INFLUENCE OF MOTHERHOOD CHALLENGES ON PERCEIVED SELF-CONCEPT AMONG STUDENT MOTHERS IN SELECTED PRIVATE UNIVERSITIES IN KIAMBU AND NAIROBI COUNTIES, KENYA

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DECLARATION

This thesis is my original work. It has not been submitted in this form or any other for the award of any other degree in Pan African Christian University or any other institution.

Signed:…… Date:……
Lilian Njoki Kasanga
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This research has been submitted with my approval as the appointed university supervisor.

Signed……. Date……
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DEDICATION

This thesis is dedicated to Elizabeth Wangari Kamwaro, my remarkable mother, who loved us intensely, valued us incredibly, encouraged, and supported our continued learning immensely.

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ABSTRACT

The main purpose of this study was to investigate the influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya. The study focused on determining the effect of physical, psychological, social, and financial challenges on self-concept and identifying interventions that mitigate their adverse effects. The research adopted an embedded mixed-methods design and was anchored on Role Theory and Self-Discrepancy Theory. The target population comprised student mothers enrolled at United States International University/Africa (USIU-Africa) in Nairobi County, and Mount Kenya University (MKU) in Kiambu County. A purposive sample of 393 student mothers participated in the study. Primary data were collected using structured questionnaires and key informant interviews. Quantitative data were coded and analyzed using the Statistical Package for Social Sciences (SPSS) Version 31, while qualitative data were analyzed thematically using NVivo software. Descriptive statistics were generated and inferential analysis was conducted using Pearson correlation and linear regression. The findings revealed that physical challenges demonstrated a moderate positive but borderline relationship with self-concept ($r = 0.509$, $p = 0.063$) and explained 25.9% of the variance ($R^2 = 0.259$), with a regression coefficient of $\beta = 0.509$ and ANOVA results of $F = 4.192$, $p = 0.063$. Psychological challenges showed a weak and non-significant relationship with self-concept ($r = 0.352$, $p = 0.217$), explaining only 12.4% of the variance ($R^2 = 0.124$), with $\beta = 0.352$ and $F = 1.701$, $p = 0.217$. Social challenges demonstrated a statistically significant moderate relationship with self-concept ($r = 0.544$, $p = 0.044$), explaining 29.6% of the variance ($R^2 = 0.296$), supported by a significant regression coefficient ($\beta = 0.544$) and ANOVA results ($F = 5.046$, $p = 0.044$). Financial challenges showed a moderate but borderline relationship with self-concept ($r = 0.519$, $p = 0.057$) and explained 27.0% of the variance ($R^2 = 0.270$), with $\beta = 0.519$ and $F = 4.431$, $p = 0.057$. In conclusion, the study established that social challenges significantly influence perceived self-concept among student mothers; physical and financial challenges demonstrated meaningful but borderline effects, while psychological challenges showed weak influence. The study recommends strengthening institutional psychosocial support systems, flexible academic policies, peer support programs, and financial assistance mechanisms to enhance the well-being, academic persistence, and positive self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

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LIST OF ABBREVIATIONS AND ACRONYMS

CUE	Commission for University Education
HLI/ HIL	Higher Learning Institution/ Institution of Higher Learning
ISERC	Institutional scientific and Ethics review Committee
KICD	Kenya Institute of Curriculum Development
KINAP	Kiambu National Polytechnic
MKU	Mount Kenya University
MOEST	Ministry of Education, Science, and Technology
NACOSTI	National Commission For Science, Technology, and Innovation
RSCQ	Robson Self-concept Questionnaire
SDT	Self-Discrepancy Theory
SPSS	Statistical Package for Social Sciences
TVET	Technical Vocational Education and Training
UN	United Nation.
USIU-Africa	United States International University-Africa

DEFINITION OF TERMS

Role Performance. Role performance refers to how well an individual fulfils the behavioural expectations associated with a given social position (Turner, 1978). In this study, it refers to the ability of student mother participants to take charge of their multiple academic and parenting responsibilities, and the extent to which managing these shapes their self-concept.

Social Relations. Social relations refer to the patterns of interaction and connection between individuals that contribute to a sense of belonging and social integration (Mead, 1972). In this study, also referred to as belongingness, it describes the extent to which a student mother feels accepted, connected, and supported across her university, home, and community environments, as assessed through questionnaire items and interview questions.

Student Mother. A student mother is a female enrolled in a formal educational institution who simultaneously assumes caregiving responsibilities for one or more dependent children (Bustillo et al., 2024). In this study, student mother specifically refers to a female student enrolled in a private university in Kenya, actively parenting while pursuing academic goals.

Self-Concept. Self-concept refers to the totality of an individual's beliefs, perceptions, and evaluations about themselves across multiple life domains (García-Martínez et al., 2022). In this study, it refers to the student mother's overall perception and evaluation of herself across five dimensions: self-esteem, self-identity, body image, social relations, and role performance.

Perceived Self-Concept. Perceived self-concept refers to the subjective, internalized representation of oneself constructed through personal experience and social feedback

(Gao & Ali, 2024). In this study, it refers to the student mother's personal interpretation of her own worth, identity, and competence as both a mother and a student.

Motherhood Challenges. Motherhood challenges refer to the physical, emotional, social, and economic demands associated with raising children that create strain when experienced alongside competing life roles (Hwang et al., 2022). In this study, they refer to the physical, psychological, social, and financial difficulties faced by student mothers in simultaneously fulfilling parenting responsibilities and pursuing academic goals within private universities.

Self-Esteem. Self-esteem refers to an individual's overall subjective evaluation of their own worth and the degree to which they perceive themselves as capable and deserving of respect (Orth & Robins, 2022). In this study, it refers to the student mother's personal sense of worth as influenced by her ability to meet the overlapping demands of motherhood and academic study, and shaped by feedback from peers, family, partners, and institutional environments.

Self-Identity. Self-identity refers to the conscious sense of who one is, encompassing the values, roles, and personal narratives through which an individual defines themselves in relation to others (Luo et al., 2024). In this study, it refers to how the student mother defines and understands herself as both a mother and a student, including how she reconciles and integrates these roles into a coherent sense of self.

Body Image. Body image is a multidimensional construct encompassing an individual's perceptions, thoughts, and feelings about their physical appearance (Palenzuela-Luis et al., 2022). In this study, it refers to the student mother's subjective perception of her physical appearance and bodily changes brought about by pregnancy,

childbirth, and breastfeeding, and the extent to which these influence her self-concept and psychological well-being.

CHAPTER ONE: INTRODUCTION AND BACKGROUND OF THE STUDY

Motherhood, while a deeply fulfilling life experience, presents unique and complex challenges when it intersects with the pursuit of higher education. Student mothers are simultaneously enrolled in private universities and actively parenting, navigating a demanding terrain that places significant pressure on their academic performance, emotional well-being, and sense of self (Espiritu et al., 2023). Besides institutional barriers, student mothers today are confronted by financial burdens, time management challenge, social isolation, strain in childcare and family demands, relationship and support challenges, health and stress issues, fatigue, as well as the academic burdens. The competing demands lead to poor self-care and a reduced sense of belonging in academic institutions; notwithstanding the threat on academic progress and timelines.

This study examined the influence of motherhood challenges specifically physical, psychological, social, and financial on the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya. It explored how these challenges shape self-perception across dimensions such as self-esteem, self-identity, body image, social relations, and role performance. By investigating these dynamics within the Kenyan private university context, the study sought to contribute to a deeper understanding of the student mother experience and to identify practical interventions that can mitigate the adverse effects of motherhood challenges on perceived self-concept, ultimately supporting the academic success and overall well-being of this population.

Studies show a steady rise in the number of student mothers in private universities as more women pursue higher education while parenting (Kiburi, 2021). The experience of motherhood significantly reshapes a woman's identity and values. For young, inexperienced student mothers, juggling academic and maternal roles is highly demanding and stressful, often with limited institutional support (Munyua et al., 2022). Globally, the

transition to motherhood is seen as a major life event that deeply impacts self-concept across dimensions of identity, body image, self-esteem, social relationships, and sense of belonging (Hutchinson, 2021).

Studies across the globe highlight the challenges and significance of supporting student mothers' self-concept. In North America, researchers emphasized the difficulty of managing expectations placed on student mothers (Guy, 2020) and the need to focus on their diverse experiences (Edlyn, 2023). Edlyn (2023) argued that a better understanding of the burdens faced by young mothers can improve their health, their children's development, and their overall functioning across educational, social, and vocational domains. Elsewhere, studies across Europe, in particular the Netherlands and Estonia explored how motherhood shapes thought patterns, behaviours, attitudes, self-worth, competence, and motivation, often leading to role conflict and self-discrepancy due to competing demands and limited resources (Tamm, 2024).

In Asia, research from China demonstrated that self-concept significantly influences emotional well-being, learning motivation, and academic success (Gao, 2024). Additional studies conducted in the Philippines stressed the importance of non-academic support systems for student mothers, noting that students with a positive self-concept perform better academically (Torres et al., 2020). A study in Iran found that life skills training enhances student self-concept, while research in Pakistan highlighted its link to academic performance, retention, and interpersonal success (Espiritu et al., 2023). These findings support the current study's goal of identifying strategies to help mitigate the adverse effects of motherhood challenges on the self-concept of student mothers.

A few studies using samples drawn from Africa highlight the critical role of educational access and support in shaping student mothers' self-concept. For instance, Abalaka (2022) emphasized that national educational interventions for women can

positively influence student mothers' sense of self. Aligned with Africa's Sustainable Development Goals for 2030 specifically SDG 3 on healthcare and SDG 4 on education there is a regional push to empower young women through life skills and institutional support (Maluleke, 2023). In Southern Africa, studies from South Africa and Namibia highlighted the importance of multilevel support systems comprising family, peers, partners, and institutions in bolstering resilience and helping student mothers resume studies and enhance their well-being (Ashipala, 2022).

These studies also reported that lack of paternal support, financial strain, and personal sacrifices negatively affect student mothers' well-being and career development, thus impacting their self-concept. Researchers in Ghana recommended establishing counselling centres in higher education institutions to address student-specific challenges (N-yelbi, 2024). Furthermore, 59% of female school dropouts aged 17 to 25 were due to early motherhood (Kakuru, 2022), while Kisanga (2023) in Tanzania emphasized the necessity of social support from partners, families, and institutions to help student mothers manage their multiple roles effectively.

Locally, Kiburi (2021) emphasized the need to support student mothers in his study using samples from Kenya. He noted that many girls in Sub-Saharan Africa still face educational disruption due to pregnancy and childbirth. Despite the increasing number of student mothers in Kenyan universities, existing policies remain inadequate and often conservative (Wekullo, 2020).

Furthermore, challenges such as low retention, hindered academic achievement, delayed study completion, and compromised psychological well-being continue to persist (Ricco, 2022). However, there is a clear research gap, as no study has specifically examined how motherhood challenges influence the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya. Equally, no existing

study is particularly focused within the contexts of the United States International University and Mount Kenya University in Kenya.

Statement of the Problem

Statistical evidence reveals increase in the population of student mothers in private universities, with some studies reporting that almost one in every two students (48.7%) conceive when in second year (Ngunyi, 2025). As a result, motherhood in contemporary private education is seen as a burden that disrupts academic progression and personal development (Juma, 2024).

Without appropriate support interventions, the implications of this on the perceived self-concept of student mothers are potentially adverse. The intersection of academic demands and maternal responsibilities therefore creates a uniquely vulnerable population whose psychological well-being and sense of self remain insufficiently understood and supported.

Globally, research consistently documents that student mothers experience significant role conflict, stigma, social isolation, and identity disruption as a result of navigating the dual demands of motherhood and higher education (Bustillo et al., 2024; Maluleke et al., 2023). In African contexts specifically, studies have linked early motherhood to school dropout, reduced academic achievement, and diminished self-worth among young women in higher education (Kakuru, 2022; Mukabana et al., 2024).

In Kenya, challenges such as low retention, delayed study completion, financial strain, and compromised psychological well-being continue to disproportionately affect student mothers in both public and private universities (Kiburi, 2021; Munyua et al., 2022). Despite the growing body of literature on student mothers' external challenges, the internal psychological consequences particularly the effect of motherhood challenges on self-concept remain largely unexamined in the Kenyan private university context.

This gap is significant because self-concept is a critical determinant of academic motivation, mental health, and long-term personal development (García-Martínez et al., 2022). Addressing this gap is therefore essential for the development of targeted institutional policies and support systems that promote both academic success and the psychological well-being of student mothers.

The effects of motherhood challenges financial, psychological, social, and physical on the self-concept of student mothers in private universities remain underexplored. Existing research has largely focused on academic performance and external challenges such as financial strain, physical demands, and inadequate social support (Kiburi, 2021; Munyua et al., 2022; Okore, 2021). However, little attention has been given to how these challenges impact the student mother's self-perception, identity, body image, self-esteem, belongingness, and role performance.

This gap limits the development of targeted institutional policies and support systems that could enhance both academic success and personal growth for this population. No study has specifically examined how motherhood challenges influence the self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya, particularly within the contexts of the United States International University and Mount Kenya University. This study therefore sought to address this gap and contribute to a more holistic understanding of student motherhood within the Kenyan private university context.

Purpose of the Study

The purpose of this study was to investigate the influence of motherhood challenges on the perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

Study Objectives

This study was guided by the following specific objectives:

1. To assess the types of challenges experienced by student mothers in private universities Nairobi and Kiambu Counties, Kenya, that might influence their perceived self-concept.
2. To investigate the extent to which those challenges influence the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.
3. To recommend interventions that mitigate the adverse influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

Research Questions

The study sought to answer the following research questions:

1. What are the different types of challenges experienced by student mothers in private universities Nairobi and Kiambu Counties, Kenya, that might influence their perceived self-concept?
2. How do those challenges influence the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya?
3. What interventions would mitigate the adverse influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

Assumptions of the Study

This study was guided by the following assumptions:

1. The study assumed that different types of motherhood challenges have a significant influence on the perceived self-concept of student mothers in private universities.
2. The study assumed that student mothers in private universities experience identifiable physical, psychological, social, and financial challenges that influence their perceived self-concept.

