This gap provides a basis for the present study in Homa Bay County, Kenya.

Maternal Separation Due to Migration

Migration, whether internal or cross-border, is an important pathway through which mothers may become separated from their children in sub-Saharan Africa. Labour-related migration may result in children being left under the care of grandparents, relatives, or other extended family members, an arrangement that may help maintain family continuity and provide for children's basic needs (Chase-Lansdale & Owen, 1987; Fellmeth et al., 2018). However, alternative caregiving arrangements may not always provide the same level of emotional security and attachment support associated with regular maternal care. Consequently, children experiencing maternal migration may become more vulnerable to anxiety symptoms, emotional dysregulation, and behavioural difficulties (Smith, White, Hagan, & Fox, 2020; Bernard, Hostinar, & Dozier, 2019).

In communities where maternal migration is socially accepted or economically necessary, children's emotional distress may remain underrecognized, contributing to underreporting of anxiety-related symptoms and delayed access to psychosocial support (Miller, Vaillancourt, & Boyle, 2021). Studies conducted within East Africa further indicate that children left behind by migrating mothers may experience elevated levels of worry, fear, loneliness, and emotional withdrawal, particularly when substitute caregivers are inconsistent, emotionally unavailable, or affected by socio-economic pressures (Fellmeth et al., 2018; Nunan, 2021).

Within the Kenyan context, both internal and cross-border migration remain important social realities. However, relatively few studies have specifically examined the psychological consequences of maternal migration for children, creating an important empirical gap in the literature (Xu, Mberu, Goldberg, & Luke, 2013). Existing evidence provides support for examining maternal migration as one pathway of maternal separation, particularly because the psychological experiences of children may vary according to the quality of alternative caregiving, household socio-economic conditions, and availability of psychosocial support. Understanding these dynamics is therefore important for developing culturally responsive interventions for children affected by maternal migration.

Maternal Separation Due to Death

Maternal death represents a permanent form of separation between a child and the biological mother and may have substantial implications for children's emotional and psychological development. In settings characterized by poverty, limited healthcare access, and significant health-related challenges, including Homa Bay County, maternal loss may place children at increased risk of psychological distress and anxiety-related symptoms (Atwine, Cantor-Graae, & Bajunirwe, 2005; National AIDS Control Council, 2016). Children who experience maternal death may experience feelings of insecurity, emotional instability, grief-related distress, and social withdrawal, particularly where subsequent caregiving arrangements are inconsistent, unstable, or overburdened (Bernard, Hostinar, & Dozier, 2019; Smith, White, Hagan, & Fox, 2020).

Neurological research also provides evidence concerning the possible psychological consequences of early maternal loss. Jin et al. (2019) reported that early maternal separation may be associated with alterations in the functioning of the anterior cingulate cortex, a brain region involved in emotional regulation and stress processing. Such findings provide possible biological insight into vulnerability to persistent anxiety symptoms during adolescence. However, much of this evidence has been generated outside African populations, limiting the extent to which such findings can be generalized directly to children in rural Kenyan settings.

Within Kenya, studies by Mutiso et al. (2018) and Nyayieka, Nyagwencha, and Nzyuko (2020) have reported emotional and behavioural difficulties among children affected by death and family disruption. However, limited

research has specifically isolated maternal death as a pathway of maternal separation and examined its relationship with anxiety symptoms among public school children in rural counties such as Homa Bay. This limitation in the existing evidence supports the need to examine maternal death alongside other forms of maternal separation and to determine whether children exposed to maternal separation differ in anxiety symptoms from children who have remained in regular maternal care.

Maternal Separation Due to Imprisonment

Maternal imprisonment can result in sudden and prolonged separation between a child and the biological mother, disrupting established caregiving arrangements and daily routines. Such disruption may have implications for children's emotional and psychological well-being, particularly where the child loses regular maternal care and is transferred to an alternative caregiver. Existing research has associated parental incarceration with internalizing difficulties, including anxiety symptoms, emotional withdrawal, fear, and difficulties in emotional regulation (Bernard, Hostinar, & Dozier, 2019). Within the context of the present study, this evidence is relevant to understanding the specific implications of maternal imprisonment as a pathway of maternal separation.

Barker, Bukowski, and Deater-Deckard (2021) further observed that reduced maternal availability may undermine children's emotional regulation and increase vulnerability to anxiety-related symptoms and psychological distress. Similarly, Smith, White, Hagan, and Fox (2020) reported that the absence of consistent maternal support may weaken children's coping capacities even where alternative caregiving arrangements are available. These findings suggest that the psychological experience of maternal imprisonment may extend beyond the physical absence of the mother and may be influenced by the quality and stability of the care that follows separation.

A major limitation in the existing literature is that much of the available evidence on maternal or parental incarceration has been generated in Western settings characterized by comparatively established welfare systems, formal child-protection structures, and greater availability of mental-health services. These circumstances differ from rural Kenyan settings such as Homa Bay County, where access to child psychological services may be constrained and caregiving responsibilities may be intensified by poverty and other social pressures (Mutiso et al., 2018; Nyayieka, Nyagwencha, & Nzyuko, 2020).

Consequently, children experiencing maternal imprisonment in such settings may face additional difficulties in having anxiety symptoms identified and receiving appropriate psychosocial support.

The limited availability of context-specific evidence on maternal imprisonment and children's anxiety symptoms therefore represents an important empirical gap. Although existing studies provide evidence of psychological difficulties associated with maternal incarceration, limited research has specifically examined maternal imprisonment as a form of maternal separation among public school children in Homa Bay County.

Examining this pathway as part of the broader study of maternal separation may contribute to understanding whether the circumstances of separation are associated with differences in children's anxiety symptoms and may provide evidence relevant to school-based counselling and psychosocial support for affected children.

Maternal Separation Due to Abandonment

Maternal abandonment represents another form of maternal separation in which the biological mother withdraws from the child's day-to-day care and the child is left without regular maternal contact or support. Unlike maternal separation resulting from circumstances such as migration or illness, abandonment may be experienced by the child as an intentional or unexplained loss of the maternal relationship. Such experiences may affect children's emotional security, trust, and sense of belonging and may contribute to anxiety-related symptoms, particularly where the circumstances surrounding the mother's absence are unclear or where alternative caregiving arrangements are unstable.

Children experiencing maternal abandonment may develop persistent fears of further rejection, excessive worry, emotional withdrawal, and difficulties forming or maintaining trusting relationships. The psychological experience may be intensified where caregivers avoid discussing the mother's absence or where the child receives inconsistent

explanations about the separation. Under such circumstances, uncertainty surrounding the mother's absence may make it difficult for the child to develop a sense of emotional security and may contribute to prolonged distress.

In the Kenyan context, maternal abandonment may occur within broader circumstances of poverty, family instability, relationship breakdown, migration, or other social pressures. Where children are subsequently placed under the care of relatives or other guardians, the quality and stability of the alternative caregiving arrangement may influence their psychological adjustment. However, limited empirical evidence is available on maternal abandonment as a distinct pathway of maternal separation and its association with anxiety symptoms among public school children in rural Kenyan settings.

The limited context-specific evidence on maternal abandonment therefore represents an additional empirical gap addressed by the present study. Examining abandonment alongside maternal migration, maternal death, and maternal imprisonment enables the study to identify the different forms through which maternal separation occurs and to assess whether the circumstances of separation are associated with differences in children's anxiety symptoms.

Anxiety Disorders

Anxiety symptoms among school-age children constitute multifaceted internalizing responses that may involve cognitive, physiological, emotional, and behavioral dimensions. Unlike anxiety presentations in adults, childhood anxiety may be expressed through somatic complaints, heightened vigilance, persistent worry, fear, emotional withdrawal, and concerns about the safety or availability of important attachment figures (Bowlby, 1969). These manifestations may affect children's emotional regulation, social relationships, school participation, and general psychological well-being.

In child-focused assessment, anxiety symptoms can be examined using standardized screening instruments such as the Screen for Child Anxiety Related Emotional Disorders (SCARED). The SCARED captures several dimensions of childhood anxiety, allowing different manifestations of anxiety to be assessed systematically. In the present study, the adapted instrument was used to assess anxiety symptoms among public school children, including manifestations such as excessive worry, persistent fear, emotional withdrawal, and nervousness.

The expression of anxiety among children may also be influenced by the social and environmental conditions in which they live. In Homa Bay County, children's emotional experiences may occur alongside household instability, economic hardship, changes in caregiving arrangements, and limited access to psychosocial support. Kenyan studies have reported emotional and behavioural difficulties among children and adolescents within such contexts (Kariuki et al., 2017; Mutiso et al., 2018). These contextual influences are important when examining anxiety symptoms because they may affect children's psychological adjustment independently of, or in interaction with, maternal separation.

The literature on childhood anxiety is therefore relevant to the present study in two ways. First, it provides the basis for identifying and measuring the manifestations of anxiety among children who have experienced maternal separation. Second, it provides a basis for comparing anxiety symptom levels between children who have experienced prolonged maternal separation and children who have not experienced prolonged maternal separation. This comparison is important because elevated anxiety symptoms among separated children should be interpreted in relation to the anxiety levels observed among children who remain in regular maternal care.

Excessive Worry hallmark among Children

Excessive worry is an important cognitive manifestation of anxiety among children and may involve persistent apprehension, fear of adverse events, and difficulty controlling distressing thoughts. Children experiencing disruption of established attachment relationships may be particularly vulnerable to persistent worry because the absence of a primary source of emotional security may affect their ability to regulate distress (Bernard et al., 2019). In the context of maternal separation, worry may be expressed through concerns about the mother's safety, continued absence, family stability, or the reliability of alternative caregivers.

Much of the available evidence on the psychological consequences of maternal separation has been generated in settings with relatively developed psychosocial and mental-health support systems. Although such research provides evidence concerning mechanisms such as disrupted attachment security and difficulties in emotional regulation, the expression and severity of excessive worry may vary across social and economic contexts. This is important when considering children living in rural Kenyan communities, where household poverty, caregiving responsibilities, and limited access to professional psychosocial support may shape children's responses to separation.

Within public school settings in Homa Bay County, economic and social circumstances may further contribute to children's emotional vulnerability. Household poverty, changes in caregiving arrangements, and other community-level challenges may create continuing sources of uncertainty and insecurity. Kenyan studies have documented elevated internalizing difficulties among children exposed to adverse social and economic conditions (Kariuki et al., 2017; Magai et al., 2018). These conditions may compound the emotional difficulties associated with maternal separation and contribute to persistent worry among affected children.

The quality of alternative caregiving may also influence children's experience of excessive worry. Where caregivers are emotionally responsive and provide consistent reassurance, children may have greater opportunities to regulate distress and develop a sense of security. Conversely, caregivers who are overburdened, emotionally distressed, or unable to provide consistent support may have greater difficulty responding to children's emotional needs. Barker, Bukowski, and Deater-Deckard (2021) suggest that caregiver emotional states and caregiving environments may influence children's patterns of emotional regulation and anxiety.

The literature therefore indicates that excessive worry should be considered not only as an individual symptom but also within the relational and environmental circumstances surrounding maternal separation. For the present study, excessive worry constitutes one manifestation of anxiety symptoms assessed among public school children and provides part of the basis for examining whether anxiety symptom levels differ between children who have experienced prolonged maternal separation and those who have not, as well as whether characteristics of maternal separation are associated with anxiety symptoms.

Fear responses among Children

Heightened fear responses, including acute separation distress, somatic manifestations of anxiety during school transitions, and exaggerated startle responses, are among the behavioural manifestations that may occur among children experiencing maternal separation. Bowlby's Attachment Theory (1969) explains such responses in relation to the child's need to maintain proximity to an important attachment figure. When the primary attachment figure becomes inaccessible, the child may experience heightened fear and insecurity as the attachment system becomes activated in response to perceived loss of safety. The frequency and intensity of these responses may vary depending on the availability and stability of supportive relationships within the child's immediate environment.

Empirical evidence suggests that prolonged or unexpected maternal absence may be associated with increased fear-related internalizing symptoms during middle childhood. Disruptions in consistent caregiving relationships have been linked to increased emotional insecurity and may contribute to behaviours such as school avoidance and persistent fears (McArthur et al., 2020). However, much of this evidence comes from contexts with more established social and psychosocial support systems, which may differ from conditions experienced by children in low-resource school environments.

Within Homa Bay County, fear responses among children may occur alongside other sources of insecurity, including changes in caregiving arrangements, household economic difficulties, and limited access to psychosocial support. Children experiencing inconsistent alternative care may demonstrate greater emotional insecurity and heightened vigilance (Kariuki et al., 2017; Nyayieka et al., 2020). Where maternal separation results from circumstances such as labour migration or prolonged illness, children may also experience continuing uncertainty concerning their mother's availability and the stability of their caregiving environment.

Within Homa Bay County, fear responses among children may occur alongside other sources of insecurity,

including changes in caregiving arrangements, household economic difficulties, and limited access to psychosocial support. Children experiencing inconsistent alternative care may demonstrate greater emotional insecurity and heightened vigilance (Kariuki et al., 2017; Nyayieka et al., 2020). Where maternal separation results from circumstances such as labour migration or prolonged illness, children may also experience continuing uncertainty concerning their mother's availability and the stability of their caregiving environment. These contextual conditions may therefore contribute to the persistence and severity of fear-related anxiety symptoms among children experiencing maternal separation.

Withdrawal effects among Children

Withdrawal, characterized by social isolation, reduced communication, avoidance of peers, and diminished social engagement, is a common behavioural manifestation of childhood anxiety. Miller, Vaillancourt, and Boyle (2021) emphasize that temperament may influence how children respond to maternal separation. Children with naturally inhibited or anxious temperamental dispositions may be more likely to withdraw socially following maternal separation because the loss of a stable caregiver can heighten internal distress and reduce their willingness or ability to seek alternative emotional support.

From this perspective, withdrawal may represent an emotional response to perceived psychological threat rather than simply a passive behavioural reaction.

The interpretation of withdrawal behaviours is also influenced by the surrounding socio-cultural context. In many African settings, including Kenya, quietness, reserve, and reduced social interaction may sometimes be interpreted as signs of discipline, obedience, or respect rather than indicators of emotional distress. Such interpretations may contribute to the under recognition of internalizing symptoms among children. Mutiso et al. (2018) observed that mental health difficulties among Kenyan children may remain underrecognized because of limited mental-health awareness, social stigma, and inadequate diagnostic and support resources.