3. The study assumed that all respondents would provide honest, accurate and truthful responses about their experiences and self-perceptions without social desirability bias.
4. The study assumed that the selected sample of student mothers was representative of the broader population of student mothers in private universities in Nairobi and Kiambu Counties, Kenya.
5. The study assumed that the research instruments, the questionnaire and key informant interview guide were valid and reliable measures of the constructs under investigation.
6. The study assumed that all participants fully understood the questionnaire items and interview questions as intended by the researcher

Justification of the Study

There is a growing recognition of the complex relationship between motherhood challenges and the perceived self-concept among student mothers in higher education, yet these perspectives remain underexplored (Kisanga, 2021). Most existing studies tend to focus narrowly on single aspects of self-concept such as self-esteem (Hutchinson, 2021) or role performance (Van Der Aar, 2022) rather than examining multiple dimensions collectively.

This study addresses that gap by exploring five self-concept dimensions covered in its objectives, conceptual framework, and data collection instruments: self-esteem, self-identity, body image, social relations, and role performance. While considerable research has been conducted on adolescent mothers in primary and secondary schools (Adangabe, 2021; Diabelková et al., 2023; Eyeberu et al., 2022), there is a clear lack of studies focusing on student mothers in private universities, especially in Kenya. Prior research underscores the significance of self-concept in influencing academic success, mental health, and overall well-being (Van der Aar, 2022).

Global and regional studies continue to call for more in-depth research on student

mothers' self-concept (Alcalde, 2024; Balba, 2021). Bang et al. (2021) emphasize the importance of enhancing self-concept as a protective factor for student mothers and their children. Collectively, these findings highlight the urgent need for comprehensive, context-specific research particularly interventions that support well-being and academic outcomes among student mothers which this study addressed through its fifth objective on mitigating interventions.

Globally, studies highlight the importance of enhancing self-concept among student mothers as a strategy for improving well-being, life skills, and social functioning. In China, Gao (2024) demonstrated that self-concept significantly influences emotional well-being, learning motivation, and academic success among students. In Korea, Bang et al. (2021) underscored the need for greater attention to building healthy self-concept in student mothers, emphasizing it as a protective factor for both the mother and her child. In the Philippines, Espiritu et al. (2023) highlighted that student mothers with stronger self-concept demonstrate better academic persistence and emotional resilience.

In Kenya, Okore (2021) recommended social skills training as a strategy for improving self-concept among student mothers in private universities. Overall, current research points to a pressing need for broader and more inclusive investigations into student mothers' self-concept, particularly within the African and Kenyan context where such studies remain scarce.

Significance of the Study

The findings of this study are expected to benefit student mothers directly by providing evidence-based insights into how motherhood challenges shape their perceived self-concept, equipping them with a clearer understanding of their experiences and the support they deserve.

For institutional administrators at private universities, the findings might inform the

development of targeted, comprehensive support programs tailored to student mothers' unique academic and psychological needs. Counselling professionals can benefit from the study's identification of specific self-concept dimensions- self-esteem, self-identity, body image, social relations, and role performance- that require focused therapeutic attention amongst the student mother population.

Policymakers might gain empirically grounded evidence to guide the formulation of inclusive higher education policies that address the intersecting challenges of motherhood and academic pursuit. Additionally, the study contributes to the growing body of knowledge on student motherhood in the Kenyan private university context, laying a foundation for future research aimed at improving the well-being, academic success, and life quality of student mothers.

Scope of the Study

This study aimed to examine the influence of motherhood challenges on perceived self-concept among student mothers aged 18 to 30 years enrolled in selected private universities in Nairobi and Kiambu Counties, Kenya. Geographically, the research was conducted in two private universities the United States International University-Africa (USIU-Africa), in Nairobi County, and Mount Kenya University (MKU) in Kiambu County. This covers both urban and peri-urban areas thus reducing geographical limitations.

The study targeted 393 student mothers actively studying while parenting, recruited through purposive and snowball sampling. A mixed-methods approach was employed over a period of four weeks, combining a structured questionnaire and in-depth interviews, guided by the Self-Discrepancy theory and Role theory.

Limitations and Delimitations

This study was limited to two out of 68 private universities in Kenya (Commission

for University Education, 2025), which restricts the generalizability of its findings to other educational settings or broader global contexts. Constraints of time and resources prevented wider geographical coverage and the inclusion of student mothers from public universities, high schools, or other regions of Kenya.

Additional limitations included the possible risk of social desirability bias affecting self-reported responses, limited prior research specifically focused on self-concept among student mothers in Kenyan private universities, and the absence of instruments tailored exclusively to the study's objectives. To address these limitations, the researcher employed data triangulation, gathered feedback from multiple relevant sources, and applied a mixed-methods approach to offset the potential weaknesses of any single method.

The study was deliberately delimited in several ways. First, it focused exclusively on student mothers in two selected private universities- USIU-Africa, in Nairobi County and MKU, in Kiambu County- and did not extend to public universities or other institution types. Second, the study was restricted to female students who were actively parenting while enrolled, excluding student fathers and non-parenting students. Third, the study examined only four dimensions of motherhood challenges physical, psychological, social, and financial and five dimensions of self-concept self-esteem, self-identity, body image, social relations, and role performance without extending to other possible variables.

Fourth, the study was anchored on two theoretical frameworks, namely Role theory and Self-Discrepancy theory, and did not incorporate other available theoretical perspectives. These delimitations were intentionally set to maintain the focus, feasibility, and coherence of the study within the available time and resources.

Chapter Summary

This chapter has set the foundation for the research study on the influence of motherhood challenges on perceived self-concept among student mothers in selected

private universities in Nairobi and Kiambu counties, Kenya. It has outlined the significant gap in existing literature regarding how the diverse motherhood challenges interact to influence the self-concept and of student mothers.

By identifying this gap, the chapter sets the stage for a deeper investigation into the self-esteem, identity, body image, social relations, and role performance dimensions of self-concept amongst student mothers. The study objectives, the significance, scope, and limitations of the study are also outlined in this chapter. The next chapter covers the review of literature related to the study, the theoretical framework and the conceptual framework as well.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter reviews literature on the unique challenges of student mothers, the related self-concept components- self-esteem, body image, identity, social relations, and role performance. It also explores strategies to mitigate the adverse effect of these challenges on student mothers' self-concept, with studies guided by the research objectives and grounded on the role theory and the self-discrepancy theory.

Empirical Literature Review

This section presents a review of empirical studies related to the influence of motherhood challenges on the perceived self-concept of student mothers in higher education. Specifically, it examines existing literature on the motherhood challenges faced by student mothers in private universities, including physical, psychological, social, and financial challenges, as well as the perception of self-concept among this population. Furthermore, the section explores the influence of each category of motherhood challenge on specific dimensions of self-concept, namely self-esteem, self-identity, body image, social relations, and role performance. Additionally, it reviews existing interventions that have been identified as effective in mitigating the adverse influence of motherhood challenges on the perceived self-concept of student mothers. Taken together, the reviewed studies inform the theoretical and conceptual underpinnings of the current study and highlight the research gaps that it sought to address. The empirical literature review clearly demonstrates the diverse challenges student mothers in universities face that influence their perceived self-concept. With the aim of addressing the gaps within the study context, the specific objectives are subsequently explored in the next section.

Motherhood Challenges Faced by Student Mothers in Private Universities

Motherhood profoundly alters a student mother's life trajectory, as shown in global

studies from Canada (Bang et al., 2021); thus, recognizing how crucial the unique experiences and motherhood influence on self-concept is. The World Health Organization [WHO] (2023) highlights challenges student mothers face, including partner and parental rejection and peer stigma, which harm individuals' self-concept. In this section, empirical literature on the challenges of student motherhood is critically reviewed in terms psychological, financial, social, and physical challenges.

Psychological Challenges

Psychological challenges represent one of the most pervasive dimensions of motherhood challenges that adversely affect the self-concept of student mothers in private universities. Specifically, emotional stress, guilt, burnout, anxiety, depression, and lack of counselling support have been widely documented as psychological burdens that student mothers carry (Anibijuwon, 2020). Furthermore, political, economic, and social factors compound these experiences, leading to stalled goals, reduced motivation, and increased dropout risk (Chinyere et al., 2021).

These challenges collectively create conditions in which student mothers feel unable to meet the demands of either their academic or maternal role effectively, generating persistent feelings of inadequacy and self-doubt. Consequently, universities must invest in support services such as counselling and childcare programs to address the psychological strain inherent in student motherhood.

Drawing from the United States, Ricco and Badiee (2022) established that the dual demands of parenting and studying cause significant psychological stress that adversely affects the self-concept of student mothers. Specifically, Robert (2022) identified role conflict, overload, ambiguity, and incompatibility as common psychological challenges impacting both academic success and personal well-being.

These challenges created conditions of emotional exhaustion that left student mothers feeling stretched thin across their competing responsibilities. Importantly, however, neither study explored the deeper implication of these psychological challenges on student mothers' self-concept dimensions, presenting a conceptual gap. Consequently, American researchers recommended targeted psychosocial support programs as essential institutional responses to the psychological challenges of student motherhood.

Consistent with these global findings, a study using a sample drawn from Northern Cyprus found that student mothers faced significant psychological challenges including time pressure and social stigma, all of which hindered their academic progress and emotional stability (Nnadi & Nazım, 2024). Similarly, Bustillo et al. (2024) found that student mothers faced major difficulties including emotional exhaustion stemming from the competing demands of motherhood and schooling.

Interestingly, neither study explored the implication of these psychological challenges on student mothers' self-concept, thus presenting a conceptual gap. It could be argued that this gap is particularly significant given that psychological challenges are the most directly linked to self-concept among all motherhood challenge dimensions. It seems reasonable, therefore, that these contextual limitations provide impetus for the present study within the Kenyan private university context.

Extending this discussion to the Philippines, Espiritu et al. (2023) found that role overload manifested in juggling and struggling with student motherhood, with the weight of dual responsibilities exceeding the capacity of student mothers to cope effectively. Similarly, Baluyos and Alvarico (2024) found that student mothers faced multiple challenges including burnout, signaling role overload as an undesirable and psychologically damaging feature of student motherhood.

Furthermore, Arabejo et al. (2025) found that student mothers struggled to balance their academic workloads and parenting duties, leading to significant emotional stress, with universities urged to implement inclusive educational policies. However, all three studies failed to examine the implication of these psychological challenges on students' self-concept, presenting a conceptual gap that the present study sought to address. Taken together, these Asian studies confirm that psychological strain is a consistent and damaging reality of student motherhood across diverse cultural contexts.

Narrowing to the African context, a study using a sample drawn from South Africa found that most student mothers expressed feelings of guilt and societal judgment as prominent psychological challenges (Maluleke, 2021). Specifically, the inability to effectively harmonize the demands of both student and maternal roles without significant stress or compromise was a common experience among participants. These feelings of guilt and judgment reflect a discrepancy between the student mother's actual self and her ideal self, directly undermining her self-concept.

However, the study did not examine how these psychological challenges specifically shaped student mothers' self-concept dimensions, a gap the present study addressed. Consequently, it seems logical that the South African context, while informative, underscores the need for a Kenyan-specific investigation into the psychological dimensions of student motherhood.

Locally, Rika (2021) found that student mothers experienced role conflict while juggling multiple responsibilities as mothers, students, and economic agents, often resulting in feelings of guilt, anxiety, and depression. Specifically, these psychological challenges were compounded whenever one role was neglected in favour of the other, creating strained relationships and diminished self-worth.

Similarly, Kiburi (2021) noted that many students mothers experience significant psychological distress as a result of inadequate institutional support and the competing demands of their dual roles. Interestingly, however, neither study specifically examined how these psychological challenges influence the self-concept dimensions of student mothers in Kenyan private universities, presenting a clear gap in the local literature. Consequently, the present study sought to address this gap by investigating the influence of psychological challenges on the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

Physical Challenges

Physical challenges constitute a significant dimension of motherhood challenges that directly disrupt the academic participation and perceived self-concept of student mothers in private universities. Torres et al. (2020) found that role strain among student mothers emanated from challenges of managing time, caring for ill babies, finishing schoolwork, and homesickness, with other physical challenges including fatigue, severe time constraints, hindered academic performance, and inadequate childcare solutions.

Furthermore, limited participation in university activities and the constant struggle to balance class attendance with assignment submission further compounded the physical burden of student motherhood. These findings underscore the critical gap in institutional support for student mothers, suggesting that private universities have largely failed to provide the physical infrastructure necessary to support their dual roles. Consequently, it seems logical that unaddressed physical challenges have far-reaching implications for how student mothers perceive and value themselves as both academics and parents.

Consistent with these findings, a study using a sample drawn from Scotland found that student mothers experienced their identities and roles as constrained by expectations around "home" as their proper place, which limited their ability to fully participate in the

public sphere of the university (Bogossian, 2020). Specifically, caring responsibilities restricted their mobility and access to public educational spaces, revealing how physical barriers to campus participation reflect deeper structural failures that shape student mothers' sense of belonging and self-worth.

Interestingly, this study provides rich insights into how physical role conflict plays out within the context of social norms and gendered spatial expectations. However, its narrow focus on a single institution limits the generalizability of its findings to the broader student mother population across diverse academic programs. It seems reasonable, therefore, that these contextual limitations provide further impetus for the present study within the Kenyan private university context.

Narrowing to the African context, a study using a sample drawn from Namibia found that student mothers experienced significant physical challenges including fatigue from combined night duties and childcare responsibilities, limited access to breastfeeding facilities on campus, and the physical demands of managing infant care alongside academic attendance (Ashipala & Natanael, 2022).

The physical toll of simultaneously managing academic and maternal responsibilities was particularly pronounced among student mothers in health-related programs, where attendance and physical presence are non-negotiable requirements. Importantly, however, its narrow focus on nursing students in a single country limits its applicability to the broader student mother population. Consequently, the present study addressed this gap by examining physical challenges across diverse academic programs within the Kenyan private university context. Taken together, these findings establish that the physical burden of student motherhood is a consistent and damaging reality that demands targeted institutional intervention.

Locally, Kanana et al. (2021) found that 92% of student mothers reported time

management difficulties with respect to lecture attendance, co-curricular activities, childcare responsibilities, domestic chores, academic trips, medical clinic visits, assignment submission, and academic group discussions. These findings highlight the breadth and intensity of physical challenges that student mothers in Kenya navigate on a daily basis, underscoring the urgent need for targeted institutional support. However, the research did not explore the concept of self-concept, presenting a conceptual gap that the present study sought to address.

Similarly, Ngunyi (2025) found that motherhood caused considerable disruptions to academic attendance, with approximately 41.03% of student mothers missing classes due to childcare demands, and some bringing their babies into lecture rooms and group discussion sessions. The visible image of a student mother carrying her baby into a lecture room is not merely a logistical inconvenience; it reflects the systemic failure of private universities to provide adequate physical support structures, raising a fundamental question about how such experiences shape the way these women perceive and value themselves as both mothers and students.

Social Challenges

Social challenges have been identified as among the most significant barriers to the academic success and psychological well-being of student mothers in private universities globally. Robert (2022) established that young student mothers rely heavily on social support systems yet frequently experience rejection, peer stigma, and institutional neglect, with the absence of adequate social support significantly undermining their ability to balance academic and maternal responsibilities.

Similarly, Bustillo et al. (2024) and Espiritu et al. (2023) both found that social isolation, strained peer relationships, and lack of institutional understanding created profound emotional burdens for student mothers, directly eroding their confidence,

motivation, and sense of belonging within their academic communities. Furthermore, Bogossian (2020) observed that societal expectations and lack of peer and institutional understanding left student mothers feeling excluded from the mainstream university experience.

Together, these global findings underscore the universal nature of social support challenges faced by student mothers and the urgent need for targeted institutional interventions that foster inclusion, belonging, and positive self-concept. Consistent with these global findings, a study using a sample drawn from selected Nigerian universities found that student mothers encountered significant time constraints that hindered their academic performance, with time constraints emerging as a recurrent feature of student motherhood challenges underpinning role strain (Ogunji et al., 2020).

Specifically, the findings revealed that social challenges faced by student mothers extended beyond time constraints to include partner, parent, and family rejection, peer stigma, and strained relationships. These social barriers created conditions of exclusion and inadequate support that left student mothers feeling isolated and undervalued within their academic communities. Importantly, the study did not examine how these social challenges specifically influenced student mothers' self-concept, presenting a conceptual gap. It seems logical, therefore, that the Nigerian context, while informative, underscores the need for a more focused investigation into the relationship between social challenges and self-concept among student mothers.

Narrowing to East Africa, Kakuru (2022) found that student mothers in Kampala, Uganda, faced severe time constraints and rejection from family, with the lack of institutional support including childcare, flexible deadlines, and counselling and exclusionary educational policies identified as significant barriers to academic success. Specifically, social exclusion and inadequate university support created conditions of urban

poverty and academic marginalisation that directly undermined student mothers' sense of belonging and self-worth.

Interestingly, however, the study's exclusive focus on informal urban communities limits both its generalizability and its ability to establish the relationship between social challenges and self-concept. Consequently, these limitations present methodological and conceptual gaps that the present study addressed through a mixed-methods approach within the formal private university context in Kenya. It could be argued that the social environment surrounding student mothers in East Africa is not merely unsupportive but may at times be actively hostile to their academic and personal development.

Locally, Mwangi (2022) found that motherhood significantly impacted students' learning due to role strain emanating from competing domestic responsibilities, financial strain, lack of institutional support, and emotional stress among undergraduate student mothers in public universities in Western Kenya. Specifically, these social challenges created conditions of persistent role conflict that undermined student mothers' academic performance and overall well-being. However, the conceptual focus of the study was on students' learning rather than self-concept, hence underscoring the need for the current study.

Similarly, Kiburi (2021) noted that student mothers in Kenya face significant social challenges arising from inadequate institutional policies and the competing demands of their dual roles, further reinforcing the social vulnerability of this population. The consistent emergence of social exclusion, family rejection, and inadequate university support across studies from Nigeria, Uganda, and Kenya is deeply telling, compelling this study to investigate how student mothers can maintain a healthy and holistic sense of self even when the social groupings and universities around them fail to offer the much-needed support.

Financial Challenges

Financial challenges have been widely documented as a significant barrier to the academic success and overall well-being of student mothers in private universities globally. LaBrenz et al. (2023) established that financial pressure significantly compounded the stress experienced by student mothers, with many reporting inabilities to afford childcare, basic needs, and tuition simultaneously.

Furthermore, Robert (2022) recommended campus-based financial support systems as essential for enabling student mothers to fulfil both their academic and parenting roles effectively. Similarly, Espiritu et al. (2023) found that financial strain was among the most debilitating challenges faced by student mothers, recommending financial aid and scholarships as critical institutional interventions. Taken together, these global studies establish that financial challenges do not operate in isolation but intersect with psychological and social dimensions to collectively undermine the self-concept of student mothers, underscoring the need for comprehensive financial support frameworks within private universities.

Consistent with these global findings, a study using a sample drawn from Korea found that financial hardship among student mothers was closely linked to diminished self-esteem and reduced social participation (Bang et al., 2021). Specifically, financial strain created conditions in which student mothers were unable to participate fully in academic and social life, further eroding their sense of belonging and self-worth.

Furthermore, Bustillo et al. (2024) similarly identified financial struggles as central to the emotional exhaustion experienced by student mothers across various universities in the Philippines. These findings reinforce the view that financial challenges have far-reaching implications for the self-concept of student mothers that extend well beyond material deprivation. Consequently, it seems logical that addressing financial challenges

through targeted institutional interventions is essential for enhancing both the academic success and psychological well-being of student mothers.

A study using a sample drawn from Ghana found that student mothers faced significant challenges balancing academic work with childcare responsibilities, with financial strain and emotional stress emerging as particularly debilitating (Amos et al., 2021). Specifically, financial challenges faced by student mothers included poverty, financial hardship, and lack of economic engagement, all of which compounded the physical and psychological demands of their dual roles.

Similarly, Sangawe (2020) found that student mothers in Tanzania faced multiple challenges including financial hardship, inadequate childcare support, and emotional stress from juggling family and academic roles. However, the study did not represent the full spectrum of private universities, thus presenting a methodological gap that the present study addressed. Taken together, these African studies confirm that financial challenges are a pervasive and damaging reality of student motherhood across diverse institutional and cultural contexts.

Locally, Rika (2021) found that student mothers experienced role conflict while juggling multiple responsibilities as mothers, students, and economic agents, often resulting in feelings of guilt, anxiety, depression, and strained relationships. Specifically, financial deprivation created conditions in which student mothers were forced to make impossible choices between their children's needs and their own academic requirements. Interestingly, however, the study's qualitative design limited the empirical generalizability of its findings to the broader student mother population in Kenyan private universities.

Consequently, the present study sought to address this methodological gap by employing a mixed methods design that establishes both the nature and extent of the influence of financial challenges on the self-concept of student mothers. It seems

reasonable that financial hardship, when unaddressed by private universities, serves as a compounding stressor that erodes student mothers' self-concept across multiple dimensions simultaneously.

Perception of Self-Concept among Student Mothers in Selected Private Universities

Research has shown that self-concept is influenced by life experiences, social interactions, culture, and the environment in which an individual operates (Rajkumar et al., 2025). Specifically, the American Psychological Association defines self-concept as self-perceptions related to capabilities, traits, values, and relationships that impact identity (APA, 2024). Furthermore, Macleod (2023) describes it as a comprehensive self-evaluation that influences motivation, emotions, and behaviour, while Rajkumar (2025) views self-concept as multifaceted and evolving throughout college life.

Together, these definitions establish self-concept as a dynamic, multi-dimensional construct that encompasses physical, personal, family, social, moral, and academic aspects (Xiao, 2024). It seems reasonable, therefore, that the self-concept of student mothers is particularly susceptible to disruption given the complex and competing demands they navigate on a daily basis.

A strong self-concept enhances social skills and resilience in facing challenges and transitions among student mothers (Kim et al., 2020). Specifically, positive self-concept links to competence, emotional awareness, academic success, health, and family functioning (Rajkumar et al., 2025). Furthermore, a healthy self-concept supports psychological well-being, motivation, social connectedness, and personal growth, all of which are critical for student mothers managing dual roles (García et al., 2022). Consequently, it enhances resilience, academic success, emotional balance, and social adaptation (Van der Aar, 2022), while a negative self-concept leads to self-doubt, anxiety, and low self-esteem (Rohmalimna, 2022).

Regional studies from Ghana, Uganda, and Kenya similarly confirm that self-concept plays a pivotal role in determining the academic persistence and personal development of student mothers (Kakuru, 2022; Kiburi, 2021).

Consistent with these global findings, local studies from Kenya further underscore the significance of self-concept among student mothers in higher education (Okore, 2021). Specifically, research has shown that student mothers with a positive self-concept demonstrate better academic endurance, stronger social relationships, and resilience in managing the competing demands of motherhood and academic study. Moreover, studies from Ghana and Uganda reveal that self-concept shapes parenting competence, personal development, and social interactions among student mothers in ways that extend beyond the university context (N-yelbi, 2024).

Interestingly, however, most existing studies have examined self-concept narrowly through the lens of self-esteem alone, neglecting the multidimensional nature of the construct. Consequently, this study focused on five key self-concept components self-esteem, self-identity, body image, social relations, and role performance as the dimensions through which the influence of motherhood challenges on perceived self-concept was examined.

Self-Esteem

Self-esteem is a widely acknowledged construct of self-concept that has been linked to almost all other psychological domains, including clinical conditions such as anxiety and depression (Adewuyi, 2023). Specifically, Adewuyi (2023) defines self-esteem as an individual's personal evaluation of worthiness, empirically linking it to perceived social support and suggesting that student mothers who face overlapping academic, caregiving,

and financial pressures benefit significantly when university and family support raise their perceived social support.

Furthermore, Chukwudum et al. (2023) describe self-esteem as a person's overall sense of self-worth, encompassing how student mothers perceive and evaluate themselves through both internal self-perception and how they believe others view them. Anwar et al. (2022) added that self-esteem encompasses beliefs about being significant, competent, strong, and virtuous, finding that student mothers with stronger self-esteem recover and adapt better under stress. Consequently, boosting self-esteem through psychological support programs is vital to help student mothers handle the dual demands of motherhood and academic study.

Self-Identity

Self-identity refers to an individual's self-perception and the extent to which they associate themselves with a particular behaviour or role (Yao et al., 2025). Specifically, it represents a student mother's confirmation of her own role and a self-consciousness formed through how she sees and defines herself in relation to her social world (Tian et al., 2022). It can also be viewed as the extent to which student mothers consider increased study time during family time, for instance, to be congruent with their personal identity as mothers.

For student mothers, seeing oneself as a capable mother-student or scholar-mother can similarly shape motivation, persistence, and alignment with supportive behaviours and strategies in juggling motherhood and academic roles (Luo et al., 2024). Consequently, a strong and coherent self-identity is essential for student mothers to successfully integrate their dual roles into a stable and positive sense of self.

Body Image

Body image refers to the student mothers' positive or negative attitude toward their bodies, with research showing that fostering a positive body image is crucial as it enhances their overall self-concept (Singh & Manju, 2022). Specifically, physical changes brought about by pregnancy, childbirth, and breastfeeding significantly alter a student mother's perception of her physical appearance, often leading to body dissatisfaction and diminished self-worth (Zamiri-Miandoab et al., 2023).

Furthermore, student mothers whose families and peers exhibit negative attitudes toward them report higher body-image insecurity, suggesting that social support plays a critical role in shaping how student mothers perceive their physical selves (Oluokun & Adeleye, 2025). Interestingly, idealized media portrayals create unrealistic expectations that foster feelings of inadequacy and harm the mental health of student mothers who are already navigating significant physical changes (Michot, 2023). Consequently, cultivating a positive body image supported by family, peers, and institutional affirmation is essential for enhancing the overall self-concept and psychological well-being of student mothers.

Social Relations

Social relations refer to the quality of an individual's relationships and sense of belonging within their community, encompassing the ability to participate in social activities and maintain meaningful interpersonal connections (Rivas, 2022). Specifically, prolonged exclusion from social events disrupts social connections, leading to a diminished sense of community that in turn negatively impacts self-concept. Furthermore, Backman et al. (2025) link social relations to the concept of social well-being, concerned with the student mothers' sense of belonging, social integration, and participation in community life.

Additionally, Sohrabivafa (2021) argues that sense of belonging, social integration, and contribution to society encompassing aspects such as social acceptance, actualization, and coherence are hallmarks of a healthy self-concept. Taken together, these findings establish that maintaining strong social connections and support networks is fundamental to student mothers' self-concept development, aiding in the balance between academic responsibilities and parenting (Alim & Sourav, 2024).

Role Performance

Role performance encompasses student mothers' enactment and fulfilment of their dual roles as a mother, caring for and nurturing children, and as a student, attending classes, completing assignments, and studying and how they negotiate the expectations of each role (Garingan, 2023). Specifically, the more conflict or barrier student mothers face in performing either role, the greater the risk of stress, compromised academic performance, and feelings of failure, thus underscoring the importance of institutional policies that reduce these barriers (Mbonyiryivuze et al., 2023).

Consistent with these findings, Wright (2022) found that role performance among Latina first-generation student mothers in the United States represented a dynamic, contested space where student mothers negotiated conflicting expectations, managed invisible labour, and carried the burdens of both home and school simultaneously. Similarly, Bacatan and Sultan (2022) depicted the roles of mothers and students as existing in constant tension in the face of academic, family, financial, and societal pressures, with themes of time management, intellectual challenges, and financial concerns emerging as key markers of role performance strain.

Consequently, these tensions sometimes lead to sacrifices in one role or the other, reinforcing the urgent need for targeted institutional support that enables student mothers to perform both roles viably and without compromising their self-concept.

Influence of Motherhood Challenges on Perceived Self-Concept

Motherhood is a profound, life-changing experience for women. A student mother's self-concept- her perception of self-including self-esteem, identity, image, social belonging, and role abilities- is multidimensional, encompassing family, social skills, competence, academic achievement, emotions, and physical appearance. Studies by Aini (2022) note that transition into motherhood causes dynamic, complex changes in self-concept (Hwang et al., 2022).

Influence of Motherhood Challenges on Student Mothers' Self-Esteem.

Positive self-esteem motivates student mothers to explore their potential and succeed across life domains such as social interactions, academics, work, and mental and physical health, while reducing antisocial behaviour (Brito, 2023). Specifically, it shapes beliefs about oneself, influencing well-being and life satisfaction (Martín-Talavera, 2023), social acceptance, healthy adjustment, and resilience to setbacks (Muris, 2023). Furthermore, self-esteem is affected by a student mother's perceived ability to balance motherhood and academics, as failure to meet cultural expectations may lower self-esteem and increase insecurity and social rejection fears (Bang, 2022).