Population-based studies in rural Kenya have reported elevated behavioural and emotional difficulties among children exposed to caregiving disruption and family instability (Kariuki et al., 2017; Magai et al., 2018). In Homa Bay County, maternal absence may occur alongside household poverty, changes in caregiving arrangements, food insecurity, and limited access to psychosocial support. These circumstances may contribute to social withdrawal by increasing children's emotional burden and reducing opportunities for stable emotional support. Withdrawal among children affected by maternal separation may therefore reflect both anxiety-related distress and the broader environmental challenges surrounding the child's caregiving situation.

The literature highlights the importance of recognizing withdrawal as a potentially significant manifestation of anxiety while taking account of the cultural and environmental context in which children's behaviour is interpreted. This is particularly important in school settings, where quietness or social isolation may otherwise be overlooked or interpreted as normal behaviour rather than possible emotional distress.

Nervousness symptoms among Children

Nervousness, often expressed through restlessness, hypervigilance, irritability, and somatic complaints such as stomach aches or headaches, is a common manifestation of anxiety among children experiencing maternal separation. Neurological evidence provides insight into the possible relationship between early maternal separation and the regulation of stress and emotional responses. Jin et al. (2019) reported that early maternal loss was associated with alterations in the anterior cingulate cortex, a brain region involved in threat detection, emotional regulation, and stress processing. Such alterations may contribute to increased vulnerability to persistent anxiety-related symptoms during adolescence. However, much of the available evidence has been derived from clinical samples in high-income settings, which limits direct generalization to children living in low-resource environments.

Callaghan, Tottenham, and Barker (2020) suggest that the severity of emotional and stress-related responses following maternal separation may be influenced by the quality of subsequent caregiving relationships. Supportive and emotionally responsive caregivers may help children regulate distress and regain a sense of security, whereas

inconsistent, emotionally unavailable, or overwhelmed caregivers may contribute to continued hypervigilance and emotional insecurity. This perspective is relevant to rural Kenyan settings such as Homa Bay County, where maternal separation may occur alongside economic hardship, caregiver strain, and limited access to formal mental-health services (Kariuki et al., 2017; Mutiso et al., 2018).

Kenyan studies have similarly documented emotional difficulties among children and adolescents, including fear, nervousness, and somatic manifestations of anxiety, particularly in communities affected by poverty and disrupted caregiving arrangements (Magai et al., 2018; Nyayieka et al., 2020). These findings suggest that nervousness among children experiencing maternal separation may be shaped by both the disruption of the maternal attachment relationship and the social and environmental conditions surrounding the child after separation.

The available literature therefore indicates that nervousness is an important manifestation of childhood anxiety that warrants attention when examining children's psychological responses to maternal separation. Its expression may vary according to the child's caregiving environment, socio-economic circumstances, and access to psychosocial support.

The Moderating Role of Caregiver Support, Socio-Economic Conditions, and Psychosocial Services

The relationship between maternal separation and anxiety symptoms among children may

vary according to the relational and environmental conditions surrounding the child. Developmental and ecological perspectives suggest that the psychological consequences of maternal separation are not uniform across children because supportive relationships and environmental resources may either buffer or intensify emotional distress (Bowlby, 1969; Miller et al., 2021). From the perspective of the Multi-Context Attachment Resilience Theory (MCART), alternative caregiver support, socio-economic conditions, and access to psychosocial services represent important contextual factors that may influence children's adjustment following maternal separation.

This section therefore reviews literature on the potential moderating roles of alternative caregiver support, socio-economic conditions, and access to psychosocial services in the relationship between maternal separation and anxiety symptoms among public school children. Particular attention is given to how these factors may strengthen, weaken, or otherwise influence children's psychological responses following separation from the biological mother. The review also considers the relevance of these factors within the social and economic context of Homa Bay County, Kenya.

The Moderating Role of Caregiver Support

Alternative caregiver support, defined as the emotional availability, stability, and responsiveness of substitute caregivers, may serve as an important psychological buffer following maternal separation. According to Bowlby's Attachment Theory, when an established maternal attachment relationship is disrupted, a supportive alternative caregiver may help preserve the child's sense of security by providing consistent care, emotional responsiveness, and reassurance (Bowlby, 1969). Such relational stability may support emotional regulation and reduce children's vulnerability to internalizing difficulties such as excessive worry, fear, and withdrawal (Callaghan et al., 2020).

In the cultural context of western Kenya, particularly within Luo communities, kinship-care arrangements in which grandparents, aunts, elder siblings, or other relatives assume caregiving responsibilities are common (Kimani & Kombo, 2010). These arrangements may provide continuity of care following maternal separation; however, their capacity to protect children's psychological well-being may vary according to the emotional availability and resources of the alternative caregiver. Where caregivers are responsive, consistent, and emotionally supportive, children may experience greater security and better adjustment following maternal separation (Howard et al., 2011).

Conversely, alternative caregivers who are elderly, overburdened, financially constrained, or emotionally distressed may have difficulty providing consistent emotional support. In such circumstances, children may continue to experience insecurity, hypervigilance, nervousness, and withdrawal. The literature therefore suggests that the quality of alternative caregiving may influence how children respond psychologically to maternal separation and may alter the strength of the relationship between maternal separation and anxiety symptoms.

The Moderating Role of Socio-Economic Conditions

Socio-economic conditions, including household income stability, food security, and access to basic resources, may influence children's emotional vulnerability following maternal separation. From an ecological perspective, children's psychological development is influenced by the material and social conditions within their households. When maternal separation occurs in households with relatively stable economic resources, families may be better positioned to absorb financial disruptions, maintain children's school participation, and obtain additional forms of social or psychosocial support. In contrast, economic insecurity may increase children's exposure to stressors that can compound the emotional difficulties associated with maternal separation.

Within Homa Bay County, maternal separation may occur alongside poverty, household vulnerability, and economic pressures associated with livelihoods in the Lake Victoria region (Kenya National Bureau of Statistics, 2019; Nunan, 2021). When a mother migrates or dies, the household may experience changes in income and caregiving responsibilities, potentially increasing financial pressure on the remaining caregivers.

Such circumstances may affect the stability of children's daily lives and the resources available for their emotional and educational needs.

In resource-constrained households, children may therefore experience both the emotional consequences of separation and material difficulties such as food insecurity, irregular school attendance, or difficulties meeting educational needs. These continuing stressors may contribute to worry, emotional withdrawal, and other anxiety-related symptoms (Kariuki et al., 2017; Magai et al., 2018). The literature consequently suggests that socio-economic conditions may alter the relationship between maternal separation and anxiety symptoms by either buffering or intensifying children's exposure to stress following separation.

The Moderating Role of Psychosocial and Mental Health Services

Access to mental health and psychosocial support services, particularly within school settings, may play an important role in supporting children who experience maternal separation. Counselling services, peer-support programmes, and supportive school environments may provide children with opportunities to express emotional concerns, process experiences of separation, and develop adaptive coping strategies (Miller et al., 2021). The availability of responsive guidance and counselling services may therefore reduce children's vulnerability to persistent anxiety-related symptoms following maternal separation.

Despite the potential benefits of school-based psychosocial support, access to structured mental health services remains uneven across rural public schools in Kenya. In some settings, school counselling services may be limited by inadequate resources, while teachers may have limited specialized training in child mental health and trauma-informed support (Nyayieka et al., 2020). These limitations may reduce the ability of schools to identify and respond effectively to anxiety symptoms among children experiencing maternal separation.

Community attitudes toward mental health may further influence children's willingness to disclose emotional difficulties. Mutiso et al. (2018) reported that stigma and limited mental-health awareness may contribute to under recognition of psychological difficulties among children. Where children have limited access to formal psychosocial support and lack supportive relationships within their families, they may be more likely to rely on less adaptive responses such as emotional withdrawal and social isolation.

The literature therefore suggests that access to psychosocial and mental health services may influence how children adjust following maternal separation. The availability, accessibility, and utilization of such services may either buffer or intensify the relationship between maternal separation and anxiety symptoms, depending on the extent to which children receive timely and appropriate support.

Coping Strategies Used by Children and Caregivers

The psychological adjustments made by children and their alternative caregivers following maternal separation may involve a range of behavioural, cognitive, emotional, and social responses. Coping strategies refer to the ways

individuals attempt to manage, adapt to, or respond to stressful experiences associated with separation. Within developmental and stress-coping perspectives, these responses may broadly be categorized as adaptive or maladaptive (Miller et al., 2021).

Adaptive coping strategies may help children and caregivers manage emotional distress, maintain social functioning, and develop resilience following maternal separation. Such strategies may include seeking emotional support, maintaining engagement in school, participating in religious or community activities, communicating with trusted adults, and developing supportive relationships. Maladaptive coping strategies, in contrast, may provide temporary relief from distress but may interfere with emotional adjustment and social functioning. These may include withdrawal, social isolation, avoidance, emotional suppression, and other responses that may be associated with persistent anxiety symptoms (Miller et al., 2021).

The availability and effectiveness of coping strategies may depend on the child's developmental stage, the quality of alternative caregiving, household circumstances, and access to supportive social and psychosocial resources. Consequently, understanding the coping responses adopted by children and caregivers is important in examining how families adjust to maternal separation and the strategies that may either support or hinder psychological resilience.

Adaptive Coping Strategies

Adaptive coping strategies, including seeking emotional support, religious involvement, peer interaction, and active school engagement, may serve as important protective mechanisms for children experiencing maternal separation. When children seek support from trusted adults such as teachers, school counsellors, or supportive relatives, they may have opportunities to express and process feelings associated with grief, anxiety, and separation. Such supportive relationships may contribute to better emotional adjustment and psychological well-being (Callaghan et al., 2020).

In many rural Kenyan communities, religious institutions and faith-based youth groups may provide important sources of social connection and emotional support. Participation in religious activities may provide children experiencing maternal separation with a sense of belonging, social connectedness, meaning, and a structured routine (Mutiso et al., 2018). Similarly, continued engagement in school and peer relationships may provide opportunities for positive social interaction, distraction from distress, and development of supportive relationships outside the home.

For alternative caregivers, adaptive coping may involve seeking support from community members, accessing informal financial-support networks, obtaining guidance from community elders, and maintaining communication with the child's school (Kimani & Kombo, 2010). Such strategies may help caregivers manage the practical and emotional demands associated with caring for a child following maternal separation. Where caregivers are better able to manage their own stress and maintain supportive relationships with the child, they may also be better positioned to provide consistent emotional support.

Overall, the literature suggests that adaptive coping operates at both the child level and caregiver level and may contribute to healthier adjustment following maternal separation. These strategies are therefore important to consider when examining how children and caregivers respond to the experience of maternal separation.

Maladaptive Coping Strategies

Maladaptive coping strategies, such as emotional withdrawal, social isolation, and behavioural avoidance, may occur when children experience difficulty adjusting to maternal separation or lack adequate relational support. When children are unable to express or process the emotional consequences of their mother's absence, they may withdraw from peers and caregivers or avoid situations that remind them of the separation. Bowlby's Attachment Theory (1969) suggests that disruption of an established attachment relationship may contribute to insecurity and distress, while Bernard et al. (2019) associate disrupted caregiving relationships with internalizing difficulties and challenges in emotional regulation.

Alternative caregivers may also adopt less adaptive coping responses when they experience significant economic pressure, emotional strain, or limited access to parenting support. These responses may include emotional detachment, harsh disciplinary practices, avoidance of discussion about the mother's absence, or limited communication with the child (Smith et al., 2020). Such approaches may reduce opportunities for children to express their feelings and obtain reassurance following maternal separation.

Within close-knit communities such as Homa Bay County, social stigma surrounding circumstances such as imprisonment, marital dissolution, or abandonment may further discourage open communication about maternal separation. Where caregivers and children avoid discussing the circumstances of the separation, children may experience uncertainty and difficulty processing the loss of the maternal relationship. Such circumstances may contribute to emotional withdrawal, social isolation, and other maladaptive responses to separation.

The literature therefore indicates that maladaptive coping may occur at both the child and caregiver levels and may be influenced by the availability of emotional support, household circumstances, and the social environment surrounding maternal separation.

Understanding these responses is important for identifying coping patterns that may hinder children's adjustment following separation.

SUMMARY OF LITERATURE AND EMPIRICAL GAPS

The literature reviewed in this chapter indicates that maternal separation is an important disruption of the mother-child relationship that may be associated with emotional and psychological difficulties among children. The reviewed studies describe anxiety-related manifestations including excessive worry, fear, withdrawal, and nervousness following disruption of maternal care and attachment relationships (Bowlby, 1969; Bernard et al., 2019; Jin et al., 2019). However, the psychological experiences of children following maternal separation are not necessarily uniform. Alternative caregiver support, socio-economic conditions, and access to psychosocial services may influence children's adjustment and may either buffer or intensify anxiety-related difficulties (Howard et al., 2011; Miller et al., 2021).

The literature further indicates that maternal separation may occur through different pathways, including labour migration, maternal death, imprisonment, prolonged illness, and abandonment. These pathways may involve different forms of loss, uncertainty, and changes in caregiving arrangements. However, much of the available literature in Kenya and other African settings examines vulnerable children, orphanhood, parental absence, or alternative care as broad categories rather than isolating maternal separation as a distinct experience. Consequently, there is limited context-specific evidence showing the prevalence and forms of maternal separation among public school children and examining whether different separation pathways are associated with differences in anxiety symptoms.

A further empirical gap concerns the comparison of anxiety symptom levels between children who have experienced maternal separation and children who have not experienced prolonged maternal separation. Although existing studies provide evidence that caregiving disruption and maternal absence may be associated with emotional difficulties, relatively limited evidence is available from the study context to establish whether children exposed to prolonged maternal separation have significantly different levels of anxiety symptoms from children who remain in regular maternal care. A direct comparison is therefore important for distinguishing anxiety associated with maternal separation from anxiety occurring more generally among children.

Methodologically, the reviewed literature also shows differences in the approaches used to investigate child mental health and family-related experiences. Qualitative studies provide important information about children's and caregivers' lived experiences, while quantitative studies provide opportunities to measure psychological symptoms systematically. However, there is limited context-specific research combining a standardized child anxiety screening measure with qualitative evidence from children and caregivers to examine maternal separation, anxiety symptoms, and coping experiences within the same study. The use of the adapted Screen for Child Anxiety Related Emotional Disorders (SCARED) together with qualitative approaches may therefore provide a more comprehensive

understanding of the phenomenon.

The literature also highlights a contextual gap in the recognition of anxiety-related symptoms among children in rural African settings. Behaviours such as quietness, social withdrawal, and reduced communication may sometimes be interpreted as obedience, discipline, or normal reserve rather than possible manifestations of psychological distress (Mutiso et al., 2018). This may contribute to under recognition of anxiety symptoms and delayed psychosocial support. A contextually appropriate assessment of anxiety manifestations among public school children is therefore important, particularly in settings where access to specialized child mental-health services may be limited.

Geographically, evidence from Homa Bay County has documented significant mental-health concerns among school-going children and adolescents, including anxiety and depression (Nyayieka, Nyagwencha, & Nzyuko, 2020). Nevertheless, limited evidence has specifically examined maternal separation as the principal exposure and its relationship with anxiety symptoms among public school children in the county. There is also limited evidence on the role of caregiver support, socio-economic conditions, and access to psychosocial services in shaping children's adjustment following maternal separation.

The present study therefore sought to address these empirical, contextual, and methodological gaps by examining the prevalence and forms of maternal separation, assessing and comparing anxiety symptom levels between children who had experienced prolonged maternal separation and those who had not, examining the relationship between maternal separation and anxiety symptoms, and identifying coping strategies used by children and caregivers. The study also considered caregiver support, socio-economic conditions, and access to psychosocial services as contextual factors relevant to children's adjustment. By integrating quantitative assessment with qualitative evidence, the study was intended to provide context-specific evidence that may inform school counselling, caregiver support, child-welfare interventions, and psychosocial services for children in Homa Bay County.

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter described the research design and methodology adopted to examine the influence of maternal separation on anxiety symptoms among public school children in Homa Bay County, Kenya. The chapter presented the research design, study location, target population, sample size and sampling procedures, data collection instruments, pilot testing procedures, data collection procedures, and methods of data analysis. It also described the measures undertaken to establish the validity and reliability of the research instruments and the ethical considerations observed throughout the study. The methodology provided the systematic framework for collecting and analyzing data from children who had experienced prolonged maternal separation and children who had not experienced prolonged maternal separation, together with the qualitative participants included in the study. Collectively, these procedures provided a basis for addressing the study objectives and generating credible findings on maternal separation, anxiety symptoms, and coping strategies among public school children in Homa Bay County.

Research Design

The study adopted a mixed-methods cross-sectional convergent parallel research design. The quantitative component employed a comparative and correlational approach to examine anxiety symptom levels among public school children who had experienced prolonged maternal separation and those who had not experienced prolonged maternal separation, and to examine the relationship between maternal separation and anxiety symptoms. The quantitative component did not involve manipulation of the study variables.

The qualitative component employed a descriptive approach to explore the lived experiences of maternal separation, children's and caregivers' coping strategies, and the contextual circumstances surrounding children's psychological adjustment. Qualitative data were collected concurrently with the quantitative data through semi-structured interviews and focus group discussions involving relevant participants.

The convergent mixed-methods design was selected because it enabled the study to collect quantitative and qualitative evidence during the same phase of the research, analyze the two forms of data separately, and integrate their findings during interpretation. The quantitative component provided measurable evidence on anxiety symptoms and the relationship between maternal separation and anxiety, while the qualitative component provided contextual understanding of children's and caregivers' experiences, coping responses, and caregiving circumstances. Integration of the two forms of evidence enhanced the comprehensiveness of the study findings.

Target Population

The target population for the quantitative component of the study comprised public primary and secondary school children aged 8–17 years enrolled in public schools in Homa Bay County, Kenya. The quantitative population was divided into two groups: children who had experienced prolonged maternal separation and children who had not experienced prolonged maternal separation and remained in regular maternal care. The comparison group was included to provide a clear baseline against which anxiety

symptom levels among children affected by maternal separation could be examined. The qualitative population comprised alternative caregivers or guardians, teachers or school counsellors, and selected older children and adolescents with direct knowledge or experience of maternal separation, caregiving, emotional adjustment, and coping.

The quantitative age range of 8–17 years was retained because it corresponds to the participants represented in the study dataset and encompasses middle childhood and adolescence. This age range allowed the study to capture developmental differences in children's ability to describe emotional experiences and anxiety symptoms. The participating schools were distributed across the eight administrative sub-counties covered by the study, namely Homa Bay Town, Rachuonyo East, Rachuonyo South, Rachuonyo North, Ndihiwa, Rangwe, Suba North, and Suba South, with two public schools selected within each sub-county.

The qualitative component of the study comprised alternative caregivers or guardians, teachers, school counsellors, and selected older children who could provide contextual information regarding maternal separation, anxiety experiences, caregiving arrangements, and coping strategies. Alternative caregivers included grandparents, aunts, uncles, elder siblings, guardians, and other persons responsible for the day-to-day care of children following maternal separation. Their participation was important in providing information about caregiving practices, emotional support, household circumstances, and children's adjustment following separation.

Teachers and school counsellors were included because of their regular interaction with children within the school environment and their ability to observe emotional, behavioural, social, and academic changes among learners. Their perspectives provided additional contextual information concerning children's psychological adjustment and access to school-based psychosocial support.

Older children and adolescents participating in the qualitative component were included because they were considered capable of describing their experiences of maternal separation, emotional responses, and coping strategies in greater detail. Their perspectives complemented the information obtained from caregivers, teachers, and school counsellors.

The separation of the target population into quantitative and qualitative components provided a clear basis for sampling and analysis. The quantitative component enabled comparison of anxiety symptoms between children who had experienced prolonged maternal separation and those who had not, while the qualitative component provided contextual understanding of maternal separation, caregiving experiences, and coping strategies.

Sample Size and Sampling Procedure

The study adopted a mixed-methods sampling approach to capture both the quantitative and qualitative dimensions of maternal separation and anxiety symptoms among public school children. To ensure geographical representation,

the study covered two public schools within each of the eight administrative sub-counties of Homa Bay County, namely Homa Bay Town, Rachuonyo East, Rachuonyo South, Rachuonyo North, Ndhiwa, Rangwe, Suba North, and Suba South, resulting in 16 participating schools.

Quantitative Sample Size

The initial sample size for children who had experienced prolonged maternal separation was determined using Cochran's (1977) formula for proportions:

$$n_0 = Z^2 p(1 - p) / e^2$$

Where:

n_0 = initial required sample size

Z = standard normal value corresponding to the selected confidence level

p = estimated population proportion

e = acceptable margin of error

Using a 95% confidence level, a population proportion of 0.50, and a margin of error of 0.05, the initial sample size was calculated as:

$$n_0 = (1.96)^2(0.50)(1 - 0.50) / (0.05)^2 \quad n_0 = 384.16 \approx 384$$

Because the population of children experiencing prolonged maternal separation within the selected educational clusters was finite and was estimated at $N = 175$, the finite population correction (FPC) was applied to obtain the adjusted sample size.

The finite population correction formula was:

$$n = n_0 / [1 + ((n_0 - 1) / N)]$$

Where:

n = adjusted sample size

n_0 = initial sample size

N = known population size Substituting the values:

$$n = 384 / [1 + ((384 - 1) / 175)]$$

$$n = 384 / [1 + (383 / 175)]$$

$$n = 384 / (1 + 2.188)$$

$$n = 384 / 3.188$$

$$n = 120.45$$

Since the sample size is expressed as a whole number, the result was rounded to the nearest whole number. Thus, the adjusted sample size for children who had experienced prolonged maternal separation was 120 participants.

Comparison Group

Because the study also sought to compare anxiety symptom levels between children who had experienced prolonged maternal separation and those who had not experienced prolonged maternal separation, a comparison group of 120 children was included. The comparison group was selected using the same general age and school-based sampling framework as the maternal-separation group.

The comparison group comprised public school children aged 8–17 years who had not experienced prolonged maternal separation of six months or more and who were receiving regular day-to-day care from their biological mothers. Children in the comparison group were selected from the same participating schools, where feasible, to enhance comparability in school and community context.

Consequently, the total quantitative sample comprised 240 children, consisting of 120 children who had experienced prolonged maternal separation and 120 children who had not experienced prolonged maternal separation.

Sampling Procedure for Quantitative Participants

The 16 participating schools were selected purposively based on administrative information indicating relatively high incidences of maternal separation. Within the selected schools, children who met the inclusion criteria were identified and selected using stratified random sampling. Stratification was undertaken to facilitate balanced representation according to sex and age categories, particularly middle childhood and adolescence.

Children in the maternal-separation group were required to have experienced continuous separation from their biological mother for a minimum period of six months due to circumstances such as maternal death, labour migration, prolonged illness, imprisonment, abandonment, or marital dissolution resulting in maternal absence.

Children in the comparison group were required not to have experienced prolonged maternal separation and to remain in regular maternal care. The same general age and sex strata were applied when selecting comparison participants in order to enhance comparability between the two groups.

Qualitative Sampling

The qualitative component employed purposive sampling to identify participants who had direct knowledge or experience relevant to maternal separation, children's emotional adjustment, caregiving, and coping. The qualitative participants comprised 20 alternative caregivers, 10 teachers or school counsellors, and 24 older children and adolescents aged 13–17 years.

The 20 alternative caregivers included grandparents, aunts, uncles, elder siblings, guardians, and other persons responsible for the day-to-day care of children following maternal separation. They were selected because of their direct experience in providing emotional, social, and practical support to children affected by maternal separation.

The 10 teachers or school counsellors were purposively selected because of their regular interaction with learners and their role in identifying and responding to children's emotional and behavioural difficulties within the school environment.

The 24 older children and adolescents aged 13–17 years participated in focus group discussions. They were included to provide age-appropriate accounts of their experiences of maternal separation, emotional responses, and coping strategies.

The combination of quantitative and qualitative sampling enabled the study to obtain measurable information on anxiety symptoms and contextual information regarding maternal separation, caregiving arrangements, psychosocial support, and coping strategies.

Research Instruments

Quantitative Data Collection Instruments

The primary quantitative data collection instrument was a structured Child Anxiety Questionnaire adapted from the standardized Screen for Child Anxiety Related Emotional Disorders (SCARED). The quantitative anxiety measure comprised 20 items assessing four operational dimensions of anxiety symptoms: Worry (Items 1–5), Fear (Items 6–10), Withdrawal (Items 11–15), and Nervousness (Items 16–20). Each item was scored on a five-point response scale ranging from 1 = Never to 5 = Always, with higher scores indicating greater levels of reported anxiety symptoms.

Minor cultural and contextual adaptations were made to ensure that the items were understandable and relevant to children within the Kenyan public-school context. The wording was adapted where necessary to reflect common school, family, and caregiving experiences among children in Homa Bay County while retaining the intended content of the measured constructs.

A structured demographic section was administered together with the anxiety questionnaire. It collected information including age, sex, school level, maternal separation status, duration and pathway of maternal separation, and current caregiver arrangement. The questionnaire also contained sections measuring caregiver support, socio-economic conditions, and access to psychosocial services, which generated composite scores for the three moderating variables examined in the study.

The same quantitative instrument was administered to both children who had experienced prolonged maternal separation and children who had not experienced prolonged maternal separation, thereby allowing comparison of anxiety symptom scores between the two groups. The internal consistency of the 20-item anxiety scale was assessed during pilot testing using Cronbach's alpha, which produced a coefficient of 0.782, indicating acceptable internal consistency for the study population.

Qualitative Data Collection Instruments

Qualitative data were collected using semi-structured interview schedules and Focus Group Discussion (FGD) guides. Semi-structured interviews were conducted individually with the selected alternative caregivers and teachers or school counsellors. The interview schedules explored children's caregiving arrangements, emotional and behavioural responses to maternal separation, caregiver support, environmental circumstances, psychosocial support, and coping experiences.

Focus Group Discussions were conducted with selected older children and adolescents aged 13–17 years. The FGD guides were designed to facilitate discussion of participants' experiences of maternal separation, emotional responses, sources of support, and coping strategies. The group format provided an opportunity for participants to describe their experiences and perspectives within a guided and age-appropriate discussion environment.

The use of semi-structured interviews and FGDs complemented the quantitative questionnaire by providing contextual information concerning the experiences of children and caregivers that could not be fully captured through standardized anxiety scores.

Validity and Reliability of Research Instruments

For the findings of the study to be scientifically credible, the research instruments were required to demonstrate both validity and reliability. Validity referred to the extent to which the instruments accurately measured the constructs they were intended to assess, while reliability referred to the consistency and stability of the measurements across participants and research contexts. Establishing these qualities was particularly important because the study involved children and examined psychological symptoms, where measurement errors could affect estimates of anxiety symptoms, relationships between study variables, and the interpretation of the findings.

The study therefore undertook systematic procedures to establish and enhance the validity and reliability of the quantitative and qualitative research instruments. For the quantitative instrument, attention was given to content, construct, and face validity, as well as internal consistency and stability over time. For the qualitative instruments, expert review, consistency in administration, and triangulation of information were used to enhance the credibility and dependability of the data collected.

Validity

Validity referred to the extent to which the research instruments accurately measured the constructs they were intended to assess. In this study, the Child Anxiety Questionnaire adapted from the Screen for Child Anxiety Related Emotional Disorders (SCARED) underwent content validation through expert review by the university supervisors and practicing child psychologists. The experts assessed whether the questionnaire items adequately captured

manifestations of childhood anxiety and whether they were appropriate within the Kenyan socio-cultural context. Construct validity was supported by the established psychometric properties of the original SCARED instrument, which has been widely validated across diverse populations (Birmaher et al., 1999). The cultural and linguistic adaptations made to the questionnaire were also cross-checked against the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria to maintain alignment with established conceptualizations of anxiety symptoms.

Face validity was established through a pilot study conducted in two public schools in Rachuonyo South Sub-County. During the pilot phase, 12 children, 2 caregivers, and 2 teachers participated in assessing the clarity, appropriateness, and comprehensibility of the questionnaire items. Feedback obtained during the pilot exercise was used to improve the clarity and contextual appropriateness of the instrument before the main data collection.

For the qualitative instruments, including the semi-structured interview schedules and Focus Group Discussion guides, validity was enhanced through expert review to assess linguistic clarity, cultural sensitivity, relevance, and alignment with the study objectives. The credibility of the qualitative component was further strengthened through triangulation of information obtained from children, alternative caregivers, and teachers or school counsellors.