Consequently, boosting self-esteem through targeted support programs is vital to help student mothers handle the dual demands of motherhood and academic study (Orth, 2022). It seems reasonable, therefore, that self-esteem occupies a central position in the overall self-concept of student mothers and warrants deliberate institutional attention.

A study using a sample drawn from Ireland found that student mothers with high self-esteem experience less depression and less parenting stress due to confidence in their

choices (Cassidy, 2022). Similarly, a study using a sample drawn from Korea found that positive self-esteem buffered parenting stress and depression by reinforcing personal values and competence among student mothers (Kim, 2020).

Furthermore, research using a sample drawn from Indonesia links healthy self-esteem with higher academic success and resilience, reducing anxiety vulnerability among student mothers navigating dual roles (Aini, 2022). These findings collectively establish that self-esteem is a critical determinant of how student mothers cope with the competing demands of motherhood and academic study across diverse cultural contexts. Consequently, self-confidence developed through supportive social and institutional environments positively influences both the student mother and her child's overall well-being (Zell, 2024).

Regional and local studies similarly confirm the central role of self-esteem in shaping the experiences of student mothers. Specifically, studies using samples drawn from Ghana and Uganda show that self-esteem impacts parenting competence, personal development, and social interactions among student mothers (N-yelbi, 2024; Kakuru, 2022). Furthermore, Kenyan studies highlight that self-esteem shapes how student mothers perceive their ability to manage their dual roles and engage meaningfully with their academic and social environments (Okore, 2021).

Interestingly, however, local research on the specific relationship between motherhood challenges and self-esteem among student mothers in private universities remains limited. Consequently, this study sought to address this gap by examining how motherhood challenges influence the self-esteem of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

Influence of Motherhood Challenges on Student Mothers' Self-Identity.

Young student mothers are at a critical period of development when the most

significant changes in identity occur. Specifically, identity is encompassed in the awareness of self through observing, thinking about, rating, improving, and sustaining the self. A study using a sample drawn from Pakistan emphasizes the importance of helping young student mothers improve their self-concept during this critical developmental period (Gul, 2023). Furthermore, a student mother's perception of how she should conduct herself based on standards, dreams, aspirations, and expectations is also shaped by significant others parents, peers, partners, instructors, and the community who provide feedback, encouragement, and expectations.

Consequently, the quality of these social influences plays a decisive role in determining whether a student mother develops a coherent and positive sense of self-identity or experiences identity fragmentation and self-doubt.

Physical challenges influence self-identity by creating a tension between the student mother's actual self and her ideal self as a capable academic and devoted parent. Specifically, fatigue, class absenteeism, and physical exhaustion from caregiving erode a student mother's belief in her academic competence, causing her to question whether she can sustain the identity of a successful student (Torres et al., 2020).

Furthermore, when physical demands consistently prevent class attendance or assignment completion, a student mother may begin to redefine her identity primarily around motherhood, thereby diminishing her academic self-concept (Ngunyi, 2025). Interestingly, a study using a sample drawn from Scotland found that student mothers experienced their identities as constrained by expectations around "home" as their proper place, limiting their ability to participate fully in the university sphere (Bogossian, 2020).

Consequently, unaddressed physical challenges progressively erode the student mother's sense of herself as a capable and legitimate member of the academic community.

Psychological challenges disrupt self-identity through the mechanism of self-discrepancy, whereby a student mother who is dissatisfied with herself develops a wounded self-image that affects her behaviour and adjustment. Specifically, a student mother who views herself as having deviated from the moral values or standards she should have upheld may lack self-acceptance, generated by a mismatch between her desired self and her real self.

Furthermore, a study using a sample drawn from Ireland identifies the potential impact of these psychological pressures on the holistic mental well-being of student mothers, noting that emotional overwhelm and guilt create persistent identity confusion (Cassidy, 2022). Similarly, a study using a sample drawn from the United Kingdom found that becoming a mother is a major developmental milestone that is central not only to a woman's identity but also to her body image, self-esteem, role establishment, and sense of competence (Gittins, 2020). Consequently, student mothers who possess a strong sense of self and self-confidence succeed better in reconciling the psychological tensions of their dual roles.

Social challenges affect self-identity through the feedback student mothers receive from peers, partners, family members, and the broader institutional environment. Specifically, early motherhood often leads to a shift in self-identity, meaning that student mothers may start to see themselves as mothers or students primarily, thus changing their perception of who they are and how they fit into the world (Munyua et al., 2022). This shift can be both positive, bringing a sense of purpose and accomplishment (Mboweni, 2020), or challenging, as it may lead to a sense of loss of the previous identity as either a student or a young person.

Furthermore, social stigma and peer rejection compound this identity disruption by reinforcing a negative reflected appraisal of the student mother's worth and belonging

within the academic community. Consequently, the social environment surrounding student mothers plays a decisive role in determining whether identity shifts lead to growth or to a diminished and fragmented sense of self.

Financial challenges influence self-identity by forcing student mothers into a position where their economic circumstances define and constrain their sense of self. Specifically, the inability to afford tuition, childcare, or basic necessities creates a discrepancy between the student mother's ideal self- her independence, academic success, and being a capable provider- and her actual self, marked by dependency and deprivation (Rika, 2021).

Furthermore, financial hardship may cause student mothers to internalize a diminished sense of self-worth, limiting their academic persistence and personal growth. On a positive note, however, rising to these financial challenges can lead to personal growth and a sense of accomplishment that contributes to a positive self-concept. Taken together, these findings establish that the four dimensions of motherhood challenges collectively and distinctly shape the self-identity of student mothers, underscoring the need for targeted institutional interventions that support identity development and self-concept enhancement within the Kenyan private university context.

Influence of Motherhood Challenges on Student Mothers' Social Relations

Human beings continuously gather cues from their environment to form identity and a sense of belonging (Michot, 2023). Young student mothers, often with little parenting experience and sometimes parenting alone, rely heavily on social support to navigate their dual roles (Robert, 2022). However, they frequently face rejection, violence, and peer stigma, which negatively affect their self-concept and sense of belonging (WHO, 2020). Concerns about not meeting societal expectations lead to self-doubt, insecurities, and negative self-talk that further erode social confidence (Michot, 2023).

Consequently, feeling included in family, peer groups, or institutional culture fosters secure acceptance and a stronger self-concept among student mothers. Physical challenges undermine social relations by restricting student mothers' ability to participate in campus life and social activities. Specifically, fatigue, time constraints, and childcare responsibilities prevent student mothers from attending social events, joining peer groups, or engaging in extracurricular activities, thereby increasing their sense of isolation (Torres et al., 2020).

Furthermore, a study using a sample drawn from Scotland found that caring responsibilities restricted student mothers' mobility and access to public educational spaces, limiting their ability to form and sustain meaningful social connections within the university (Bogossian, 2020). Interestingly, the physical absence of student mothers from social spaces sends signals to peers and faculty that reinforce their marginalization within the academic community. Consequently, unaddressed physical challenges progressively erode the social relations that are essential for building a positive sense of belonging and self-concept among student mothers.

Psychological challenges influence social relations through the emotional barriers they create between student mothers and their peers. Specifically, anxiety, guilt, and emotional exhaustion make it difficult for student mothers to engage socially, as they feel overwhelmed by their dual demands and reluctant to burden others with their struggles (Bustillo et al., 2024). Furthermore, concerns about not meeting societal expectations lead to self-doubt and negative self-talk that further isolate student mothers from supportive social networks (Michot, 2023).

A study using a sample drawn from Korea found that positive social relations buffered parenting stress and depression by reinforcing personal values and competence, although social comparisons sometimes negatively impacted self-concept (Bang, 2022).

Consequently, psychological distress creates a withdrawal from social engagement that progressively erodes the student mother's sense of belonging and social identity.

Social challenges directly and most powerfully affect social relations through stigma, rejection, and exclusion experienced across multiple environments. Specifically, a study using a sample drawn from Australia found that perceptions by peers, tutors, and lecturers significantly affected student mothers' academic persistence and well-being, with lack of university understanding leading to feelings of neglect (Bogossian, 2020).

Similarly, studies using samples drawn from the Philippines found that strong family cohesion and unconditional acceptance from social networks positively influenced self-esteem and overall well-being, while lack of support and stigma caused psychological strain (Espiritu et al., 2023). Furthermore, a study using a sample drawn from South Africa revealed that unsupportive social environments led to isolation and psychological stress, while adequate social support reduced conflict and improved role performance and competence among student mothers (Maluleke, 2023).

Consequently, the stress of early motherhood, combined with social stigma, partner absence, and lack of support, negatively affects self-concept, though encouragement and personal achievement can foster self-confidence and stronger social relations.

Financial challenges affect social relations by forcing student mothers into social withdrawal due to the shame and stigma associated with financial deprivation. Specifically, the inability to afford social activities, appropriate clothing, or childcare creates barriers to social participation that further isolate student mothers from their peers (Rika, 2021).

Furthermore, Amedorme (2024) found that adequate social support reduced conflict and improved role performance among student mothers, suggesting that financial interventions must be accompanied by social integration efforts to be effective. Locally, Ibworo et al. (2024) found that social support from friends, peers, family, and partners is

vital for student mothers in managing their challenging yet rewarding roles, with positive social relationships offering encouragement, affirmation, emotional relief, and shared experiences that replenish emotional resources.

Taken together, social support from family, peers, partners, and universities is crucial for student mothers to maintain a positive self-concept, and this study sought to explore how each dimension of motherhood challenges influences student mothers' perceived self-concept with specific focus on social relations and sense of belonging.

Influence of Motherhood Challenges on Student Mothers' Body Image

Body image involves a person's perception of their physical appearance, body shape, health, and condition, all of which impact psychological functioning (Michot, 2023). Specifically, young student mothers experience significant identity transitions as budding professionals, mothers, and students, making their relationship with their bodies particularly complex and vulnerable (Shapovalenko, 2022).

Furthermore, research has shown that idealized media portrayals create unrealistic expectations that foster feelings of inadequacy and harm the mental health of student mothers who are already navigating significant physical changes (Michot, 2023). Interestingly, realistic body satisfaction has been linked to better well-being and parenting competence, suggesting that a positive body image is not merely cosmetic but fundamentally shapes how student mothers function across their dual roles (Singh & Manju, 2022).

Consequently, this study examined how each of the four dimensions of motherhood challenges physical, psychological, social, and financial specifically influences the body image of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

Physical challenges constitute the most direct influence on the body image of

student mothers, as pregnancy, childbirth, and breastfeeding produce tangible and often distressing bodily changes. Specifically, weight gain, postpartum body changes, and the physical demands of lactation frequently lead to body dissatisfaction, low self-esteem, depressive moods, and self-criticism among student mothers (Hutchinson, 2021).

Furthermore, a study using a sample drawn from Ireland found that new mothers experienced significant body image concerns arising from the physical toll of motherhood, with these concerns directly undermining their psychological well-being and sense of competence (Cassidy, 2022). Similarly, Zamiri-Miandoab et al. (2023) found that counselling interventions addressing body image concerns among lactating mothers significantly improved their self-esteem and overall self-concept. Consequently, it seems logical that unaddressed physical body changes, in the absence of institutional and social support, progressively erode the body image and broader self-concept of student mothers.

Psychological challenges influence body image through the emotional burden of role conflict, guilt, and persistent feelings of inadequacy that prevent student mothers from developing a positive relationship with their physical selves. Specifically, emotional exhaustion and anxiety make it difficult for student mothers to appreciate or accept their bodies, as their mental energy is consumed entirely by the pressure of competing demands (Espiritu et al., 2023).

Furthermore, a student mother who views herself as failing in either her academic or maternal role may internalize this failure as a reflection of her physical self, compounding body dissatisfaction with broader self-worth concerns (Higgins, 1987). Interestingly, Oluokun and Adeleye (2025) found that student mothers who developed stronger psychological resilience demonstrated better body image security, suggesting that psychological support programs can simultaneously address emotional well-being and body image.

Consequently, boosting psychological resilience through targeted counselling interventions is essential for helping student mothers develop and maintain a positive body image.

Social challenges influence body image through the stigma and judgment that student mothers receive from peers, partners, family members, and society regarding their physical appearance following motherhood. Specifically, student mothers whose families and peers exhibit negative attitudes toward them report higher body-image insecurity, suggesting that the social environment is a powerful determinant of how student mothers perceive and evaluate their physical selves (Oluokun & Adeleye, 2025).

Furthermore, idealized media portrayals and peer comparisons create unrealistic standards of physical appearance that student mothers feel unable to meet, fostering feelings of inadequacy and social shame (Michot, 2023). Similarly, a study using a sample drawn from South Africa found that social stigma and peer judgment regarding post-pregnancy bodies significantly contributed to negative body image and diminished self-concept among student mothers (Maluleke, 2023). Consequently, cultivating socially supportive environments that affirm student mothers' physical identities is essential for fostering positive body image and broader self-concept development.

Financial challenges affect body image by preventing student mothers from accessing adequate nutrition, healthcare, and personal care resources necessary for physical well-being and self-care. Specifically, the inability to afford basic needs creates conditions of physical deprivation that compound body dissatisfaction and erode the self-esteem of student mothers who already feel stretched thin by their dual responsibilities (Rika, 2021). Furthermore, financial hardship limits student mothers' access to healthcare services that could support postpartum recovery and address body image concerns arising from pregnancy and childbirth (Sangawe, 2020). Interestingly, Amedorme (2024) found that

student mothers who received financial support and institutional assistance demonstrated improved body image satisfaction and stronger overall self-concept, reinforcing the view that financial interventions have psychological and physical dimensions that extend beyond material relief.

Taken together, these findings establish that the four dimensions of motherhood challenges collectively and distinctly shape the body image of student mothers, underscoring the urgent need for comprehensive institutional support that addresses physical, psychological, social, and financial barriers to positive body image development within the Kenyan private university context.

Influence of Motherhood Challenges on Student Mothers' Role Performance

LaBrenz (2022) found that motherhood challenges add significant stress for student mothers, with younger mothers often prioritizing parenting over their student role, affecting their identity, self-confidence, and academic success. Similarly, Robert (2022) established that role conflict, overload, ambiguity, and incompatibility are common challenges that impact both academic success and child development.

Furthermore, studies using samples drawn from South Africa and Kenya show that juggling motherhood and academics disrupts routine and social life, leading some student mothers to prioritise one role over the other. Consequently, societal norms and expectations add significant pressure on student mothers. Specifically, Maluleke (2024) and Juma (2024) noted that these norms sometimes make motherhood feel burdensome rather than fulfilling.

While these studies provide valuable insights into role performance challenges, they largely treat role conflict as an outcome rather than examining its deeper implications for how student mothers perceive and evaluate themselves, a critical conceptual gap that limits the development of targeted interventions. Kisanga (2021) in Tanzania offers a more optimistic perspective, noting that these very challenges can motivate student mothers to

succeed academically for their own and their children's future. Kisanga suggested that role performance challenges, when adequately supported, can serve as catalysts for identity development and self-concept enhancement rather than merely as barriers. This is a nuance that this study sought to explore and substantiate within the Kenyan private university context.

Interventions that Mitigate the Adverse Influence of Motherhood Challenges on Perceived Self-Concept Among Student Mothers in Private Universities

Social support interventions encompass the instrumental, emotional, and informational support programs and initiatives that student mothers access in navigating their dual roles. Specifically, in this study they are classified into three categories: family support, peer support, and university support. Several studies have identified key interventions by private universities to enhance the self-concept of student mothers, including life skills programs, on-campus childcare, home visits, health initiatives, parent education for financial and job skills, increased visibility of student mothers in higher learning institutions, and supportive policies (Bang et al., 2022; Kim et al., 2020).

However, these studies often lack depth in explaining how such interventions specifically improve self-concept. Consequently, this study sought to investigate how motherhood challenges impact the perceived self-concept of student mothers within Kenyan private universities and to identify interventions that can effectively enhance it.

Physical Challenge Interventions

Physical challenges such as fatigue, limited campus participation, and inadequate childcare require targeted institutional responses that address the bodily and logistical demands of student motherhood. Specifically, the APA (2024) highlights university strategies such as increasing mental health staff, offering counselling, crisis response, and campus-wide wellness programs as essential physical support mechanisms. Furthermore,

Robert (2022) recommends campus-based childcare, parenting workshops, and flexible class schedules to aid student mothers' time management and physical well-being.

Locally, practical interventions such as providing safe and hygienic breastfeeding spaces, offering special meals, redesigning bathrooms, and ensuring medical care have been recommended as essential physical support structures (Mwenje, 2021). Taken together, these recommendations underscore the urgency of addressing physical barriers through practical institutional infrastructure that enables student mothers to participate fully in academic life.

Psychological Challenge Interventions

Psychological challenges require counselling-focused and psychosocial support interventions that address the emotional and mental health dimensions of student motherhood. Specifically, Ibworo (2024) highlights the role of non-judgmental acceptance, faculty support, and individualized counselling in enhancing the psychosocial adaptation of student mothers within Kenyan universities. Furthermore, Okore (2021) recommends social skills training as a strategy for improving self-concept among student mothers, while Mwenje (2021) calls for active administrative support for counselling programs.

Similarly, Gachenia et al. (2023) highlights the importance of consistent follow-up and support in ensuring that counselling interventions produce sustained improvements in student mothers' psychological well-being and self-concept. Consequently, it seems logical that psychological interventions must be deliberately embedded within the institutional culture of private universities rather than offered as peripheral or optional services.

Social Challenge Interventions

Social challenges require interventions that foster inclusion, belonging, and peer connection among student mothers within the university community. Specifically, Wekullo (2020) underscores the role of university flexibility and community support in creating

socially inclusive environments that enable student mothers to feel valued and accepted. Furthermore, Munyua (2022) proposes university support groups and special accommodation facilities for student mothers as mechanisms for fostering social integration and reducing isolation.

Similarly, Mwangi (2022) concluded that for sustainable impact, universities must develop family-sensitive frameworks such as flexible learning schedules, counselling programs, and university childcare support to strengthen the family-based coping systems that underpin student mothers' resilience and success. Consequently, Mwangi (2022) stresses the need for targeted care to ensure the retention of expectant and parenting students, reinforcing the view that social interventions must be comprehensive, deliberate, and institutionally embedded.

Financial Challenge Interventions

Financial challenges require targeted economic support mechanisms that extend beyond generic bursaries to address the specific material needs of student mothers. Specifically, Juma (2024) advocates for educational programs on parenting, financial support, and campus-based childcare centres as essential financial interventions for student mothers in Kenyan private universities. Furthermore, Kiburi (2021) underscores the importance of both family and university financial support in enabling student mothers to manage the competing economic demands of their dual roles.

Similarly, Robert (2022) recommends campus-based financial support systems as essential for enabling student mothers to fulfil both their academic and parenting roles effectively. Consequently, this literature review underscores the unique challenges student mothers face and their influence on perceived self-concept, reinforcing the urgent need for comprehensive, context-specific financial interventions that simultaneously address the material, social, and psychological dimensions of student motherhood within Kenyan

private universities

Family Support: Research suggests that family members of student mothers are a key social support system in their quest to manage their dual roles. Bustillo et al. (2024) found that family support systems were crucial coping mechanisms for student mothers amidst challenges such as time constraints, financial struggles, and emotional exhaustion. Furthermore, Baluyos and Alvarico (2024), using a sample of 15 student mothers, found that family members were essential sources of strength and resilience in helping student mothers balance their dual responsibilities. Both studies concluded that private universities should adopt family-supportive and flexible academic policies to promote the well-being and success of student mothers. However, both studies were conducted in Asia utilizing qualitative methodologies, hence opening contextual and methodological gaps that the present study sought to address.

Extending this discussion to the South African context, Maluleke et al. (2023) found that student mothers reported significant challenges balancing their dual roles but displayed strong perseverance through the help of family and social networks. Specifically, family support was identified as a primary source of emotional stability and practical assistance, enabling participants to remain engaged in their studies. In addition, Anane et al. (2021), using focus groups with 30 student mothers at the University of Education, Winneba in Ghana, reported that family support was an essential coping resource against financial, emotional, and time-related challenges.

These African studies collectively confirm that family support plays a pivotal role in enabling student mothers to persist academically despite the competing demands of their dual roles. Consequently, it seems logical that strengthening family support structures within the Kenyan private university context would significantly enhance the self-concept and academic resilience of student mothers.

Locally, Mwangi (2022) found that family support was vital in helping student mothers manage time, reduce stress, and maintain motivation amidst multiple responsibilities. Specifically, student mothers who benefited from strong familial backing exhibited better academic endurance and emotional health compared to those with limited support. Furthermore, the study provided contextually relevant empirical evidence that offers a strong basis for advancing research within the Kenyan higher education context.

However, a conceptual gap inherent in the study was the non-demonstration of the link between family support and the self-concept of student mothers. Consequently, the present study sought to fill this gap by explicitly examining how family support influences the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya.

Peer Support. Research evidence reveals that peer support is significant in international and cross-cultural contexts. Lamichhane (2023), focusing on international student-mothers in Australia, highlighted that peer networks created solidarity and empowerment in navigating "care-blind" university systems. In the Philippines, Baluyos and Alvarico (2024) used qualitative approaches to explore how student-mothers balance academic and parenting responsibilities. The study revealed that student-mothers drew encouragement and motivation from peer networks, which provided shared understanding and companionship in their struggles.

Both studies concluded that peer relationships not only reduced feelings of isolation but also fostered determination, suggesting that universities should integrate peer-based initiatives within broader psychosocial support programs.

In the African context, Akomaning and Osafo (2021) and Anane et al. (2021) emphasized peer support as a key coping mechanism among student-mothers in Ghana. Akomaning and Osafo (2021), through qualitative interviews and focus groups with 30

student-mothers at the University of Cape Coast, found that peers offered academic collaboration and emotional reassurance, helping participants manage limited time and stress. Likewise, Anane et al. (2025) studying student-mothers at the University of Education, Winneba, identified supportive peers as instrumental in alleviating academic burdens and fostering a sense of belonging. Both studies concluded that peer relationships complement family and private universities support, highlighting the importance of cultivating peer mentoring and cooperative learning environments in private universities to improve student-mothers' academic engagement and well-being.

In line with these studies, Adu-Gyamfi (2025), studying West African graduate student-mothers in the United States found that peer networks filled critical emotional and practical gaps where private universities support was limited. Student mothers relied on culturally familiar peers to counter isolation and manage the challenges of studying abroad.

Mwangi (2022) found peer support were vital in helping mothers manage time, reduce stress, and maintain motivation amidst multiple responsibilities. Across multiple contexts, several studies underscore the pivotal role of peer support in helping student-mothers navigate the demands of higher education. This supported the argument advanced by Ogunji et al. (2020) who identified peer support as one of the most effective informal mechanisms promoting inclusion and success.

Collectively, the studies suggest the central importance of peer support in navigating student motherhood challenges. However, the influence of these support systems on the student mothers' self-concept remains an under-researched area, raising the researcher's curiosity on how peer support influences self-concept in a student mother.

Institutional Support. Studies conducted by Dickson and Tennant (2021), Lamichhane (2023), and Natividad and Florendo (2025) expanded the discussion of family support into cultural and university dimensions. Specifically, Dickson and Tennant (2021)

found a gap between faculty perceptions of providing adequate support and student mothers' experiences of insufficient university care. Furthermore, Lamichhane (2023) showed that international student mothers often lacked proximate family networks and thus struggled with emotional and logistical challenges, highlighting the need for institutionally embedded care systems.

Similarly, Natividad and Florendo (2025) revealed that strong social and familial networks mitigated stress among married student mothers, though cultural expectations often intensified mental strain. Taken together, these studies establish that institutional support must deliberately bridge the gap between what universities perceive they offer and what student mothers actually experience, informing the recommendations that follow.

Existing studies in Australia recommend expanding affordable childcare, offering flexible study options, financial incentives, and acknowledging student mothers as a marginalized group to ensure equity in higher education (Bower, 2020). Ireland recommended helping student mothers manage identity changes, promoting parenting competence, physical activity, and mental well-being (Cassidy, 2022). Research in Asia calls for campus support systems that build resilience (Roudi, 2022), programs addressing sexual health, and parenting awareness (Bustillo, 2024), financial aid and scholarships (Espiritu et al., 2023), accessible counseling, parenting workshops, and inclusive learning environments (Cantero, 2024). In Korea, Bang et al. (2021) emphasized practical skills training and participatory learning to boost motivation and self-concept.

Uwakwe et al. (2021) found that student mothers in Nigerian private universities faced unique challenges with implications for inclusiveness and counselling interventions, concluding that private universities must develop targeted counselling programs that address the multifaceted challenges of student motherhood rather than relying on generic

student support services. Furthermore, Adu-Gyamfi (2025) examined the experiences of West African graduate student mothers studying in the United States.

Specifically, the challenges these student mothers encountered including cultural adjustment issues, limited childcare access, and emotional strain were rooted not merely in their West African origins but were significantly compounded by their displacement from extended family networks within the American university context. In Southern Africa, Maluleke (2023) highlighted the critical role of university and instructor support in enabling student mothers to navigate their dual roles.

The study found that empathetic faculty and flexible university policies significantly contributed to student mothers' resilience and academic persistence. Collectively, these studies from Nigeria and South Africa underscore the reality that university support remains largely inadequate and inconsistent, compelling the argument that private universities must move beyond symbolic acknowledgment toward the deliberate design and implementation of culturally responsive, comprehensive support systems.

Akomaning and Osafo (2021) found that integrating family-friendly and flexible learning policies within distance education programs enhanced student mothers' academic performance and mental well-being, with family support emerging as a central coping resource among student mothers at the University of Cape Coast. Furthermore, identifying factors influencing self-concept, providing psychological support, tracking motherhood status in policy, and encouraging support groups have been recommended as key interventions in Ghana (Amedorme, 2024; Anibijuwon, 2020).

Additionally, flexible lecturers and understanding university staff were highlighted as essential components of effective institutional support for student mothers (Anane, 2021). Interestingly, these Ghanaian recommendations align closely with findings from Nigeria and South Africa, suggesting that the institutional support needs of student mothers across West and Southern Africa are broadly consistent. Consequently, it seems logical that Kenyan private universities can draw meaningfully from these African contexts in designing targeted, culturally responsive support systems for student mothers.

In Tanzania, Kisanga and Matiba (2023) employed a qualitative design involving 30 student-mothers, finding that despite facing financial hardship, limited institutional support, and emotional strain, participants used social and family support networks, time management, and spirituality to cope. They concluded that private universities must complement family support with gender-sensitive and family-friendly policies, including flexible schedules and childcare services, to foster student-mothers' academic success. Uganda's recommendations include lactating rooms and counseling (Kakuru, 2022), while Tanzania stresses life skills and faculty support (Kisanga, 2023).

To the researcher, this emphasizes the pivotal role of universities that goes beyond academic offerings, and the need to holistically impact students, including in enhancement of self-concept amongst student mothers.

Theoretical Framework

This study was informed by a dual-theoretical approach to provide a nuanced understanding of the complex factors that shape the perceived self-concept of student mothers. The two theories provided a scaffold to design the study, helped interpret the findings, and understand the dynamics of perceived self-concept among student mothers were the Self-Discrepancy Theory by Tory (1989), and the Role Theory- crafted by several scholars.

Role Theory

The Role Theory, developed by scholars such as Linton (1936), Merton (1957), Mead (1972), and Turner (1978), posits that individuals occupy multiple social roles simultaneously, and that the expectations, norms, and demands attached to these roles significantly influence their behaviour, attitudes, and self-perception. The theory's central tenets include role conflict, which occurs when the demands of one role interfere with another; role strain, which arises from the difficulty of fulfilling the requirements of a single role; and role enrichment, which recognizes that successfully navigating multiple roles can equally yield emotional rewards, social connections, and enhanced identity.

The Role Theory was applicable to this study in that student mothers simultaneously occupy the roles of mother, student, and in some cases breadwinner, creating a complex web of competing demands and expectations that directly shape how they perceive themselves. Specifically, the concepts of role conflict and role strain apply directly to the physical, psychological, social, and financial challenges examined in this study, as each challenge creates a context in which student mothers must negotiate competing role demands.

When a student mother experiences role conflict, for instance missing a lecture to attend to a sick child, the resulting sense of failure in either role may erode her self-concept. Conversely, successfully managing both roles might strengthen her sense of identity, competence, and self-worth, consistent with the concept of role enrichment.