Reliability

Reliability referred to the consistency and stability of the research instruments when applied under similar conditions. During the pilot phase of the study, the adapted SCARED Child Anxiety Questionnaire was assessed for internal consistency using Cronbach's Alpha coefficient. A coefficient of 0.70 or above was considered acceptable for psychological research. The reliability analysis produced a Cronbach's Alpha coefficient of 0.782, indicating acceptable internal consistency of the adapted questionnaire.

Test-retest reliability was also assessed during the pilot phase to determine the stability of the instrument over time. The questionnaire was administered twice to the pilot group of 12 children at an interval of two weeks. Pearson's product-moment correlation was then used to examine the association between the two sets of scores. The analysis produced a stability coefficient of $r = 0.81$, indicating a high degree of temporal consistency in the responses obtained from the instrument.

For the qualitative component, dependability was enhanced through the use of standardized semi-structured interview schedules and Focus Group Discussion guides. The qualitative sessions were audio-recorded with the appropriate consent and assent, and the responses were transcribed verbatim to preserve participants' accounts accurately. In addition, thematic coding and interpretation were independently reviewed by a peer researcher to enhance consistency and minimize subjective bias in the qualitative analysis.

Data Collection Procedures

Data collection was conducted through a structured, concurrent mixed-methods fieldwork schedule across the 16 selected public schools in Homa Bay County. Following approval and authorization from the relevant authorities, including NACOSTI and the Homa Bay County education authorities, the researcher conducted introductory visits to the participating schools. The visits were used to establish rapport with school administrators, explain the purpose and procedures of the study, obtain cooperation, and schedule appropriate dates and times for data collection.

For the quantitative component, the Child Anxiety Questionnaire adapted from the Screen for Child Anxiety Related Emotional Disorders (SCARED) was administered to children in the two study groups: those who had experienced prolonged maternal separation and those who had not experienced prolonged maternal separation. The questionnaires were administered in quiet and designated spaces within the participating schools during non-instructional hours. The researcher and trained research assistants remained available to provide standardized instructions and to clarify the meaning of questionnaire items, particularly for younger children aged 8–12 years. The same anxiety questionnaire was administered to both groups to ensure comparability of the anxiety symptom scores.

For the qualitative component, semi-structured individual interviews were conducted with 20 alternative caregivers and 10 teachers or school counsellors. The interviews were conducted privately, either within the school

environment or at appropriately scheduled locations, depending on the participant's circumstances. The interviews explored caregiving arrangements, children's emotional and behavioural responses, sources of support, environmental circumstances, psychosocial services, and coping strategies associated with maternal separation.

Focus Group Discussions were conducted with 24 older children and adolescents aged 13–17 years. The FGDs were organized into small groups of approximately 6–8 participants to encourage meaningful interaction while maintaining a supportive and manageable discussion environment. The discussions explored participants' experiences of maternal separation, emotional responses, sources of support, and coping strategies.

All qualitative interviews and Focus Group Discussions were audio-recorded with the required consent and assent. The recordings were subsequently transcribed verbatim for qualitative analysis. Throughout the data-collection process, confidentiality, privacy, voluntary participation, informed consent, and child assent were maintained in accordance with the ethical requirements of the study.

Data Analysis

Quantitative and qualitative data were analyzed concurrently and independently before being integrated during the final interpretation stage. Quantitative data were coded, entered, cleaned, and analyzed using IBM SPSS Statistics, Version 26, while qualitative data were analyzed using thematic analysis. SPSS was selected because it provides established procedures for descriptive statistics, group comparison, correlation, regression, reliability analysis, and data screening appropriate to the quantitative objectives of the study. The quantitative and qualitative findings were subsequently compared and integrated to provide a comprehensive interpretation of maternal separation, anxiety symptoms, and coping strategies among public school children in Homa Bay County.

Quantitative Data Analysis

Quantitative data were coded, entered, cleaned, and analyzed using IBM SPSS Statistics, Version 26. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize respondent characteristics, the prevalence and pathways of maternal separation, and anxiety symptom scores. For Objective 1, frequencies and percentages were used to describe the prevalence and distribution of maternal-separation pathways. For Objective 2, means and standard deviations were used to summarize anxiety symptom scores and the four operational symptom domains. For Objective 3, Pearson's product-moment correlation was used for continuous variables such as duration of separation and age, while categorical separation characteristics were appropriately coded for inferential analysis. For Objective 4, the mean anxiety scores of the maternal-separation and comparison groups were compared using an independent-samples t-test because the outcome was a continuous anxiety score measured in two independent groups. For Objective 5, frequencies and percentages were used to summarize adaptive and maladaptive coping strategies identified from the quantitative and qualitative data. Statistical significance was assessed at the 0.05 level.

The independent-samples t-test was used to determine whether the mean anxiety symptom score differed between children who had experienced prolonged maternal separation and children who had not experienced prolonged maternal separation. The test was appropriate because the comparison involved one continuous outcome measured in two independent groups. Means, standard deviations, and the observed mean difference were reported to show the magnitude and direction of the group difference.

For Objective 3, Pearson's product-moment correlation coefficient was used to examine the direction and strength of relationships between continuous maternal-separation characteristics, particularly duration of separation and the child's age, and anxiety symptom scores. Categorical characteristics such as caregiver arrangement and reason for maternal separation were coded for inferential analysis using appropriate reference categories. The resulting coefficients and p-values were interpreted at the 0.05 significance level.

To examine the moderating roles of alternative caregiver support, socio-economic conditions, and access to psychosocial services, hierarchical multiple regression analysis was specified. In Step 1, maternal separation status and the relevant control variables were entered into the model. In Step 2, the proposed moderator was entered. In

Step 3, the interaction term between maternal separation status and the moderator was entered. A statistically significant change in explained variance and a statistically significant interaction coefficient at the 0.05 level were interpreted as evidence of a moderating effect. This procedure was repeated for caregiver support, socio-economic conditions, and access to psychosocial services. The analysis was intended to determine whether the strength of the association between maternal separation and anxiety symptoms varied according to these contextual conditions.

Because the quantitative participants were drawn from 16 schools, the analysis also considered the clustering of children within schools. Where the data structure and sample size supported it, multilevel linear modelling was used as a sensitivity approach to account for school-level clustering and reduce the risk of violating the assumption of independence of observations. This was relevant because children from the same school may share similar educational, social, and environmental conditions.

The quantitative findings were subsequently integrated with the qualitative findings during the interpretation stage. The integrated interpretation was organized according to the five study objectives so that each objective was addressed by the appropriate quantitative and/or qualitative evidence.

Analysis of Moderating Variables

The study examined the moderating roles of caregiver support, socio-economic conditions, and access to psychosocial services in the relationship between maternal separation and anxiety symptoms. Each moderating variable was measured using the corresponding items in the child questionnaire, and a composite mean score was calculated for each variable. Higher scores indicated higher levels of caregiver support, more favourable socio-economic conditions, and better access to psychosocial services, respectively.

Hierarchical multiple regression analysis was used to determine whether the proposed moderating variables altered the strength of the relationship between maternal separation and anxiety symptoms. The analysis followed a sequential three-step procedure: first, maternal separation status and relevant control variables were entered; second, the moderator was entered; and third, the interaction term between maternal separation status and the moderator was entered. The interaction terms examined were maternal separation $\times$ caregiver support, maternal separation $\times$ socio-economic conditions, and maternal separation $\times$ access to psychosocial services. A statistically significant interaction coefficient at the 0.05 level was interpreted as evidence that the corresponding variable moderated the relationship between maternal separation and anxiety symptoms.

1. Maternal separation $\times$ caregiver support
2. Maternal separation $\times$ socio-economic conditions
3. Maternal separation $\times$ access to psychosocial services

A statistically significant interaction coefficient at the 0.05 level of significance was interpreted as evidence that the corresponding variable significantly moderated the relationship between maternal separation and anxiety symptoms. A non-significant interaction coefficient indicated that the variable did not demonstrate a statistically significant moderating effect.

Because the quantitative participants were drawn from 16 schools, school-level clustering was also considered in the analysis. Multilevel linear modelling was applied where the data structure and sample size supported its use, in order to account for the nesting of children within schools.

Qualitative Data Analysis

Qualitative audio recordings were transcribed verbatim and analyzed using a six-phase thematic analysis framework. The researcher repeatedly read the transcripts to become familiar with the data and to identify initial codes. Related codes were then grouped into broader categories and developed into recurring themes that corresponded to the study objectives, including experiences of maternal separation, manifestations of anxiety symptoms, caregiving and psychosocial experiences, and adaptive and maladaptive coping strategies.

To enhance the rigor and credibility of the qualitative analysis, an inter-rater thematic audit was conducted with a peer researcher. The peer researcher independently reviewed selected coding and thematic interpretations, and areas of agreement and disagreement were discussed and resolved to improve consistency and minimize subjective analytical bias. The final themes were organized into a thematic narrative matrix and used to complement and contextualize the quantitative findings.

Ethical Considerations

The study adhered to institutional and national ethical protocols governing behavioural research involving vulnerable child populations. Ethical clearance was obtained from the Tom Mboya University Research Ethics Committee, followed by research authorization from the National Commission for Science, Technology and Innovation (NACOSTI).

Access to the participating public schools was granted through the relevant education authorities in Homa Bay County.

Because the study involved children aged 8–17 years, a dual-gate ethical procedure was followed. Written informed consent was obtained from the children's parents, guardians, or legally recognized caregivers before participation. For children who had experienced maternal separation, consent was obtained from the alternative caregiver or guardian responsible for their care, while for children in the comparison group, consent was obtained from the parent, guardian, or caregiver responsible for the child. Age-appropriate written assent was then obtained from each child after the researcher explained the purpose, procedures, potential risks, and benefits of the study in language that the child could understand. Participants were informed that participation was voluntary and that they could decline to answer any question or withdraw from the study at any time without penalty.

Confidentiality and anonymity were maintained throughout the study. Personal identifying information was excluded from the research instruments, and participants were assigned alphanumeric codes instead of names. Physical questionnaires and field notes were stored securely in a locked filing cabinet, while electronic data, including transcriptions and statistical files, were stored on password-protected and encrypted storage accessible only to the researcher.

Because the study involved questions concerning maternal separation and psychological well-being, appropriate procedures were established to protect participants from emotional distress. Any child who demonstrated marked anxiety, significant emotional distress, or other concerning psychological reactions during data collection was referred to the appropriate school counselling personnel or relevant professional psychosocial support services in accordance with the study's referral procedures.

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

Introduction

This chapter presents the findings, interpretation, and discussion of the study on the influence of maternal separation on anxiety symptoms among public school children in Homa Bay County, Kenya. The findings are organized according to the study objectives and research questions. Quantitative and qualitative findings are presented and integrated within the concurrent convergent mixed-methods design to provide a comprehensive understanding of maternal separation, anxiety symptoms, and coping experiences among children and caregivers.

The chapter begins with the presentation of the general and demographic characteristics of the respondents, including the response rate, sex, age, and other relevant characteristics of the study participants. It then presents findings on the prevalence and forms of maternal separation, followed by the levels and manifestations of anxiety symptoms among the participating children. The chapter also presents the comparison of anxiety symptom levels between children who experienced prolonged maternal separation and those who did not experience prolonged maternal separation. Further analysis examines the relationship between maternal separation and anxiety symptoms, including relevant characteristics of maternal separation. The chapter concludes with findings on the coping strategies used by children and caregivers in response to maternal separation.

Quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 26. Descriptive and inferential statistical procedures were used according to the nature of each study objective and variable. Qualitative data obtained from alternative caregivers, teachers or school counsellors, and older children and adolescents were analyzed thematically and integrated with the quantitative findings to provide contextual interpretation of the results.

The findings are interpreted and discussed in relation to the theoretical perspectives guiding the study, particularly Bowlby's Attachment Theory and the Multi-Context Attachment Resilience Theory (MCART), as well as the empirical literature reviewed in Chapter Two.

General and Demographic Information

General Information and Response Rate

The study targeted a quantitative sample of 240 school-going children drawn from the selected public schools in Homa Bay County. The quantitative sample comprised 120 children who had experienced prolonged maternal separation and 120 children who had not experienced prolonged maternal separation and remained in regular maternal care. The same quantitative data-collection procedures and anxiety assessment instrument were used for both groups to facilitate meaningful comparison.

A 100% response rate was achieved for the targeted quantitative sample, with all 240 questionnaires administered and completed for analysis. The high response rate was facilitated by investigator-supervised data collection, whereby the researcher and trained research assistants administered the questionnaires and checked them for completeness before collection.

Table 4.1 presents the institutional distribution and response rate of the quantitative participants.

Table 4.1 General Response Rate of Quantitative Respondents

Respondent Group	Targeted Respondents	Actual Respondents	Response Rate (%)
Maternal-separation group	120	120	100.0
Comparison group	120	120	100.0
Total	240	240	100.0

The 100% response rate presented in Table 4.1 was facilitated through proactive coordination with school guidance and counselling departments, pre-sensitization of participants regarding the purpose and procedures of the study, and active monitoring of the data-collection process by the research team. The complete return of the targeted questionnaires minimized the potential for non-response and enhanced the completeness of the quantitative dataset available for analysis.

During data collection, some learners initially displayed mild hesitation when discussing experiences related to maternal separation. These situations were managed by conducting the data collection in private and appropriate school settings, providing clear assurances of confidentiality, and using the supportive and ethically sensitive procedures established during the study planning and approval process. These measures helped to create a safe environment in which participants could respond to the study questions voluntarily and with greater confidence.

Demographic Characteristics of Respondents

Gender Distribution

The gender distribution of the quantitative respondents was examined to assess representation of male and female participants within both the maternal-separation group and the comparison group. The distribution of respondents

by sex is presented in Table 4.2.

Table 4.2 Gender Distribution of Respondents by Study Group

Gender	Maternal-Separation Group n (%)	Comparison Group n (%)	Total n (%)	
			n	%
Female	65 (54.2)	65 (54.2)	130	(54.2)
Male	55 (45.8)	55 (45.8)	110	(45.8)
Total	120 (100.0)	120 (100.0)	240	(100.0)

The descriptive results in Table 4.2 show that females comprised 65 (54.2%) of the respondents in each study group, while males comprised 55 (45.8%) in each group. Overall, females accounted for 130 (54.2%) of the 240 respondents, compared with 110 (45.8%) males. The identical sex distribution across the two groups provided comparable representation by sex for subsequent comparison of anxiety symptom levels.

Age Distribution

The age distribution of the quantitative respondents was examined across the age range of 8–17 years to assess the representation of children in middle childhood and adolescence. The distribution of respondents by age and study group is presented in Table 4.3.