The Role theory however may not fully explain why some student mothers cope better than others or how self-concept is impacted by motherhood. Consequently, to mitigate this weakness and for a more comprehensive understanding in this study, it was combined with Tory Higgins (1989) Self Discrepancy theory to provide the conceptual lens through which the relationship between motherhood challenges and the dimensions of

perceived self-concept was interpreted.

Self-Discrepancy Theory

The Self-Discrepancy Theory (SDT), developed by Tory Higgins (1989) and built on Carl Rogers' Theory of Self, explains the emotional and psychological consequences of perceived mismatches between three aspects of the self: the actual self, representing who a person currently is; the ideal self, representing who a person desires to be; and the ought self, representing who a person believes they should be based on external expectations and obligations.

The theory holds that when significant gaps exist between these self-states, individuals experience negative emotions such as anxiety, guilt, and diminished self-worth, while congruence between self-states promotes psychological well-being and positive self-concept.

The Self-Discrepancy theory is directly applicable to this study in that student mothers frequently experience discrepancies between their actual self- feeling overwhelmed, financially strained, and time-pressured- and their ideal self as both a devoted mother and a successful student. Specifically, these gaps manifest in self-doubt, lowered self-esteem, and compromised mental health across the five dimensions of self-concept examined in this study.

Furthermore, the ought self is equally relevant, as student mothers frequently feel pressure from family, peers, partners, and institutions to meet externally imposed standards of both academic and maternal performance. Consequently, when student mothers fail to meet these standards, the resulting discrepancy between the ought self and the actual self generates guilt, anxiety, and diminished self-worth.

Together, the Role theory and the Self-Discrepancy theory provided a comprehensive dual lens through which this study examined how motherhood challenges

shape student mothers' perceived self-concept across the dimensions of self-esteem, self-identity, body image, social relations, and role performance within Kenyan private universities.

Conceptual Framework

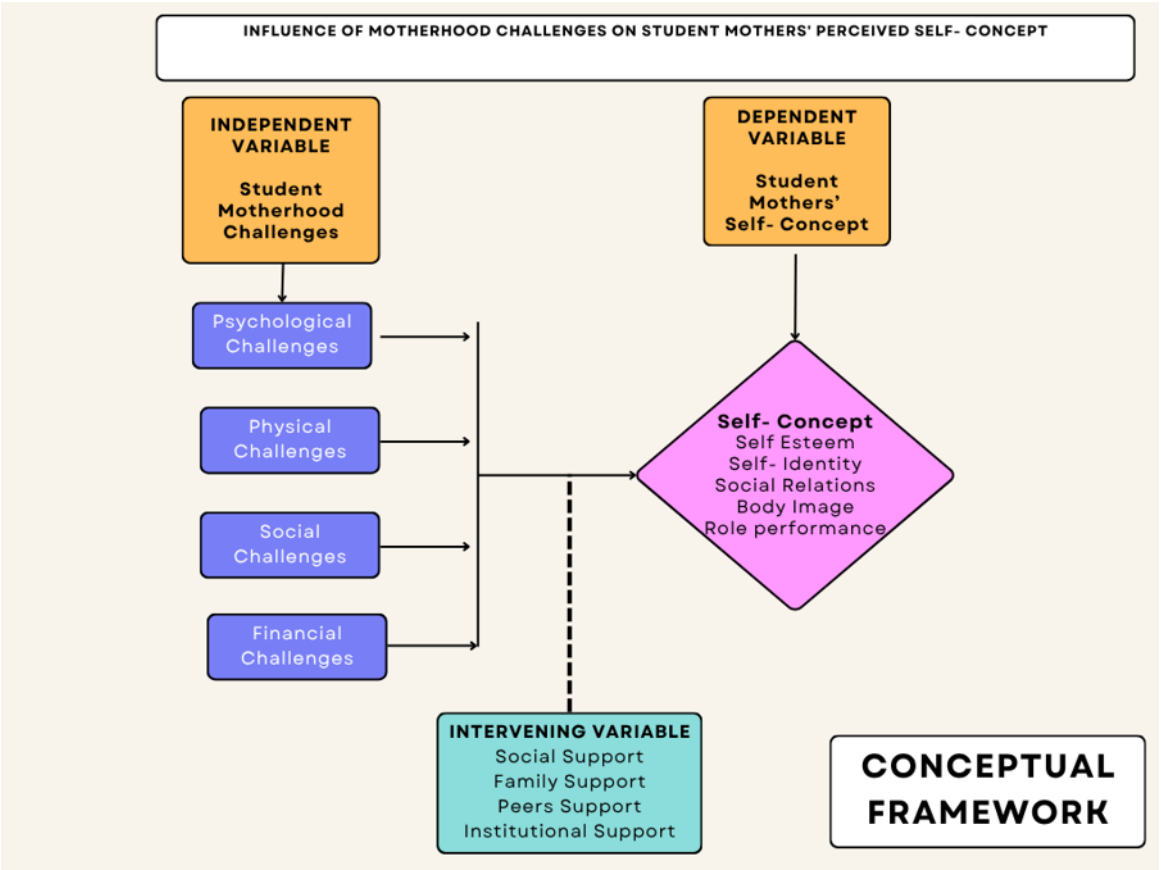
The conceptual framework of the research study is presented in Figure 1. It depicts the relationship between the independent variable, the intervening variable, and the dependent variable. The independent variable comprises motherhood challenges, operationalized through physical, psychological, social, and financial challenges. The intervening variable is social support, comprising family support, peer support, and university support, while the dependent variable is the perceived self-concept of student mothers, assessed through the dimensions of self-esteem, self-identity, body image, social relations, and role performance.

The two theoretical frameworks are embedded in this conceptual framework through specific concepts that directly apply to the study. Specifically, from Role theory, the concepts of role conflict, role strain, and role enrichment inform the independent variable by explaining how the four dimensions of motherhood challenges create competing demands that directly shape each dimension of self-concept. Furthermore, from the Self-Discrepancy theory, the concepts of the actual self, ideal self, and ought self-inform the dependent variable by explaining how gaps between these self-states created by motherhood challenges produce the specific self-concept deficits measured across the five dimensions.

Consequently, social support as the intervening variable operates through both theoretical lenses: it reduces role strain and conflict as explained by Role theory, while simultaneously narrowing the discrepancy between the actual and ideal self as explained by the Self-Discrepancy theory. Taken together, these theoretical concepts establish the

logical and empirical basis for the relationships depicted in the conceptual framework.

Figure 1 Conceptual Framework



Source: Self developed by researcher on Canva.com on 12/1/2025

The conceptual framework illustrates the relationship between the independent variable (motherhood challenges), the intervening variable (social support), and the dependent variable (self-concept). Motherhood challenges in this study are indicated by physical, psychological, social, and financial challenges. The self-concept of student mothers is assessed through dimensions such as self-esteem, body image, self-identity, role performance, and social relations. Social support interventions comprise family support, peer support, and private university support.

Role theory contributes to this framework through its central tenets of role conflict, role strain, and role enrichment. Specifically, role conflict and role strain explain how the

four dimensions of motherhood challenges physical, psychological, social, and financial create competing demands that directly undermine the five dimensions of self-concept.

Furthermore, role enrichment explains how adequate social support, as the intervening variable, can transform these competing demands into opportunities for identity development and self-concept enhancement. The Self-Discrepancy theory contributes through its central tenets of the actual self, ideal self, and ought self. Specifically, the gaps between these self-states generated by motherhood challenges produce the self-concept deficits measured across the five dimensions, while social support interventions narrow these gaps by providing the affirmation, resources, and belonging that bring the actual self-closer to the ideal and ought self.

Taken together, both theories work in tandem within this framework to explain not only how motherhood challenges erode self-concept but also how targeted social support interventions can mitigate these effects.

A Synthesis of Research Gaps

Existing research largely focuses on the influence of motherhood challenges on student mothers' academic achievement, mainly in Asia (Guy, 2020) and Kenya (Munyua, 2022), but there is a notable lack of studies specifically examining how motherhood challenges affect the self-concept of student mothers in private universities. Despite a significant rise in student parents both globally and locally, Robert (2022) and Juma (2024) concur that student mothers remain under-researched, especially regarding their unique experiences compared to non-parent learners.

Additionally, most prior studies have centered on teenage mothers in primary or secondary education rather than those in private universities, as cited in South Africa (Adangabe, 2021) and in Kenya (Gachenia, 2021; Mukabana, 2024). Furthermore, while self-esteem has been widely studied, other dimensions of self-concept such as identity,

body image, role performance, and social relations remain less explored. Equally, studies have recommended more diverse and deepened research on the experiences of student mothers in Kenya, considering their experiences are distinctly different compared to other non-parent learners (Bustillo, 2024).

A critical examination of the existing literature reveals that no study has specifically investigated the effects of motherhood challenges on the self-concept of student mothers in private universities in Kenya or identified how that self-concept can be enhanced. Specifically, the results of currently existing studies suggest that more attention is needed toward student mothers' perspectives, as this population remains significantly under-researched within the Kenyan private university context.

Furthermore, while numerous global and regional studies have explored issues such as financial support, university flexibility, and support systems, there remains a critical gap in understanding how these factors specifically affect the perceived self-concept of student mothers within a Kenyan context. Consequently, there is a compelling need to move beyond general academic and parenting challenges to focus on the psychological dimensions of how student mothers perceive themselves their self-worth, identity, body image, role performance, and struggles with belongingness as they strive for success in both academic and personal lives.

This study therefore aimed to examine how motherhood challenges shape student mothers' self-concept in Kenyan private universities and to identify interventions that can support their identity development, self-esteem, and psychosocial well-being.

Table 1 Summary of Research Gaps Addressed by the Current Study

Author(s) & Year	Study Focus	Context	Methodology	Gap Identified	How the Current Study Addresses the Gap
Dasig (2020)	Challenges of student mothers in tertiary education	Philippines	Qualitative descriptive	Did not explore the influence of challenges on self-concept	The current study explicitly examined how motherhood challenges influence the perceived self-concept of student mothers, filling the conceptual gap left by Dasig's focus on challenges alone
Torres et al. (2020)	Academic experiences of married student mothers	Philippines	Qualitative phenomenological	Qualitative methodology limits generalizability, self-concept not explored	The current study employed an embedded mixed methods design, enabling both statistical generalizability and deeper contextual understanding, while explicitly measuring self-concept as the dependent variable
Bogossian (2020)	Spatial norms and student mothers in higher education	Scotland	Qualitative; very small sample (n=7)	Very small sample; self-concept not examined	The current study used a larger purposive sample of 393 student mothers and directly examined self-concept across five dimensions, addressing both the sample size and conceptual limitations

Author(s) & Year	Study Focus	Context	Methodology	Gap Identified	How the Current Study Addresses the Gap
Espiritu et al. (2023)	Lived experiences of student mothers	Philippines	Qualitative phenomenological	Did not explore implications of challenges on self-concept	The current study moved beyond describing lived experiences to statistically establishing the nature and extent of the influence of motherhood challenges on self-concept dimensions
Maluleke (2021)	Student mothers' perceptions of motherhood	South Africa	Qualitative exploratory	Self-concept not examined as a distinct variable	The current study operationalized self-concept as a multidimensional dependent variable measured through the validated Robson Self-Concept Questionnaire (RSCQ), addressing this conceptual gap
Kanana et al. (2021)	Challenges and coping mechanisms of student mothers	Kenya	Mixed methods	Self-concept not explored despite examining challenges comprehensively	The current study built on Kanana et al.'s identification of challenges by establishing their statistical relationship to self-concept, adding a conceptual dimension absent from the earlier Kenyan study

Author(s) & Year	Study Focus	Context	Methodology	Gap Identified	How the Current Study Addresses the Gap
Mwangi (2022)	Motherhood and learning among undergraduate student mothers	Kenya	Mixed methods	Focused on academic learning rather than self-concept	The current study shifted the conceptual focus from academic learning outcomes to the psychological dimension of self-concept, filling the gap identified in the Kenyan higher education context
Kakuru (2022)	Student mothers in informal urban communities	Uganda	Qualitative	Focused on informal communities; self-concept not examined; qualitative only	The current study examined student mothers in formal private university settings in Kenya using a mixed methods design, and explicitly investigated the relationship between social challenges and self-concept
Ngunyi et al. (2025)	Influence of student motherhood on challenges experienced	Kenya	Qualitative/descriptive	Descriptive only; cause-effect relationship and self-concept not explored	The current study employed inferential statistics including Pearson correlation, linear regression, and ANOVA to establish cause-effect relationships between motherhood

Author(s) & Year	Study Focus	Context	Methodology	Gap Identified	How the Current Study Addresses the Gap
					challenges and self-concept, addressing this methodological gap
Kiburi (2021)	Support for student mothers in Sub-Saharan Africa	Kenya	Review-based	No study examined motherhood challenges and self-concept specifically in Kenyan private universities	The current study is the first to specifically examine the influence of motherhood challenges on the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya, directly addressing this contextual and conceptual gap

Chapter Summary

This chapter has presented and discussed related studies under subtopics of self-concept and the study objectives, namely, motherhood challenges that impact student mothers' self-concept; the various dimensions of self-concept (self-esteem, identity, body image, social relations, and role performance); and possible interventions to mitigate the adverse effects of these challenges on the perceived self-concept in student mothers. The chapter has also covered the theoretical framework based on two theories- the Self-Discrepancy theory and the Role theory. The reviewed literature demonstrated the existence of gaps that needed to be addressed in the quest to establish the influence of motherhood challenges on the perceived self-concept of student mothers in Kenyan private

universities. The next chapter includes a detailed description of the study design and methodology utilized.

CHAPTER THREE: RESEARCH METHODOLOGY

Introduction

This chapter outlines the research procedures and methods for studying the effects of student motherhood challenges on the perceived self-concept among student mothers in selected Kenyan private universities. It covers the research design, population of study, sampling methods, and types of data collected. Additionally, it discusses data collection techniques, instrument pretesting, reliability and validity measures, data analysis plans, and ethical considerations. The chapter also includes highlights of the survey questionnaire and participants interview tools employed in the study, ending with the summary.

Research Design

The study applied a concurrent mixed methods design. It combined quantitative and qualitative approaches to effectively address the research questions and gain a comprehensive understanding of the relationship between motherhood challenges and the perceived self-concept of student mothers in selected private universities in Nairobi and Kiambu Counties. Both the qualitative and quantitative data sets were collected and analyzed simultaneously to enhance the findings and to allow different perspectives into the research problem (Dawadi et al., 2021).