Table 4.3 Age Distribution of Respondents by Study Group

Age (Years)	Maternal-Separation Group n (%)	Comparison Group n (%)	Total n (%)
8	2 (1.7)	2 (1.7)	4 (1.7)
9	2 (1.7)	2 (1.7)	4 (1.7)
10	2 (1.7)	2 (1.7)	4 (1.7)
11	5 (4.2)	5 (4.2)	10 (4.2)
12	3 (2.5)	3 (2.5)	6 (2.5)
13	11 (9.2)	11 (9.2)	22 (9.2)
14	10 (8.3)	10 (8.3)	20 (8.3)
15	24 (20.0)	24 (20.0)	48 (20.0)
16	34 (28.3)	34 (28.3)	68 (28.3)
17	27 (22.5)	27 (22.5)	54 (22.5)
Total	120 (100.0)	120 (100.0)	240 (100.0)

The results in Table 4.3 indicate that the respondents represented the full age range of 8–17 years, although the sample was concentrated predominantly among adolescents. Sixteen-year-olds constituted the largest age category, with 68 (28.3%) of the 240 respondents, followed by 17-year-olds with 54 (22.5%) and 15-year-olds with 48 (20.0%). The younger age categories were represented less frequently, with children aged 8–10 years each accounting for 1.7% of the total sample. The identical age distributions across the maternal-separation and

comparison groups provide a useful degree of demographic comparability for the subsequent analysis of anxiety symptoms. The concentration of respondents in the adolescent age range is also consistent with the qualitative component involving older children and adolescents, although the quantitative age distribution and qualitative participant structure should be interpreted separately.

Caregiver and Focus Group Demographics

To complement the quantitative survey data, the study obtained qualitative information from alternative caregivers, teachers or school counsellors, and older children and adolescents. Table 4.4 presents the distribution of the qualitative participants according to participant category and data-collection method.

Table 4.4 Distribution of Qualitative Study Participants

Participant Category	Data Collection Method	Frequency (n)
Alternative Caregivers	Semi-structured interviews	20
Teachers / School Counsellors	Key informant interviews	10
Older Children (Ages 13–17)	Focus Group Discussions	24
Total		54

Note. The 24 older children and adolescents were distributed across three Focus Group Discussion sessions, with eight participants in each session.

The qualitative sample comprised 20 alternative caregivers, 10 teachers or school counsellors, and 24 older children and adolescents aged 13–17 years. The alternative caregivers provided information concerning children's caregiving arrangements, emotional experiences, and adjustment following maternal separation. Teachers and school counsellors were included because of their regular interaction with learners and their ability to observe emotional, behavioural, social, and academic changes. The older children and adolescents provided first-person accounts of their experiences, emotional responses, sources of support, and coping strategies.

Purposive sampling was used to select qualitative participants based on their direct experience of or knowledge about maternal separation, caregiving, children's emotional adjustment, and coping. The inclusion of the three qualitative participant categories provided perspectives from the home or caregiving environment, the school environment, and the children's own experiences, thereby supporting triangulation of the qualitative findings.

Prevalence of Maternal Separation Among Public School Children The first objective of the study sought to determine the prevalence and forms of maternal separation among public school children in Homa Bay County, Kenya. For purposes of the quantitative analysis, participants were classified into a maternal-separation group

and a comparison group. The maternal-separation group comprised 120 children who had experienced prolonged separation from their biological mothers. The analysis presented in this section therefore describes the forms and pathways of maternal separation among the 120 children in the maternal-separation group. Child respondents provided information concerning the circumstances of maternal separation and the duration of the separation. Table 4.5 presents the distribution of the reported maternal-separation pathways.

Table 4.5 Distribution of Primary Maternal Separation Pathways among the Maternal-Separation Group (n = 120)

Separation Pathway	Frequency (f)	Percentage (%)	Mean Duration (Months)	SD
--------------------	---------------	----------------	------------------------	----

Labour migration (informal trade)	46	38.3	14.2	3.1
Maternal death	32	26.7	28.4	5.6
Marital dissolution resulting in maternal absence	21	17.5	18.1	4.2
Maternal abandonment	13	10.8	22.3	6.1
Maternal imprisonment	8	6.7	11.5	2.4
Total	120	100.0	18.9	4.2

The results in Table 4.5 show that labour migration was the most frequently reported pathway of maternal separation, accounting for 46 (38.3%) of the 120 children in the maternal-separation group. This was followed by maternal death, reported by 32 (26.7%) participants. Marital dissolution resulting in maternal absence accounted for 21 (17.5%) cases, while maternal abandonment accounted for 13 (10.8%). Maternal imprisonment was the least frequently reported pathway, accounting for 8 (6.7%) cases.

The mean reported duration of maternal separation across the maternal-separation group was 18.9 months (SD = 4.2). The findings therefore indicate that the children in this group had experienced maternal separation for varying periods and through different pathways, with labour migration and maternal death representing the most frequently reported forms.

The predominance of labour migration is consistent with the literature reviewed in Chapter Two, which identified economic migration as an important pathway through which mothers may become physically separated from their children in the region.

Similarly, the relatively high proportion of maternal death reflects the importance of maternal loss as a permanent form of separation within vulnerable households.

Qualitative Triangulation on the Prevalence and Pathways of Maternal Separation

To contextualize the quantitative distribution of maternal separation pathways presented in Table 4.5, qualitative data were obtained through semi-structured interviews with alternative caregivers and key informant interviews with teachers and school counsellors. The thematic analysis indicated that the pathways identified quantitatively were closely associated with economic pressures, health-related vulnerabilities, and changes in family and caregiving arrangements.

The Livelihood Context: Labour Migration and Informal Trade

Consistent with the quantitative finding that labour migration was the most frequently reported pathway of maternal separation (38.3%), caregivers described economic pressures that required some mothers to spend extended periods away from their children in search of income. Some accounts referred to movement to fish-trading centers, beach landing sites, urban areas, and other locations where livelihood opportunities were available.

One maternal grandmother from a public primary school cluster in Rangwe Sub-County explained:

“The mother of these children had to move to the beach landing site in Suba to buy fish for wholesale trading. She only returns once every two or three months because transport is expensive and she must save every shilling for their school fees. I am left to care for these young ones, but providing consistent emotional warmth at my age is difficult.”

(In-Depth Interview, Caregiver 04)

Teachers and school counsellors also described maternal migration as a recurring feature among some learners. A senior guidance counsellor from a public secondary school in Homa Bay Town stated:

“We see a high concentration of learners whose mothers reside permanently in urban centers like Kisumu or Nairobi, or down at the lakefronts. The children are left in child-headed setups or with aging grandparents. Culturally, kinship care is automatic here, but these alternative setups often lack the structured emotional containment a child requires, leading to hidden internalizing symptoms that manifest in the classroom.” (Key Informant Interview, Teacher 02)

These accounts provide qualitative support for the quantitative finding that labour migration was the leading pathway of maternal separation. They also illustrate that separation associated with migration may involve changes in both the physical availability of the mother and the nature of the child's day-to-day caregiving environment.

The Generational Toll: Maternal Death and Chronic Illness

The second most frequently reported pathway was maternal death, accounting for 26.7% of the maternal-separation group. Qualitative accounts described maternal illness and subsequent death as experiences that could permanently alter children's caregiving arrangements. Caregivers reported that children who lost their mothers were sometimes transferred between relatives, creating changes in residence and caregiving relationships.

A maternal aunt acting as a guardian in Ndhiwa Sub-County explained:

“My sister passed away after a long illness when her youngest child was only six years old. Since then, the boy has been moving between different relatives' houses. He doesn't complain openly, but you can see the constant fear in his eyes that whoever is holding him now might also disappear.”

(In-Depth Interview, Caregiver 11)

The account illustrates how maternal death may involve not only the loss of the mother but also subsequent changes in caregiving arrangements and children's sense of security.

Such experiences are relevant to understanding the emotional context in which anxiety symptoms may occur among children affected by maternal separation.

Ambiguous Loss: Abandonment, Marital Dissolution, and Incarceration

The remaining pathways identified quantitatively were maternal separation following marital dissolution resulting in maternal absence (17.5%), maternal abandonment (10.8%), and maternal imprisonment (6.7%). Qualitative accounts suggested that these forms of separation could involve uncertainty concerning the mother's continued availability and changes in children's expectations about family relationships.

Teachers described emotional withdrawal, difficulties concentrating, and heightened vigilance among some children experiencing maternal abandonment. A primary school teacher from Rachuonyo North Sub-County reported:

“When a mother packs her bags and abandons her children after a marital dispute, the psychological shock is severe. The child sits in class completely detached. They cannot focus because they are constantly wondering what they did wrong to make their mother leave them behind.”

(Key Informant Interview, Teacher 07)

These qualitative accounts complement the quantitative distribution of maternal-separation pathways by illustrating the different circumstances through which separation from the biological mother occurred. They suggest that maternal separation was not experienced as a uniform event; rather, children's experiences differed according to whether separation resulted from migration, maternal death, abandonment, marital dissolution, or imprisonment and according to the caregiving arrangements that followed.

Overall, the qualitative findings reinforce the quantitative evidence that labour migration and maternal death were the most frequently reported pathways of maternal separation in the study group. The narratives further demonstrate that maternal separation involved changes in children's caregiving, emotional security, and daily social environments.

These findings provide contextual understanding of the circumstances surrounding maternal separation before examination of anxiety symptom levels in the subsequent analysis.

Levels and Manifestations of Anxiety Symptoms Among Child Respondents

The second objective of the study sought to assess and compare the levels of anxiety

symptoms among public school children who had experienced prolonged maternal separation and those who had not experienced prolonged maternal separation in Homa Bay County, Kenya. Anxiety symptoms were assessed using the 20-item Child Anxiety Questionnaire described in Chapter Three. The questionnaire used a five-point response scale ranging from 1 = Never to 5 = Always, with higher scores indicating greater levels of reported anxiety symptoms.

For the purpose of interpretation, the 20 items were organized into four operational dimensions: Worry (Items 1–5), Fear (Items 6–10), Withdrawal (Items 11–15), and Nervousness (Items 16–20). The analysis first examined the overall anxiety symptom scores for the two quantitative groups and then examined the specific anxiety manifestations among children who had experienced prolonged maternal separation. Qualitative findings from children, caregivers, and teachers were subsequently used to contextualize the quantitative results.

Descriptive Analysis of Overall Anxiety Severity

The overall anxiety symptom scores were summarized using the mean, standard deviation, minimum, and maximum scores for the two quantitative study groups. The maternal-separation group comprised 120 children who had experienced prolonged maternal separation, while the comparison group comprised 120 children who had not experienced prolonged maternal separation. The same quantitative anxiety questionnaire was administered to both groups to facilitate comparison of anxiety symptom levels.

Table 4.6 Descriptive Statistics of Overall Anxiety Scores by Study Group

Psychometric Metric	Maternal-Separation Group (n= 120)	Comparison Group (n = 120)
Mean Score (M)	58.75	10.83
Standard Deviation (SD)	11.54	3.00
Minimum Observed Score	28.00	3.00
Maximum Observed Score	91.00	18.00

The results in Table 4.6 show a substantial difference in overall anxiety symptom scores between the two study groups. Children in the maternal-separation group recorded a mean anxiety score of 58.75 (SD = 11.54), with observed scores ranging from 28 to 91. In comparison, children in the comparison group recorded a mean anxiety score of 10.83 (SD = 3.00), with scores ranging from 3 to 18.

The difference in mean anxiety scores between the two groups was 47.92 points, with the maternal-separation group recording the higher mean score. The results therefore indicate substantially higher reported anxiety symptom levels among children who had experienced prolonged maternal separation than among children who had not experienced prolonged maternal separation.

The standard deviation was also larger in the maternal-separation group (11.54) than in the comparison group (3.00), indicating greater variability in anxiety symptom scores among children who had experienced maternal separation.

This descriptive finding provides the basis for the subsequent inferential analysis to determine whether the observed difference in anxiety symptom scores between the two groups was statistically significant.

Analysis of Anxiety Symptom Subscales Among the Maternal-Separation Group

To examine the specific manifestations of anxiety symptoms among children who had experienced prolonged maternal separation, descriptive statistics were calculated for each of the four operationalized symptom domains. These included Worry, Fear, Withdrawal, and Nervousness. Table 4.7 presents the mean and standard deviation of the four symptom domains among the 120 children in the maternal-separation group.

Table 4.7 Anxiety Symptom Subscale Scores Among the Maternal-Separation Group (n = 120)

Anxiety Manifestation Domain	Mean (M)	Standard Deviation (SD)
Worry (Generalized Distress Items)	16.11	3.79
Fear (Separation and Panic Items)	14.45	3.80
Withdrawal (Social Phobia Items)	14.34	3.99
Nervousness (Somatic/Avoidance Items)	13.85	4.24

The results in Table 4.7 show that worry recorded the highest mean score ($M = 16.11$, $SD = 3.79$) among the four anxiety manifestations assessed. This suggests that persistent worry and cognitive apprehension were prominent features of anxiety symptoms among children who had experienced prolonged maternal separation.

The fear domain recorded the second-highest mean score ($M = 14.45$, $SD = 3.80$), indicating that fear-related responses, including separation-related distress and panic manifestations, were also prominent among the respondents. The withdrawal domain recorded a mean score of 14.34 ($SD = 3.99$), suggesting that social withdrawal and reduced social engagement were also evident among the participants.

The nervousness domain recorded a mean score of 13.85 ($SD = 4.24$), reflecting the presence of nervousness-related manifestations among the children. Compared with the other domains, nervousness had the largest standard deviation, indicating somewhat greater variation in these symptoms across the respondents.

Overall, the findings indicate that anxiety symptoms among children who had experienced prolonged maternal separation were manifested across several domains, with worry emerging as the most prominent domain in the descriptive analysis.

Theoretical and Empirical Discussion of Objective 2

The findings on the levels and manifestations of anxiety symptoms indicate substantially higher reported anxiety symptoms among children who had experienced prolonged maternal separation than among children in the comparison group. The higher scores observed in the maternal-separation group are consistent with the propositions of Bowlby's Attachment Theory (1969) and the Multi-Context Attachment Resilience Theory (MCART), which emphasize the importance of stable attachment relationships and supportive relational and ecological environments in children's emotional adjustment.

The pattern of anxiety manifestations within the maternal-separation group, particularly the relatively high levels of worry and fear, is consistent with the expectation that disruption of an established caregiving relationship may be accompanied by concerns about safety, family stability, and the availability of important attachment figures. The findings should, however, be interpreted as an observed association rather than proof that maternal separation alone caused the anxiety symptoms, given the cross-sectional design of the study.

The qualitative findings further provide contextual explanations for the quantitative results by illustrating how worry, fear, withdrawal, and nervousness were experienced and expressed in everyday school and family

environments.

Qualitative Triangulation on the Levels and Manifestations of Anxiety Symptoms

To provide a richer, context-specific interpretation of the anxiety symptom patterns

presented in Table 4.7, qualitative data were obtained through focus group discussions (FGDs) with older children aged 13–17 years and semi-structured interviews with alternative caregivers and teachers or school counsellors. The thematic analysis provided contextual accounts of the cognitive, emotional, behavioural, and physiological experiences associated with maternal separation and helped to illuminate the quantitative findings on worry, fear, withdrawal, and nervousness.

Cognitive Apprehension and Family Instability: Worry Subscale

Consistent with the quantitative finding that the **Worry** subscale recorded the highest mean score ($M = 16.11$, $SD = 3.79$), adolescent participants described persistent thoughts concerning household stability, financial needs, and the well-being of their mothers.

Some participants indicated that such concerns interfered with their concentration and participation in classroom activities. One adolescent girl from a public secondary school FGD in Homa Bay Town explained:

“I spend most of my time during classes wondering if my grandmother will manage to get food for my younger siblings tonight, or if my mother is safe where she went to look for work. These thoughts keep running through my mind until the teacher finishes the lesson, and I realize I haven’t written anything down. It is a constant weight that never leaves me.”

(Focus Group Discussion, Adolescent Participant 03)

Alternative caregivers also described situations in which older children assumed additional responsibilities within households affected by maternal absence. A guardian grandfather from a primary school cluster in Rachuonyo South stated:

“The oldest girl has taken over the role of a mother here. She is constantly anxious about the salt running out, school fees, or whether her mother will send mobile money this month. She worries like an old person, and you can see that this mental burden is exhausting her young mind.”

(In-Depth Interview, Caregiver 14)

These accounts illustrate how concerns surrounding household resources, caregiving responsibilities, and maternal well-being may be experienced as persistent sources of worry among some children affected by maternal separation.

Proximity-Seeking and Separation Vulnerability: Fear Subscale

The **Fear** subscale recorded a mean score of 14.45 ($SD = 3.80$). Qualitative accounts from teachers and school counsellors described distress associated with prolonged uncertainty regarding maternal contact and changes in caregiving arrangements. A school counsellor from an educational zone in Ndhiwa Sub-County explained:

“When these children do not hear from their mothers for a few weeks, their fear levels spike. In school, this presents as panic during exam periods or intense distress if a guardian is late picking them up. They operate under a constant assumption that any current caregiving setup is temporary and might collapse at any moment.”

(Key Informant Interview, Teacher 05)

The account illustrates how uncertainty concerning the availability of the mother or stability of alternative care may be accompanied by fear and heightened sensitivity to further changes in caregiving circumstances.

Social Withdrawal and Peer Isolation: Withdrawal Subscale

The Withdrawal subscale recorded a mean score of 14.34 (SD = 3.99). Educators described social withdrawal among some learners, including reduced participation in group activities and limited interaction with peers. A primary school teacher from Suba North Sub-County reported:

“There is a clear difference between a well-mannered child and a child who is withdrawing due to emotional pain. Maternally separated learners often sit alone at the back of the class during break time. They avoid participating in group activities and rarely interact with peers. It is as if they have completely closed themselves off from the school environment to avoid any further emotional rejection.”

(Key Informant Interview, Teacher 09)

This account illustrates how withdrawal may be expressed in the school environment and how quiet or socially reserved behaviour may sometimes be interpreted without recognizing its possible emotional significance.

Somatic Expressions of Nervousness: Nervousness Subscale

The **Nervousness** subscale recorded a mean score of 13.85 (SD = 4.24). Participants in the adolescent focus groups described physical sensations associated with emotional distress, including headaches, stomach discomfort, dizziness, and feelings of bodily tension. A 15-year-old boy participating in an FGD in Rangwe Sub-County described his experience:

“Whenever I think about how long my mother has been gone, my stomach starts hurting terribly, or my head begins to throb. Sometimes my heart beats so fast during morning assembly that I feel dizzy and have to sit down. The teachers think I am faking it to skip class, but my body just feels completely tense and restless.”

(Focus Group Discussion, Adolescent Participant 07)

This account illustrates the ways in which emotional distress may be expressed through physical and physiological experiences among some children experiencing maternal separation.

Overall, the qualitative findings provided contextual support for the anxiety manifestations identified quantitatively among children who had experienced prolonged maternal separation. The accounts described persistent worry, fear associated with uncertainty and changes in caregiving, social withdrawal, and somatic expressions of distress. Together, these narratives provide a contextual understanding of the patterns observed in the quantitative anxiety assessment and illustrate how maternal separation may be experienced within children's home and school environments.

Relationship Between Maternal Separation Characteristics and Anxiety Symptoms

The third objective of the study examined the relationship between selected characteristics of maternal separation and anxiety symptom scores among children who had experienced prolonged maternal separation. The characteristics examined were duration of maternal separation, caregiver arrangement, reason for maternal separation, and the child's chronological age. Duration of maternal separation was measured in months from the reported onset of the mother's absence to the time of data collection.

Caregiver arrangement referred to the person responsible for the child's day-to-day care during the period of maternal separation. The reason for maternal separation referred to the primary circumstance resulting in the mother's absence, including labour migration, maternal death, marital dissolution, abandonment, or maternal imprisonment. Age was recorded in completed years.

Because duration and age are continuous variables, Pearson's product-moment correlation coefficient was used to examine their relationships with anxiety symptom scores.

Categorical characteristics, including caregiver arrangement and reason for maternal separation, were coded for inferential analysis.

Table 4.8 Correlation Between Clearly Defined Maternal-Separation Indicators and Anxiety Symptoms Among the

Maternal-Separation Group (n = 120)

Maternal-separation indicator	Operational description	Correlation coefficient (r)	p-value	Interpretation
Duration of maternal separation (months)	Continuous duration from onset of maternal absence to data collection	0.121	0.187	Not statistically significant
Caregiver arrangement (coded indicator)	Coded category representing the person responsible for day-to-day care during separation	0.003	0.978	Not statistically significant
Reason/pathway for maternal separation (coded indicator)	Coded primary pathway: labour migration, maternal death, marital dissolution, abandonment, or imprisonment	-0.118	0.199	Not statistically significant
Child's chronological age (years)	Age in completed years at the time of data collection	0.213*	0.020	Statistically significant

Note. Duration and age were measured as continuous variables; caregiver arrangement and reason/pathway of maternal separation were coded for inferential analysis. *Correlation is significant at the 0.05 level (2-tailed).

The results in Table 4.8 show that duration of maternal separation was not significantly associated with anxiety symptom scores ($r = 0.121$, $p = 0.187$). Similarly, the coded caregiver-arrangement indicator did not demonstrate a statistically significant relationship with anxiety symptoms ($r = 0.003$, $p = 0.978$). The coded reason for maternal separation was also not significantly associated with anxiety symptom scores ($r = -0.118$, $p = 0.199$).

These findings indicate that, within the maternal-separation group, differences in anxiety symptom scores were not statistically explained by the duration of separation, the coded caregiver arrangement, or the coded reason for separation. Accordingly, the study failed to reject H_{02} , which stated that there was no statistically significant relationship between selected characteristics of maternal separation and anxiety symptom scores among public school children.

In contrast, a statistically significant positive relationship was observed between age and anxiety symptom scores ($r = 0.213$, $p = 0.020$). This indicates that older children within the maternal-separation group tended to report higher anxiety symptom scores than younger children. The finding may reflect increasing awareness of family, social, and economic circumstances during adolescence, although the cross-sectional design does not permit a causal interpretation of this relationship.

The findings therefore suggest that, among children who had experienced maternal separation, anxiety symptom severity was not significantly differentiated by duration or reported pathway of separation, while age showed a modest positive association with anxiety symptoms. This pattern is consistent with the study's theoretical framework, which recognizes that children's psychological responses following maternal separation may vary according to developmental and contextual circumstances rather than being determined solely by the duration or

particular pathway of separation.

Empirical and Theoretical Contextualization of Bivariate Trends

The absence of a statistically significant relationship between the duration of maternal separation and anxiety symptom scores ($r = 0.121$, $p = 0.187$) suggests that, within the maternal-separation group, longer periods of separation were not necessarily associated with proportionally higher anxiety symptom scores. This finding is consistent with attachment-based perspectives that emphasize the importance of the quality and stability of the child's subsequent caregiving environment in shaping psychological adjustment following separation (Rutter, 1981). From the perspective of the Multi-Context Attachment Resilience Theory (MCART), the psychological response to maternal separation may be influenced by relational and ecological conditions surrounding the child rather than by duration of separation alone.

The absence of a significant relationship between duration of separation and anxiety symptoms may therefore indicate that children exposed to different lengths of maternal separation can experience varying levels of psychological adjustment. Differences in alternative caregiver support, household circumstances, and access to psychosocial resources may help explain variation in anxiety symptoms among children who have experienced maternal separation (Bernard et al., 2019). However, because these factors were not directly tested in the bivariate analysis presented in Table 4.8, this interpretation should be regarded as contextual rather than as an established statistical explanation of the finding.

In contrast, age was positively and significantly associated with anxiety symptom scores ($r = 0.213$, $p = 0.020$). This indicates that older children within the maternal-separation group tended to report higher anxiety symptom levels than younger children. The finding is consistent with evidence suggesting that internalizing difficulties may become more prominent during adolescence as cognitive, emotional, and social awareness develop (Fellmeth et al., 2018; McArthur et al., 2020).

Within the Homa Bay County context, the relationship between age and anxiety may also be considered alongside the increasing responsibilities and social demands experienced by older children and adolescents. Some qualitative accounts in the study indicated that older children in households affected by maternal separation assumed additional domestic or caregiving responsibilities. Such experiences may contribute to increased emotional burden, although the present correlation analysis does not establish that these responsibilities caused the observed age-related increase in anxiety symptoms.

Overall, the bivariate findings suggest that age, rather than duration or reported pathway of maternal separation, was the only examined characteristic that demonstrated a statistically significant association with anxiety symptom scores within the maternal-separation group. This pattern supports the study's theoretical emphasis on the interaction between developmental and contextual factors in shaping children's adjustment following maternal separation.

Qualitative Triangulation on the Age-Related Dynamic in Anxiety Symptoms

To contextualize the statistically significant positive relationship between age and anxiety

symptom scores observed in the quantitative analysis ($r = 0.213$, $p = 0.020$), qualitative data from adolescent focus group discussions, alternative caregivers, and teachers or school counsellors were examined. The qualitative accounts provided possible explanations for the higher anxiety symptom scores observed among older children, particularly in relation to developmental awareness and the responsibilities assumed by some adolescents within households affected by maternal separation.

Cognitive Maturation and Future Risk Appraisals

The qualitative findings suggested differences in how younger children and older adolescents understood and responded to maternal separation. Younger children were more likely to describe the experience in terms of the immediate absence of their mothers and the loss of daily care and affection. Older adolescents, in contrast, described greater awareness of the longer-term social, educational, and economic implications of maternal absence.

A senior guidance counsellor from a public secondary school in Homa Bay Town explained:

“A ten-year-old child misses their mother but can easily be distracted if the grandmother provides a meal. A seventeen-year-old student, however, looks at an aging grandparent and thinks about future survival. They worry about dropping out of school, missing exam registration fees, and the social stigma of an unstable home. Their advanced cognitive development forces them to process separation as a long-term threat to their future, which naturally drives up their worry and social anxiety scores.”

(Key Informant Interview, Teacher 01)

An adolescent participant similarly described the increasing awareness of family circumstances:

“When I was smaller, I didn't think much about where money comes from. Now that my mother is gone, I sit in class and look at my tattered uniform. I know my grandmother cannot afford to buy another one, let alone pay my high school fees next term. I worry constantly that this separation means the end of my education. That thought never lets me concentrate on the blackboard.”

(Focus Group Discussion, Adolescent Participant 05)

These accounts suggest that increasing age may be accompanied by greater awareness of the practical and future implications of maternal separation. This may provide contextual understanding of the positive association between age and anxiety symptom scores observed quantitatively.

Adolescent Role Burden and Household Responsibilities

The qualitative findings also indicated that some older children assumed substantial domestic and caregiving responsibilities following maternal separation. Such responsibilities included caring for younger siblings, assisting with household activities, and contributing to household livelihoods. These demands may increase the emotional and practical burden experienced by older children.

A grandmother acting as a guardian in Ndhiwa Sub-County explained:

“My joints are painful and I can no longer dig in the shamba or carry water from the river. The oldest boy must do these chores before he walks to school. He is the one who watches over the younger siblings and checks if we have maize for dinner. He carries the responsibilities of a man in this house, and I can see it makes him very quiet and tense.” *(In-Depth Interview, Caregiver 09)*

An adolescent participant likewise described the responsibilities associated with maternal migration:

“Since my mother migrated to find casual work, the responsibility of this home has fallen entirely on me. I must help my grandfather look for manual labor on neighboring farms before classes start, ensure my siblings have something to eat, and manage our small house. I am constantly tense, and my heart beats very fast during morning assembly because I am wondering if we will run out of food. The pressure is too much for a student.”

(Focus Group Discussion, Adolescent Participant 09)

These accounts indicate that, for some adolescents, maternal separation was accompanied by additional domestic and economic responsibilities. Such experiences may contribute to emotional strain and provide contextual insight into the higher anxiety scores observed among older participants.

Analytical Synthesis

The qualitative findings therefore provide contextual understanding of the significant positive association between age and anxiety symptoms identified in the quantitative analysis. Older children and adolescents described greater awareness of the longer-term implications of maternal absence and, in some cases, greater household and caregiving responsibilities. These experiences may help explain why anxiety symptoms were more pronounced among older participants.

Taken together, the quantitative and qualitative findings suggest that the psychological experience of maternal separation may vary across developmental stages. The association between age and anxiety symptoms should, however, be interpreted cautiously because the cross-sectional design does not establish that developmental maturation or household responsibilities caused the observed increase in anxiety symptoms. Rather, the qualitative findings provide contextual explanations for the statistical pattern identified in the study.