In this study, the mixed methods design was preferred as it enabled the researcher to extract richer insights into the lived experiences and contextual reality of the student mothers. In combining the qualitative and the quantitative aspects simultaneously, the design strengthened the validity of the research findings (Creswell & Plano Clark, 2023).

Population

The population of the study consisted of female university students enrolled in two selected private universities in Kenya, namely, the United States International University/Africa (USIU-Africa, 8,790 female students) and Mount Kenya University

(MKU, 14,057 female students). The two universities were purposively selected because they are among the largest private universities in Kenya, with MKU being located within Kiambu County and USIU in Nairobi County, together offering diverse academic programs across both urban and peri-urban settings.

This, thereby, provided a sufficiently large and representative population of student mothers from varied academic backgrounds. The total target population comprised 22,847 female students across both universities, and the population distribution is presented in Table 1.

Table 2 Population Distribution

Name of Private Universities	Population	Percent
United States International University-Africa	8,790	38.48%
Mount Kenya University	14,057	61.52%
Total	**22,847**	**100.0%**

Source: CUE (2025) and TVET Institution Websites

Sample Size

The sample size was determined using Yamane formula as follows:

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

Where n= sample size, N= population size, and e=error margin (set at 5%).

Therefore:

$$n = \frac{22{,}847}{1 + 22{,}847\ (0.05)^2}$$

$$n = 393$$

The sample size was 393 student mothers distributed proportionately across the

female student population as shown in Table 3. The sample size was determined using the Yamane (1967) formula: $n = N/1+N(e)^2$, where N represents the total population and e represents the margin of error.

Table 3 Sample Size Distribution

Name of Private Universities	Population	Sample Size	Percent
USIU-Africa	8,790	147	38.5%
Mount Kenya University	14,057	246	62.5%
Total	**22,847**	**393**	**100.0%**

Source: Researcher (2025)

Sampling Method

The study used purposive sampling method to recruit three hundred and ninety-three (393) student mothers into the study. The recruitment focused on student mothers who met criteria such as being between 18-30 years of age, having one child or more, currently enrolled as students in private universities, and willing to participate. Purposive sampling intentionally selected the respondents who had experienced the phenomenon of motherhood while studying. Snowball sampling was then employed to reach hard-to-access participants by having initial respondents refer others who were eligible, thus creating a snowball effect.

Types of Data

Primary data was collected. Both quantitative data and qualitative data were gathered. Quantitative data entailed all data types that were expressed in numeric form and were subjected to statistical analysis (Halevi et al., 2023). The qualitative data included all the non-numeric textual data that informed the study through deeper insights into how motherhood challenges influence student mothers' perceived self-concept as well as interventions that might lessen the adverse impact.

Data Collection Methods

Data was collected using structured questionnaires administered to student mothers as well as Key Informant Interviews held with university counsellors. The student mothers' questionnaire was divided into four sections. Section A elicited respondents' demographic information such as age, year of study, number of children, marital status, and ages of children. Section B comprised a researcher-developed scale to elicit data on motherhood challenges, categorized into physical, psychological, social, and financial challenges. Section D contained a researcher-developed Likert scale for measuring social support interventions under family support, peer support, and university support.

Section C represented the dependent variable self-concept measured using an adapted version of the Robson Self-Concept Questionnaire (RSCQ) developed by Robson (1989). Although the RSCQ was originally developed around seven dimensions of self-esteem, namely sense of significance, self-worth, appearance and social acceptability, competence, resilience and determination, control over personal destiny, and value of existence. Self-esteem widely recognized as a core and central dimension of self-concept (Orth & Robins, 2022).

Consequently, the RSCQ was deemed appropriate for measuring the self-concept of student mothers in this study, as its items collectively capture the evaluative and affective dimensions that constitute perceived self-concept across the five dimensions examined. The original RSCQ contains 30 Likert-scale items with a response format ranging from 0 to 7, from completely disagree to completely agree. However, an adapted 20-item version was employed in this study, retaining only those items directly relevant to the five self-concept dimensions under investigation self-esteem, self-identity, body image, social relations, and role performance, to ensure conceptual alignment with the study's objectives (Palenzuela et al., 2022).

The adapted tool consisted of both positively and negatively worded statements, with positively worded items scored as printed and negatively worded items reverse coded. However, this was not disclosed to participants to avoid bias. Participants selected one response per item on a Likert scale of 0 to 7, with higher total scores indicating a more positive self-concept. The scores were tallied by summing all item responses, with the tool supporting self-exploration and honest self-reporting, making it suitable for this research context. Each section of the questionnaire also contained relevant open-ended questions where respondents could corroborate their answers in their own words.

To gather rich qualitative data, Key Informant Interviews were conducted with four college counsellors representing the two private universities. Specifically, interviews were audio-recorded with participants' permission and later transcribed for thematic analysis. Furthermore, the key informant interviews provided supplementary qualitative insights that enriched and contextualized the quantitative findings from the questionnaire. Interestingly, the perspectives of university counsellors offered an institutional viewpoint on the motherhood challenges faced by student mothers and the support systems available to them.

Consequently, the combination of structured questionnaires and key informant interviews ensured comprehensive data collection that addressed both the breadth and depth dimensions of the research questions.

Pilot Testing

Pilot studies help identify design flaws and improve data quality (Mcleod, 2023). Whereas the researcher used the validated and widely applied Robson Self-Concept Questionnaire (RSCQ), which has proven reliability and has been used in various global, regional, and local studies (Monteiro, 2021; Lucy, 2020), a pilot study was necessary in order to establish the validity and reliability of the tool within the Kenyan social context (Tseng, 2021). The pilot study was conducted on a purposively selected sample of 10

student mothers at Zetech University. Zetech was selected because it is a private university in Kiambu County that shares similar institutional characteristics, student demographics, and academic structures with the two main study sites USIU-Africa and MKU.

The data were not included in the main study, thereby eliminating the risk of contaminating the primary data. Data was collected through self-administered structured questionnaires distributed physically and virtually to the 10 pilot participants. They completed them independently and returned them to the researcher on the same day, enabling prompt review of item clarity, response patterns, and potential areas of ambiguity. The results of the pilot study were used to determine the clarity and effectiveness of the instrument in gathering the intended data, and any ambiguous or poorly worded items identified were revised before the main data collection exercise commenced.

Instrument Reliability and Validity

This study ensured research quality by focusing on both reliability and validity (Alvin, 2023). Consistent procedures, standardized interviews, and coding guidelines were used to minimize variability. Detailed documentation of data collection and analysis supported replication (Chetwynd, 2022). Cronbach's alpha was used to determine the reliability coefficient. Instrument reliability was accepted at 0.7 Cronbach's alpha. Validity in this study was ensured by using the validated Robson Self-Concept Questionnaire (RSCQ) by Robson (1989); grounding the research in Role Theory cited by (Andrade, 2023), (Espiritu et al., 2023) in Philippines; (Atkinson, 2023) in UK; (Anglin, 2022) in USA; and Self- discrepancy theory cited in USA (Wang, 2024).

Triangulation was used to enhance credibility by incorporating multiple data sources and methods. Internal validity was strengthened by considering demographic factors such as age, marital status, and number of children. Additionally, purposive sampling of student mothers from two private universities in Kenya helped support

generalizability of the findings.

Research Procedures

The researcher first obtained ethical clearance from the Institutional Scientific and Ethics Review Committee (ISERC) at PAC University prior to commencing any data collection activities. Subsequently, an introduction letter was obtained from the university, and a research permit was applied for and obtained from the National Commission of Science, Technology and Innovation (NACOSTI). Upon receiving all necessary approvals, the researcher presented the relevant authorization documents to the respective Deans of Students offices to seek institutional permission to conduct the study.

The researcher thereafter elicited the support of student counsellors in the respective private universities to help identify and access eligible student mothers who met the study's inclusion criteria. Counselors helped to facilitate initial contact between the researcher and potential participants actively enrolled and simultaneously parenting one or more children. Student mothers who expressed willingness to participate were first presented with a consent form (see Appendix I) to confirm voluntary participation and acknowledge the confidentiality clause before any data collection commenced.

Structured questionnaires were administered both physically and online by the researcher with the assistance of a trained research assistant at each university. Specifically, questionnaires were distributed to student mothers in common areas such as libraries, student lounges, and outside lecture halls during breaks between classes, ensuring minimal disruption to their academic schedules. Participants completed the questionnaires independently and returned them to the researcher or research assistant on the same day, ensuring a high response rate and minimizing the risk of incomplete returns. The entire data collection exercise was conducted over a period of four weeks, with two weeks allocated to each university. On average, each participant took between 20 and 30 minutes to

complete the questionnaire.

Key Informant Interviews were conducted separately with four university counsellors, two from each institution, at mutually convenient times and locations within the respective universities. Specifically, each interview lasted approximately 30 to 40 minutes and was conducted in a private office setting to ensure confidentiality and encourage candid responses. Interviews were audio-recorded with participants' explicit permission and later transcribed verbatim by the researcher for thematic analysis.

Furthermore, field notes were taken during each interview to capture non-verbal cues and contextual observations that enriched the qualitative data. Consequently, the combination of self-administered structured questionnaires and audio-recorded key informant interviews ensured comprehensive, rigorous, and ethically sound data collection across both study sites.

Data Analysis Plan

Data analysis plan comprises the process by which collected data is reviewed, cleaned, and displayed to highlight useful information that can be used to make conclusions and support decision-making (Bougie & Sekaran, 2013). The filled questionnaires were downloaded from Google Forms, coded, and uploaded to the Statistical Package for Social Scientists (SPSS) Version 31 for analysis.

The analysis began with descriptive statistics, including means, frequencies, and standard deviations, to summarize the perceptions and experiences of student mothers regarding motherhood challenges and self-concept. These descriptive statistics helped identify overall trends in the data, such as how respondents perceive the impact of physical, psychological, social, and financial challenges on their self-concept dimensions including self-esteem, self-identity, body image, social relations, and role performance.

Inferential statistics techniques used in the analysis of the collected data included

Pearson correlation coefficient and linear regression analysis. Pearson correlation coefficient was used to describe the strength and relationship between the dependent variable (self-concept of student mothers) and independent variables (physical challenges, psychological challenges, social challenges, and financial challenges).

Linear regression analysis was used to determine the effect of each independent variable on the dependent variable. A linear regression model of the form shown below was used:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where:

Y = Self-concept of student mothers

β_0 = Constant

β_1 = Slope of each independent variable

X_1 = Respective independent variable (physical, psychological, social, or financial challenges)

ε = Error term

The regression analysis helped answer the research questions, which sought to establish the influence of the independent variables on the dependent variable (self-concept of student mothers). The model helped determine if there was a positive or negative relationship between the variables and to what extent. Additionally, separate regression models were developed to examine how motherhood challenges predict specific dimensions of self-concept (self-esteem, self-identity, body image, social relations, and role performance individually), enabling a more nuanced understanding of differential relationships.

Qualitative data from key informant interviews with university counselors and open-ended responses from student mothers were analyzed using thematic analysis.

According to Braun and Clarke (2022), the thematic analysis process involves six systematic phases that guide the identification and interpretation of patterns within qualitative data. The researcher became familiar with the data by reading and rereading interview transcripts to gain an in-depth understanding. Initial codes were generated through systematically tagging relevant features of the data that relate to the research objectives.

The researcher then searched for themes by grouping related codes into potential themes that capture significant meanings or patterns. The themes were reviewed to ensure they accurately represented the coded data and aligned with the overall dataset. Themes were then defined and named by refining their scope and clearly explaining what each theme represented. Finally, a coherent report was written, weaving together the thematic findings with supporting verbatim extracts to present an insightful interpretation of the data.

Qualitative data processing was undertaken using NVivo qualitative data analysis software. The results of thematic analysis were used to clarify and corroborate the quantitative findings, providing deeper contextual insights into how student mothers experience motherhood challenges and their influence on self-concept. Graphical techniques including bar graphs, scatter plots, and pie charts were also used to visualize the data and present the findings in a clear and accessible manner.

Ethical Considerations

The ethical protocols followed commenced with university clearances, starting with the acquisition of ethical clearance certificate from PAC University's ISERC. Alongside this was a research authorization letter sought from the University's Registrar of Academic Affairs. The researcher subsequently complied with legal requirements of research by first obtaining a research permit from NACOSTI. These documents together were used to seek permission from the respective private universities to access research participants.

The participants were fully informed about the study's purpose and were required to sign an informed consent form as evidence of voluntary participation. Before collecting data, the participants were fully informed of the study, its requirements, and their right to withdraw their participation at any time before or during the study. During data analysis, pseudonyms were used to protect identities, and any identifying data was anonymized. Data was used solely for research purposes, and findings were reported accurately and ethically, without plagiarism.

Chapter Summary

This chapter has outlined a detailed description of the study methodology and design. The population of study, the sample, sampling methods, data types, collection methods, and research procedures are presented. Further, the procedure for pilot testing, and determination of the validity and reliability of the research instruments have been explained. Additionally, the data analysis plan and ethical considerations are included. The chapter ensuing presents the analyzed results, the interpretation of findings, and discussion of the study.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION OF RESULTS, INTERPRETATION OF FINDINGS, AND DISCUSSION

Introduction

This chapter discusses the research findings, summarizes noteworthy findings and results of the research titled 'the influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu counties, Kenya.' The chapter is organized as follows: response rate, demographic results which include age, relationship status, parenting status, number of children, age of youngest child, and level of education. This is followed by descriptive and inferential statistics related to the research objectives examining how physical, psychological, social, and financial challenges influence the self-concept dimensions of student mothers. The results are presented using tables and figures.