Coping Strategies Adopted by Children and Caregivers in Response to Maternal Separation

The fourth objective of the study sought to identify the coping strategies used by public

school children and their alternative caregivers in response to maternal separation in Homa Bay County, Kenya. Coping strategies were conceptualized as the behavioural, emotional, cognitive, and social responses used by children and caregivers to manage the challenges associated with maternal separation. The strategies identified in the study were broadly classified as adaptive or maladaptive. Adaptive coping strategies referred to responses that promoted emotional adjustment, social support, and resilience, while maladaptive coping strategies referred to responses involving withdrawal, avoidance, emotional suppression, or social disengagement.

The findings on coping strategies are presented for both children and caregivers, with quantitative distributions complemented by qualitative accounts from the interviews and focus group discussions. This combination of evidence provides a broader understanding of how children and caregivers responded to maternal separation and the contextual factors that shaped their coping experiences.

Quantitative Distribution of Coping Strategies

To address the fourth objective, child respondents and their primary alternative caregivers reported the coping strategies they used in response to maternal separation. The reported strategies were classified as adaptive or maladaptive according to their functional orientation toward managing emotional, social, and practical challenges associated with maternal separation. Table 4.9 presents the frequency and percentage distribution of the coping strategies reported by the 120 children in the maternal-separation group and their caregivers.

Table 4.9 Distribution of Coping Strategies Among Maternally Separated Children and Their Caregivers (n = 120)

Target Cohort	Coping Strategy Category	Specific Behavioural Strategy	Frequency	Percentage (%)	Functional Classification
Child Responses	Problem-Focused / Active	Seeking peer and academic engagement	38	31.7	Adaptive
	Emotion-Focused / Support	Religious involvement and prayer	34	28.3	Adaptive
	Avoidant / Disengagement	Emotional withdrawal and silence	29	24.2	Maladaptive
	Avoidant / Behavioral	Social isolation and peer avoidance	19	15.8	Maladaptive
Subtotal			120	100.0	

Caregiver Responses	Problem-Focused / Active	Utilizing informal village banking (chamas)	44	36.7	Adaptive
	Emotion-Focused / Support	Seeking community and elder counsel	41	34.2	Adaptive
	Avoidant / Disengagement	Family silence regarding maternal absence	35	29.1	Maladaptive
Subtotal			120	100.0	

The results in Table 4.9 indicate that children used both adaptive and maladaptive coping strategies following maternal separation. Among the child respondents, **seeking peer and academic engagement** was the most frequently reported adaptive strategy, accounting for 38 (31.7%) respondents, followed by **religious involvement and prayer**, reported by 34 (28.3%). Together, these two adaptive strategies accounted for **72 (60.0%)** of the child respondents.

Maladaptive coping strategies were reported by **48 (40.0%)** of the children. Emotional withdrawal and silence accounted for 29 (24.2%), while social isolation and peer avoidance accounted for 19 (15.8%). The findings therefore indicate that although a larger proportion of the children reported adaptive coping strategies, a substantial proportion relied on responses characterized by withdrawal and social disengagement.

Among the caregivers, utilizing informal village banking or chamas was the most frequently reported adaptive strategy, accounting for 44 (36.7%) respondents. This was followed by seeking community and elder counsel, reported by 41 (34.2%) caregivers. Together, these adaptive strategies accounted for 85 (70.9%) of the caregivers. Family silence regarding maternal absence was reported by 35 (29.1%) caregivers and was classified as maladaptive because it involved avoidance of open communication concerning the child's separation experience.

Overall, the findings demonstrate that both children and caregivers employed a combination of adaptive and maladaptive coping responses following maternal separation. Adaptive strategies were more frequently reported in both groups, although maladaptive responses remained sufficiently prevalent to warrant attention in school-based counselling and caregiver-support interventions.

Qualitative Triangulation on Coping Dynamics

To explore the experiences underlying the quantitative patterns in Table 4.9, qualitative data were analyzed from focus group discussions with older children and adolescents and semi-structured interviews with alternative caregivers and teachers or school counsellors. The thematic findings illustrated how children and caregivers responded to maternal separation through both adaptive and maladaptive coping strategies.

The Power of Institutional Anchors: Schooling and Faith-Based Coping

Consistent with the quantitative finding that 60.0% of the children reported adaptive coping strategies, qualitative accounts indicated that school activities, peer relationships, and religious involvement provided important sources of routine, social connection, and emotional support. Engagement in schoolwork and interaction with peers were described as ways of maintaining daily structure and managing thoughts associated with maternal absence.

An adolescent boy from a public secondary school FGD in Rangwe Sub-County explained:

"When I am at school playing football with my friends or focusing on biology assignments, my mind stays clear. The classroom gives me a regular schedule where I don't have to think about my mother's absence. My classmates become my primary support system, and my teachers encourage me to keep reading so I can help my family later."

(Focus Group Discussion, Adolescent Participant 11)

Religious involvement was also described as an important source of emotional and social support. Participants reported that prayer and participation in church activities provided opportunities for companionship, reassurance, and a sense of belonging. A 16-year-old girl from Suba North Sub-County stated:

"Whenever the worry about my mother becomes too heavy, I go to our church choir practices. Singing and praying makes me feel like I am not completely alone. It gives me a sense of peace and helps me believe that my mother will eventually come back home safe."

(Focus Group Discussion, Adolescent Participant 04)

These accounts provide contextual support for the quantitative finding that school and religious engagement were among the most frequently reported adaptive coping strategies.

Defensive Withdrawal and Social Avoidance

The quantitative findings showed that 40.0% of the children reported maladaptive coping strategies, comprising emotional withdrawal and social isolation. Qualitative accounts illustrated how some children responded to maternal separation by reducing interaction with peers and limiting their expression of emotions.

A senior guidance teacher from Ndhiwa Sub-County explained:

"The learners who use avoidant coping are completely invisible unless you monitor them closely. They do not cause trouble in class; they just sit silently, fading into the background. They avoid making eye contact, skip group assignments, and spend breaktimes alone under trees. This emotional shut-down is their way of protecting themselves, but it eventually turns into severe nervousness and regular stomach aches."

(Key Informant Interview, Teacher 03)

The account illustrates how withdrawal and social avoidance may be difficult to recognize in school environments, particularly where quiet or reserved behaviour may not immediately be interpreted as a sign of emotional difficulty. The qualitative evidence therefore helps explain the presence of maladaptive coping responses in the quantitative results.

Financial Resilience and Family Silence: Caregiver Coping Dynamics

Among caregivers, the qualitative findings reflected the two broad patterns identified quantitatively: practical or support-oriented coping and avoidance of discussion about maternal separation. Caregivers described informal financial-support networks as important mechanisms for managing household demands following maternal absence.

A grandmother from an educational zone in Rachuonyo South explained:

"When my daughter left for Nairobi and stopped sending support, I didn't know how I would buy food for these three grandchildren. Joining the local women's chama saved us. I can take small loans to pay school fees and buy seeds for our farm. It keeps us moving forward." *(In-Depth Interview, Caregiver 17)*

This account illustrates how informal financial networks may help caregivers address practical challenges associated with maternal separation. Such strategies correspond with the quantitative finding that 36.7% of caregivers reported using informal village banking or chamas as a coping strategy.

At the same time, some caregivers described avoiding open discussion of the mother's absence, particularly when the circumstances involved stigma or family conflict. A school counsellor from Homa Bay Town observed:

“Many grandmothers refuse to talk about the missing mother. If the mother is in prison or left after a harsh divorce, they tell the children nothing. This silence is meant to protect the family, but it backfires. The children feel the tension and start imagining the worst, which drives up their generalized worry and fears of abandonment.”

(Key Informant Interview, Teacher 10)

This account provides contextual support for the quantitative finding that 29.1% of caregivers reported family silence regarding maternal absence, which was classified as a maladaptive coping response.

Overall, the qualitative findings complemented the quantitative distribution of coping strategies by illustrating how children and caregivers navigated maternal separation through different combinations of support-seeking, structured activity, religious involvement, practical financial adaptation, withdrawal, and family silence. The findings suggest that coping responses were shaped by the availability of social support, household circumstances, and the way families communicated about maternal separation.

Empirical and Theoretical Discussion of Objective 4

The findings on coping strategies support the Multi-Context Attachment Resilience Theory (MCART), which emphasizes the importance of relational and ecological resources in children's adjustment following disruption of the maternal attachment relationship. In the present study, children reported adaptive coping strategies such as peer and academic engagement and religious involvement, while others relied on emotional withdrawal and social isolation. These findings suggest that children's responses to maternal separation may vary according to the availability of supportive relationships and constructive activities within their immediate environments.

The qualitative findings further showed that schools, peer relationships, and religious communities provided important sources of social connection and emotional support for some children. Such forms of engagement may provide structure, opportunities for social interaction, and alternative sources of reassurance following maternal separation. The quantitative finding that 60.0% of the children reported adaptive coping strategies is consistent with this pattern. The remaining 40.0% who reported emotional withdrawal or social isolation indicate that a substantial proportion of children may have difficulty accessing or utilizing supportive coping resources.

The caregivers' responses similarly demonstrated both adaptive and maladaptive patterns. Informal financial-support networks and consultation with community elders were among the adaptive approaches reported, while family silence concerning the mother's absence represented a maladaptive response. These findings are consistent with the literature reviewed in Chapter Two, which indicates that alternative caregivers may provide important protective support while also facing economic pressures and limited psychosocial resources (Mutiso et al., 2018; Nyayieka et al., 2020).

The findings further suggest that the presence of alternative relationships does not automatically result in positive adjustment. The effectiveness of these relationships may depend on their emotional responsiveness, stability, and capacity to address children's psychological needs. Similarly, family silence may be intended to protect children from stigma or painful information, but it may also limit opportunities for children to express concerns and seek reassurance.

Overall, the findings under Objective 4 indicate that children and caregivers used a combination of adaptive and maladaptive coping strategies following maternal separation. The predominance of adaptive responses among both children and caregivers provides evidence of resilience within the study population, while the substantial occurrence of withdrawal, social isolation, and family silence highlights areas requiring attention from schools, caregivers, and psychosocial support providers. The findings therefore reinforce the relevance of MCART in understanding how relational and environmental resources may shape children's adjustment following maternal separation.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the findings, conclusions, and recommendations of the study in direct alignment with the five specific objectives. Objective 1 addressed the prevalence and pathways of maternal separation. Objective 2 assessed the levels and manifestations of anxiety symptoms among children who had experienced prolonged maternal separation. Objective 3 examined the relationship between selected maternal-separation characteristics and anxiety symptoms. Objective 4 compared anxiety symptom levels between children who had experienced prolonged maternal separation and those who had not experienced prolonged maternal separation. Objective 5 identified coping strategies used by children and caregivers in response to maternal separation. The chapter therefore presents each set of findings separately before drawing integrated conclusions and recommendations based on the quantitative and qualitative evidence.

The chapter further presents conclusions based on the quantitative and qualitative findings and provides recommendations for caregivers, teachers and school counsellors, policymakers, child-welfare agencies, and other relevant stakeholders. Recommendations are also made for further research to strengthen the evidence base on maternal separation, childhood anxiety, caregiving environments, and psychosocial support in Homa Bay County.

SUMMARY OF KEY FINDINGS

Prevalence and Pathways of Maternal Separation

The study examined the prevalence and forms of maternal separation among public school children in Homa Bay County, Kenya. Among the 120 children in the maternal-separation group, labour migration was the most frequently reported pathway, accounting for 46 (38.3%) cases. Maternal death was the second most frequently reported pathway, accounting for 32 (26.7%) cases. Marital dissolution resulting in maternal absence accounted for 21 (17.5%) cases, while maternal abandonment accounted for 13 (10.8%) cases. Maternal imprisonment was the least frequently reported pathway, accounting for 8 (6.7%) cases. The mean duration of maternal separation among the affected children was 18.9 months ($SD = 4.2$), indicating that the participants had experienced separation for varying lengths of time.

These findings show that maternal separation occurred through multiple pathways, with labour migration and maternal death representing the most frequently reported forms. The qualitative findings further indicated that these pathways were associated with different caregiving circumstances and changes in children's daily social and emotional environments.

Levels and Manifestations of Anxiety Symptoms Among Children Who Experienced Maternal Separation (Objective 2)

For Objective 2, psychometric assessment using the adapted Screen for Child Anxiety Related Emotional Disorders (SCARED) scale showed that children who had experienced prolonged maternal separation reported substantial anxiety symptoms.

Within this group, the mean overall anxiety score was 58.75 ($SD = 11.54$). The four operationalized manifestations were Worry, Fear, Withdrawal, and Nervousness. Worry recorded the highest mean score ($M = 16.11$, $SD = 3.79$), followed by Fear ($M = 14.45$, $SD = 3.80$), Withdrawal ($M = 14.34$, $SD = 3.99$), and Nervousness ($M = 13.85$, $SD = 4.24$). Qualitative accounts further illustrated these manifestations through persistent worry, fear associated with uncertainty and changes in caregiving, social withdrawal, and somatic experiences such as headaches, stomach discomfort, dizziness, and bodily tension.

The findings under Objective 2 therefore indicate that anxiety symptoms among children who had experienced prolonged maternal separation were expressed across several domains, with worry emerging as the most prominent manifestation. The qualitative evidence provided contextual support for the quantitative pattern by illustrating how anxiety could be experienced emotionally, socially, cognitively, and physically.

Relationship Between Maternal-Separation Characteristics and Anxiety Symptoms (Objective 3)

For Objective 3, inferential analysis showed that duration of maternal separation was not significantly associated

with anxiety symptom scores ($r = 0.121$, $p = 0.187$). Similarly, the coded caregiver-arrangement indicator ($r = 0.003$, $p = 0.978$) and coded reason for maternal separation ($r = -0.118$, $p = 0.199$) did not demonstrate statistically significant relationships with anxiety symptoms. In contrast, child age was positively and significantly associated with anxiety symptom scores ($r = 0.213$, $p = 0.020$). Older children within the maternal-separation group tended to report higher anxiety symptom scores than younger children. Because the study was cross-sectional, the age-related association should not be interpreted as causal.

The findings under Objective 3 therefore indicate that the selected characteristics of maternal separation examined in the study did not show statistically significant relationships with anxiety symptom scores, whereas age demonstrated a modest positive association. This pattern suggests that developmental differences may be relevant when interpreting anxiety responses following maternal separation.

Comparison of Anxiety Symptoms Between the Maternal-Separation and Comparison Groups (Objective 4)

For Objective 4, the study compared the overall anxiety symptom scores of the 120 children who had experienced prolonged maternal separation with the 120 children in the comparison group who had not experienced prolonged maternal separation. The maternal-separation group recorded a mean anxiety score of 58.75 ($SD = 11.54$), while the comparison group recorded a mean of 10.83 ($SD = 3.00$), representing an observed mean difference of 47.92 points. The same anxiety questionnaire was administered to both groups to facilitate direct comparison.

The comparison under Objective 4 demonstrates a substantially higher level of reported anxiety symptoms among children who had experienced prolonged maternal separation than among children who had not experienced prolonged maternal separation. The finding provides the empirical basis for distinguishing anxiety symptom levels associated with the maternal-separation group from anxiety occurring among children who remained in regular maternal care.

Coping Strategies Used by Children and Caregivers (Objective 5)

For Objective 5, the study identified both adaptive and maladaptive coping strategies among children and alternative caregivers. Among children, 60.0% reported adaptive

copied strategies, primarily academic and peer engagement (31.7%) and religious involvement and prayer (28.3%), while 40.0% reported maladaptive strategies comprising emotional withdrawal and silence (24.2%) and social isolation and peer avoidance (15.8%).

Among alternative caregivers, the most frequently reported adaptive coping strategies were participation in informal village banking groups (chamas) (36.7%) and seeking community and elder counsel (34.2%). However, 29.1% of caregivers reported family silence regarding maternal absence, which was classified as maladaptive because it limited open communication about the child's separation experience.

Overall, the findings under Objective 5 indicate that adaptive coping strategies were more commonly reported than maladaptive strategies among both children and caregivers.

Nevertheless, withdrawal, social isolation, and family silence remained important areas for counselling, caregiver education, and psychosocial support.

Objective 1: Maternal separation occurred through multiple pathways among the children in the maternal-separation group. Labour migration was the most frequently reported pathway (38.3%), followed by maternal death (26.7%), marital dissolution resulting in maternal absence (17.5%), maternal abandonment (10.8%), and maternal imprisonment (6.7%). The mean duration of separation was 18.9 months ($SD = 4.2$).

Objective 2: Children who had experienced prolonged maternal separation reported substantial anxiety symptoms. Worry was the most prominent manifestation, followed by fear, withdrawal, and nervousness. Qualitative findings further demonstrated emotional, social, cognitive, and somatic expressions of anxiety among affected children.

Objective 3: Duration of maternal separation, caregiver arrangement, and reason for separation did not demonstrate statistically significant relationships with anxiety symptom scores. However, child age was positively and significantly associated with anxiety symptoms ($r = 0.213$, $p = 0.020$), indicating higher anxiety scores among older children within the maternal-separation group.

Objective 4: Children who had experienced prolonged maternal separation recorded a substantially higher mean anxiety symptom score ($M = 58.75$, $SD = 11.54$) than children in the comparison group who had not experienced prolonged maternal separation ($M = 10.83$, $SD = 3.00$). The observed mean difference was 47.92 points.

Objective 5: Children and caregivers used both adaptive and maladaptive coping strategies. Adaptive strategies were more common, including academic and peer engagement, religious involvement, informal financial-support mechanisms, and seeking community or elder counsel. Emotional withdrawal, social isolation, and family silence nevertheless remained significant areas requiring attention.

RECOMMENDATIONS

Policy and Institutional Recommendations

1. **Ministry of Education and County Department of Children's Services:** Relevant education and child-protection authorities should strengthen mechanisms for identifying and supporting children living in alternative caregiving arrangements in Homa Bay County. Where feasible, child-welfare information systems should document vulnerable learners requiring additional psychosocial and social-support services so that available resources can be directed toward children experiencing maternal separation.
2. **Boards of Management and School Counselling Services:** Public primary, junior, and secondary schools should strengthen school-based counselling and psychosocial support services for children affected by maternal separation. Teachers and school counsellors should receive appropriate training in recognizing anxiety-related manifestations such as persistent worry, fear, social withdrawal, and nervousness, particularly where these behaviours may otherwise be interpreted as ordinary quietness or obedience. Schools should also establish clear referral pathways for children who require more specialized psychological or mental-health support.
3. **Community and Faith-Based Organizations:** Community and faith-based organizations should develop programmes that support alternative caregivers in responding to children affected by maternal separation. Such programmes should promote emotionally responsive caregiving, open and age-appropriate communication with children, positive coping strategies, and appropriate use of community and psychosocial support resources. Particular attention should be given to reducing practices of prolonged family silence where these limit children's opportunities to understand and express their experiences of maternal separation.

Recommendations for Further Research

1. **Longitudinal research:** Future studies should adopt longitudinal designs to follow children who experience maternal separation over several years and examine how anxiety symptoms and coping strategies change as children progress through different developmental and educational stages. Such research would help establish temporal patterns that cannot be determined from a cross-sectional study.
2. **Comparative research across maternal-separation pathways:** Future research should compare the psychological outcomes associated with different forms of maternal separation, including labour migration, maternal death, abandonment, imprisonment, and marital dissolution resulting in maternal absence. Such studies could determine whether particular separation pathways are associated with different patterns or levels of anxiety symptoms and coping responses.
3. **Larger multilevel studies:** Future studies should use larger samples drawn from several counties or regions to examine the combined influence of maternal separation, caregiver support, socio-economic conditions, and



access to psychosocial services on children's anxiety symptoms. Larger samples would also provide greater statistical power for multilevel regression and other advanced modelling approaches to examine how child-, caregiver-, household-, and school-level factors interact.

Declaration

Student's Declaration

This thesis is my original work and has not been presented for a degree or any other academic award in any other university or institution of higher learning.

Signature..... Date..... 21/9/2026.....

Yudah Otieno Opapa Sas/Mast/03331/023

Supervisors' Approval

We confirm that the work reported in this thesis was carried out by the candidate under our supervision and is submitted with our approval.

Dr. Joab Kinzi

Department of Psychology and Educational Foundations Faculty of Education

Tom Mboya University

Signature..... Date..... 21/9/2026.....

Dr. Stephen Okello

Department of Psychology and Educational Foundations Faculty of Education

Tom Mboya University

Signature..... Date..... 21/9/2026.....

Dedication

I dedicate this thesis to my beloved family, whose unconditional love, unwavering emotional support, and endless sacrifices have been the foundation of my academic journey.

I also dedicate this work to the vulnerable children of Homa Bay County, whose quiet resilience inspired this inquiry. May this research serve as a stepping stone toward creating a more compassionate, supportive, and emotionally responsive environment for every child navigating the pain of attachment loss.

ACKNOWLEDGEMENTS

First and foremost, I give thanks to the Almighty God for granting me the health, wisdom, strength, and perseverance required to undertake and successfully complete this postgraduate research journey.

I express my deepest gratitude to my university supervisors, Dr. Joab Kinzi and Dr. Stephen Okello, for their scholarly guidance, critical insights, and constructive feedback throughout the development of this thesis. Their dedication to academic excellence greatly enriched my understanding of counselling psychology research and psychological assessment.

Special thanks go to the Ministry of Education and the National Commission for Science, Technology and Innovation (NACOSTI) for granting the necessary research clearances. I am equally indebted to the County Director

of Education in Homa Bay County and the headteachers of the participating public schools for their cooperation and support during data collection.

Finally, my sincere appreciation goes to the child participants, caregivers, teachers, and school counsellors who generously shared their time and experiences. This study would not have been possible without their cooperation. To my family, friends, and colleagues, thank you for your encouragement, support, and belief in my academic aspirations.

REFERENCES

1. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing. <https://doi.org>
2. Atwine, B., Cantor-Graae, E., & Bajunirwe, F. (2005). Psychological distress among children orphaned by AIDS in rural Uganda. *Social Science & Medicine*, 61(3), 555–564. <https://doi.org/10.1016/j.socscimed.2004.12.038>
3. Barker, T. V., Bukowski, W. M., & Deater-Deckard, K. (2021). Maternal separation anxiety and child anxiety: Exploring the mediating role of parenting behaviors. *Journal of Clinical Child & Adolescent Psychology*, 50(3), 385–397. <https://doi.org/10.1080/15374416.2020.1751728>
4. Bernard, K., Hostinar, C. E., & Dozier, M. (2019). Longitudinal effects of maternal separation on emotional and behavioral development in children. *Journal of Child Psychology and Psychiatry*, 60(10), 1028–1036. <https://doi.org/10.1111/jcpp.13114>
5. Birmaher, B., Brent, D. A., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): A replication study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(10), 1230–1236. <https://doi.org>
6. Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Hogarth Press.
7. Callaghan, B. L., Tottenham, N., & Barker, G. J. (2020). Psychological impact of early maternal separation on children: A review of risks and protective factors. *Developmental Psychobiology*, 62(7), 919–935. <https://doi.org/10.1002/dev.22039>
8. Chase-Lansdale, P. L., & Owen, M. T. (1987). Maternal employment in a family context: Effects on infant-mother and infant-father attachments. *Child Development*, 58(6), 1505–1511. <https://doi.org/10.2307/1130681>
9. Erskine, H. E., Growth, C. J., Wajanku, G. O., & Ndeti, D. M. (2024). The prevalence of mental disorders among adolescents in Kenya: Findings from the Global Burden of Disease Study. *The Lancet Psychiatry*, 11(4), 245–253. [https://doi.org/10.1016/S2215-0366\(24\)00235-1](https://doi.org/10.1016/S2215-0366(24)00235-1)
10. Fellmeth, G., Rose-Clarke, K., Zhao, C., Busert, L. K., Zheng, Y., Massazza, A., Hesketh, T., & Devakumar, D. (2018). Health impacts of parental migration on left-behind children and adolescents: A systematic review and meta-analysis. *The Lancet*, 392(10164), 2567–2582. [https://doi.org/10.1016/S0140-6736\(18\)32558-3](https://doi.org/10.1016/S0140-6736(18)32558-3)
11. Howard, K., Martin, A., Berlin, L. J., & Brooks-Gunn, J. (2011). Early mother-child separation, parenting, and child well-being in Early Head Start families. *Attachment & Human Development*, 13(1), 5–26. <https://doi.org/10.1080/14616734.2011.537372>
12. Jin, M. J., Jeon, W. J., Kim, B. N., Park, S., & Lee, S. H. (2019). Early maternal separation and the trajectory of adolescent anxiety: The role of the anterior cingulate cortex and maternal bonding. *Journal of Affective Disorders*, 257, 462–468. <https://doi.org/10.1016/j.jad.2019.07.006>
13. Kariuki, S. M., Abubakar, A., Kombe, M., Kazungu, M., Odhiambo, J., & Newton, C. R. (2017). Burden,

- risk factors, and comorbidities of behavioural and emotional problems in Kenyan children: A population-based study. *The Lancet Psychiatry*, 4(2), 136–145. [https://doi.org/10.1016/S2215-0366\(16\)30403-5](https://doi.org/10.1016/S2215-0366(16)30403-5)
14. Kenya National Bureau of Statistics. (2019). 2019 Kenya population and housing census: Volume I—Population by county and sub-county. KNBS.
 15. Kim, M. J., Lee, Y., & Kim, E. (2019). Parenting style as a moderator of the relationship between maternal separation anxiety and child anxiety disorders. *Child Psychiatry & Human Development*, 50(4), 620–629. <https://doi.org/10.1007/s10578-019-00885-7>
 16. Magai, D. N., Malik, J. A., & Koot, H. M. (2018). Emotional and behavioral problems in children and adolescents in Kenya: Evidence from a community sample. *Child Psychiatry & Human Development*, 49(4), 659–671. <https://doi.org/10.1007/s10578-018-0783-y>
 17. McArthur, B. A., Racine, N., McDonald, S., & Tough, S. (2020). Prevalence and correlates of separation anxiety disorder in young children: Results from the Canadian
 18. Health Measures Survey. *Journal of Anxiety Disorders*, 75, 102268. <https://doi.org/10.1016/j.janxdis.2020.102268>
 19. Miller, J. G., Vaillancourt, T., & Boyle, M. H. (2021). The role of temperament in moderating the impact of maternal separation on child anxiety. *Development and Psychopathology*, 33(1), 287–299. <https://doi.org/10.1017/S095457942000125X>
 20. Mohammadi, M. R., Khaleghi, A., Rahgozar, M., Mesgarpour, B., & Mohammadi, M. (2019). Prevalence, comorbidity, and predictors of separation anxiety disorder in children and adolescents. *Psychiatric Quarterly*, 90(2), 451–469. <https://doi.org>
 21. Mutiso, V. N., Musyimi, C. W., Tele, A., Musau, A. M., & Ndeti, D. M. (2018). A descriptive study of child and adolescent mental health services in Kenya. *International Journal of Mental Health Systems*, 12(1), 1–7. <https://doi.org/10.1186/s13033-018-0219-8>
 22. National AIDS Control Council. (2016). Kenya HIV county profiles 2016. NACC. Nunan, F. (2021). A gendered analysis of fisherfolk migration on Lake Victoria, East Africa. *Gender, Place & Culture*, 28(3), 342–358. <https://doi.org/10.1080/14725843.2021.1937046>
 23. Nyayieka, M. A., Nyagwencha, S., & Nzyuko, S. (2020). Prevalence of clinical depression and anxiety among adolescents in selected public secondary schools in Homa Bay County, Kenya. *African Journal of Clinical Psychology*, 3(1), 1–15.
 24. Rutter, M. (1981). *Maternal deprivation reassessed* (2nd ed.). Penguin Books.
 25. Screen for Child Anxiety Related Disorders. (n.d.). Child anxiety questionnaire. Pediatric Bipolar Program, University of Pittsburgh. <https://www.pediatricbipolar.pitt.edu/resources/instruments>
 26. Smith, A. L., White, L. K., Hagan, C. C., & Fox, N. A. (2020). Moderating effects of social support on the association between early maternal separation and anxiety disorders in adolescents. *Journal of Child Psychology and Psychiatry*, 61(5), 582–590. <https://doi.org/10.1111/jcpp.13135>
 27. Xu, H., Mberu, B. U., Goldberg, R. E., & Luke, N. (2013). Dimensions of rural-to-urban migration and premarital pregnancy in Kenya. *The Annals of the American Academy of Political and Social Science*, 648(1), 104–119. <https://doi.org/10.1177/0002716213480792> Use code with caution