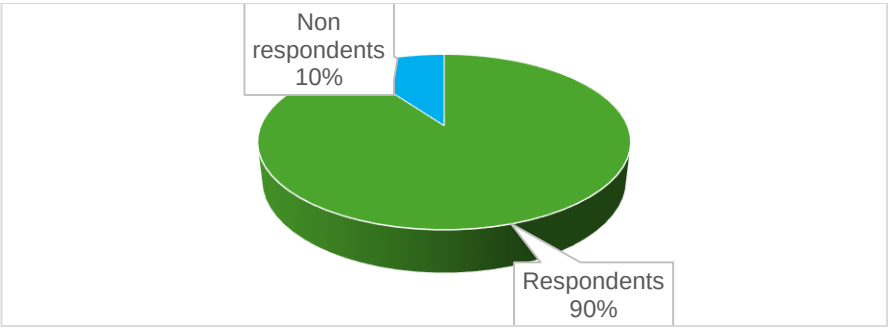
Response Rate

The study targeted 393 student mothers from two selected private universities in Nairobi and Kiambu counties in Kenya, United States International University-Africa (USIU-Africa) and Mount Kenya University (MKU), through purposive and snowball sampling. Questionnaires were administered both physically and electronically via Google Forms to accommodate respondents' preferences and ensure maximum response rate. Out of the 393 targeted respondents, 354 student mothers successfully completed and submitted the questionnaires. This represented a response rate of 90%. This response rate was exceptionally high and sufficient to draw robust conclusions for the study, and the rate of participation was highly representative.

According to Bryman and Bell (2015), any response rate above 60% is considered adequate for survey research, while rates above 70% are deemed good for drawing reliable

conclusions from the findings. The 90% response rate obtained in this study far exceeds these benchmarks, indicating strong participant engagement and commitment to the research topic.

Figure 2 Response Rate



Demographics

The findings pertaining to the demographic information of student mothers are discussed in this section. The demographic statistics included the respondents' age, relationship status, parenting status, number of children, age of youngest child, and level of education.

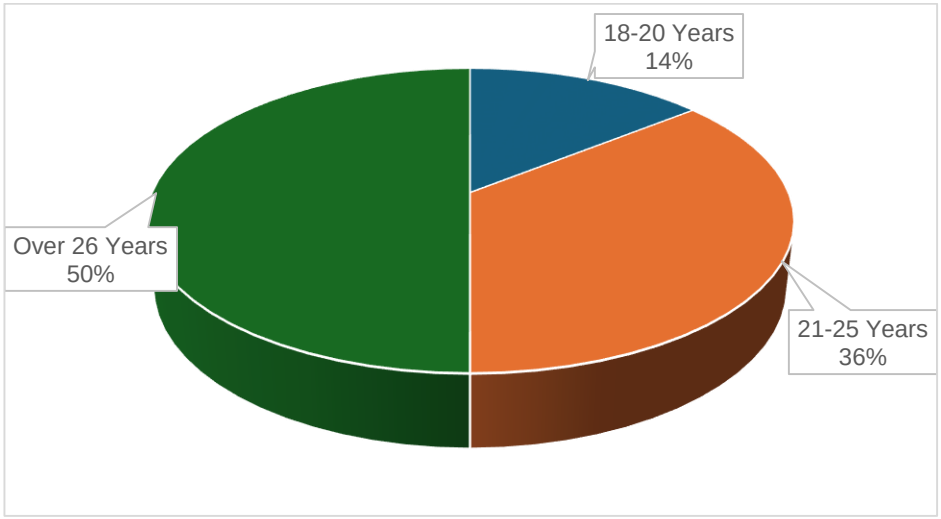
Age

Respondents engaged in this research were asked to indicate their age group, and the results are presented in Figure 3. The findings show that the majority (50%) of student mother participants were over 26 years old, 36% were aged between 21-25 years, while 14% were aged between 18-20 years. This distribution is consistent with the findings of Munyua et al. (2022) in Kenya, who similarly established that the majority of student mothers in public universities were aged between 21 and 30 years.

Specifically, this age pattern reflects the reality that many women conceive and begin parenting during the early years of their undergraduate studies, typically between their first and third years of study, when they are simultaneously adjusting to the demands

of higher education and transitioning into adulthood (Ngunyi, 2025). The fair representation across different age groups in this study captures perspectives from both younger and more mature student mothers, enriching the findings by reflecting the diverse life stages at which women navigate the intersection of motherhood and higher education (Bustillo et al., 2024).

Figure 3 Age



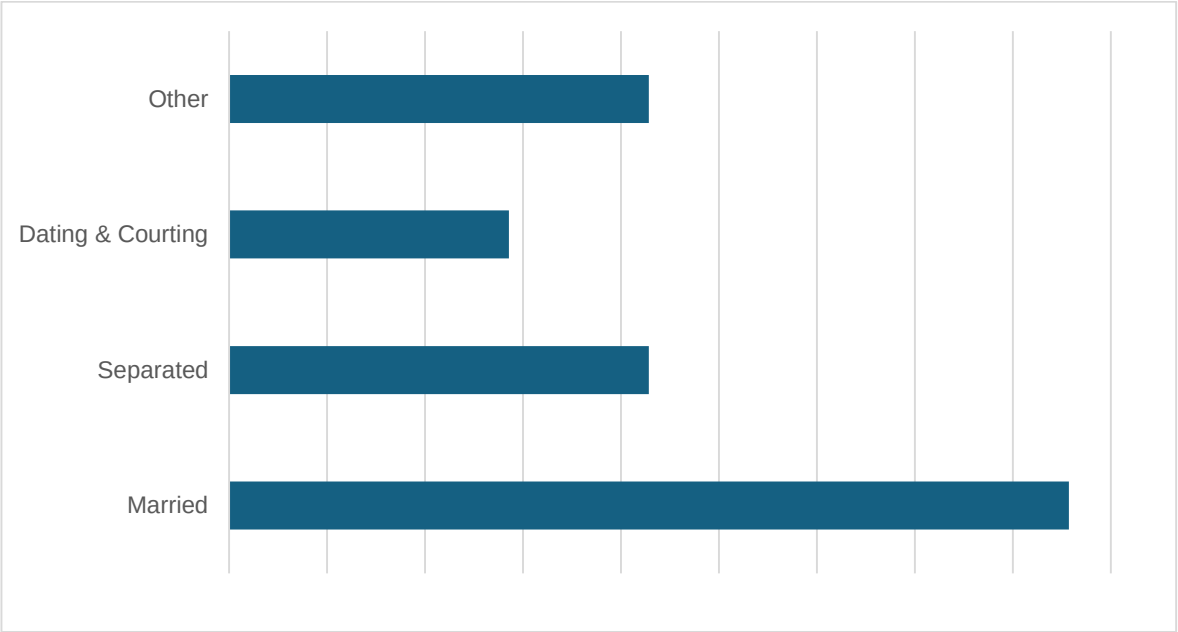
Relationship Status

Respondents were requested to indicate their relationship status, and the results are presented in Figure 4. The study established that the plurality (42.9%) of respondents were married, 21.4% indicated other relationship statuses, 21.4% were dating or courting, and 14.3% were separated. This distribution aligns with the findings of Kanana et al. (2021) in Kenya, who found that student mothers present diverse partnership arrangements ranging from marriage to single parenthood, with relationship status significantly influencing the level of social and financial support available to student mothers in their academic pursuits.

The predominance of married respondents in this study suggests that while some student mothers benefit from spousal support, the presence of separated respondents

underscores the reality that relationship instability is a common feature of the student mother experience, consistent with findings by Maluleke et al. (2023) in South Africa, who noted that partner absence and relationship strain are significant contributors to role conflict and diminished self-concept among student mothers.

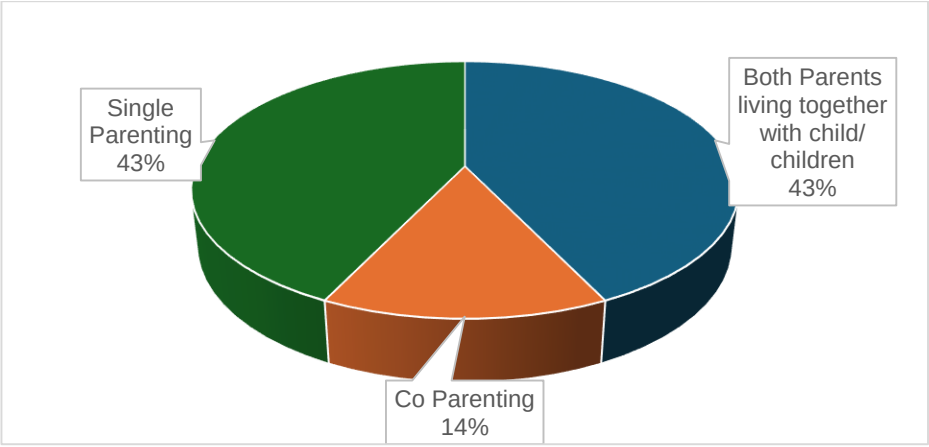
Figure 4 Relationship Status



Parenting Status

Respondents were requested to indicate their parenting arrangement, and the results are presented in Figure 5. The study findings reveal that 43% of student mothers reported living together with spouse and child or children, 43% were single parenting, while 14% were co-parenting. The notably high proportion of single-parenting student mothers in this study is consistent with Kakuru (2022) in Uganda, who found that a significant proportion of student mothers in East Africa navigate their academic journey without consistent partner support, placing disproportionate caregiving burdens on the mother alone.

Figure 5 Parenting Status

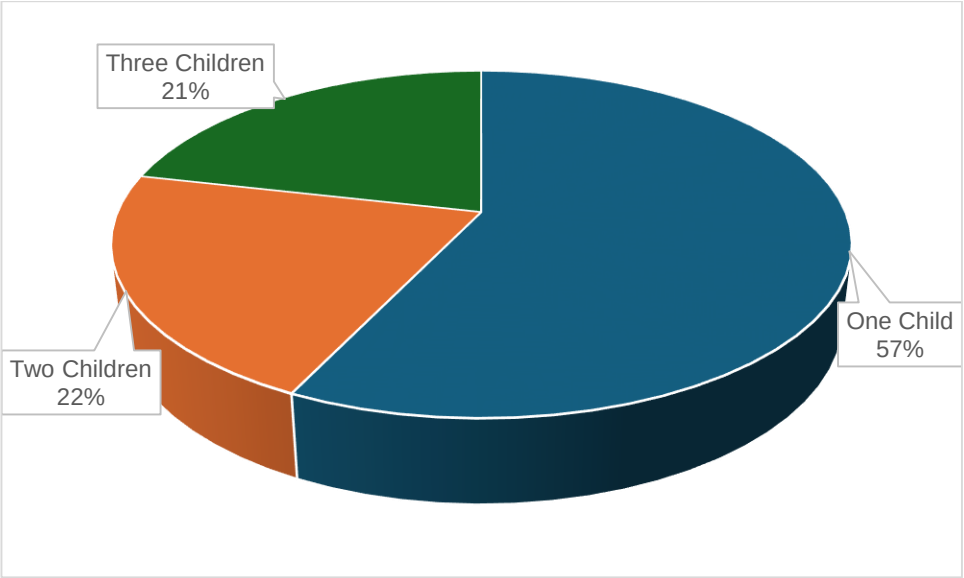


Number of Children

Respondents were requested to indicate the number of children they were parenting, and the results are presented in Figure 6. The study established that the majority (57%) of student mothers had one child, 22% had two children, and 21% had three children. The predominance of student mothers with a single child is consistent with Ngunyi et al. (2025) in Kenya, who found that most undergraduate student mothers at Kirinyaga University were first-time mothers, suggesting that many women enter Private education shortly after their first childbirth.

However, the substantial proportion of student mothers parenting two or more children in this study is noteworthy, as Espiritu et al. (2023) in the Philippines established that the number of children significantly compounds the physical and psychological demands on student mothers, with each additional child amplifying role strain, time constraints, and financial pressure, thereby increasing the risk of negative self-concept.

Figure 6 Number of Children

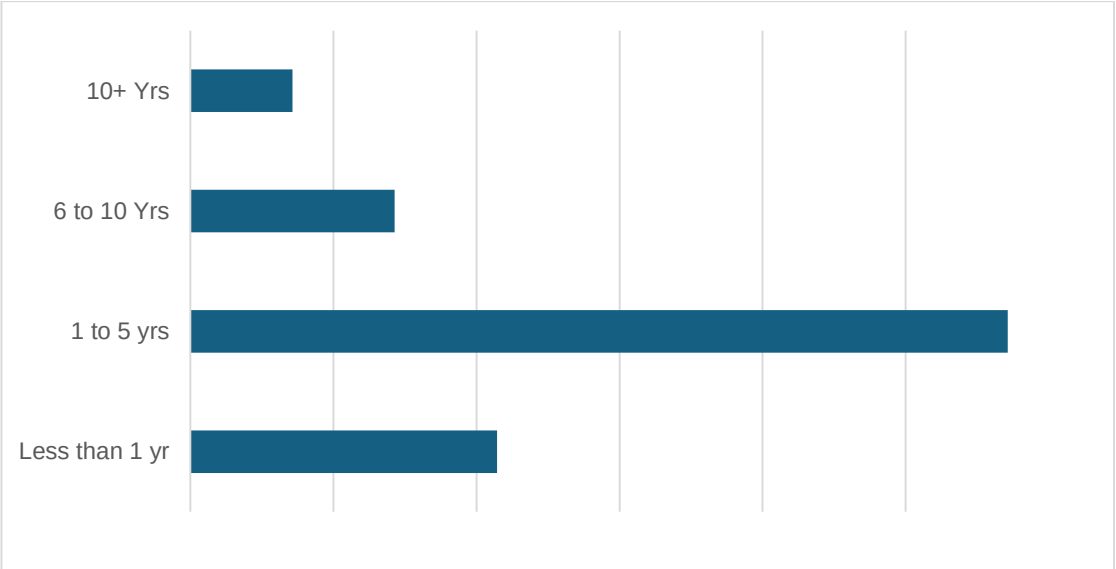


Age of Youngest Child

Respondents were requested to indicate the age of their youngest child, and the results are presented in Figure 7. The study findings indicate that the majority (57.1%) of student mothers had the youngest child aged between 1 to 5 years, 21.4% had the youngest child less than 1 year old, 14.3% had the youngest child aged 6 to 10 years, while 7.1% had the youngest child aged 10 years and above. The finding that over three-quarters of respondents were parenting children below the age of five is particularly significant, as this period represents the most intensive phase of childcare demand, characterized by high dependency, frequent health needs, and the absence of school-based childcare relief (WHO, 2023).

This is consistent with Ashipala and Natanael (2022) in Namibia, who found that student mothers of infants and toddlers experience the most pronounced physical exhaustion and role conflict, given that very young children require constant supervision and care that is difficult to reconcile with the demands of full-time academic study.

Figure 7 Age of the Youngest Child

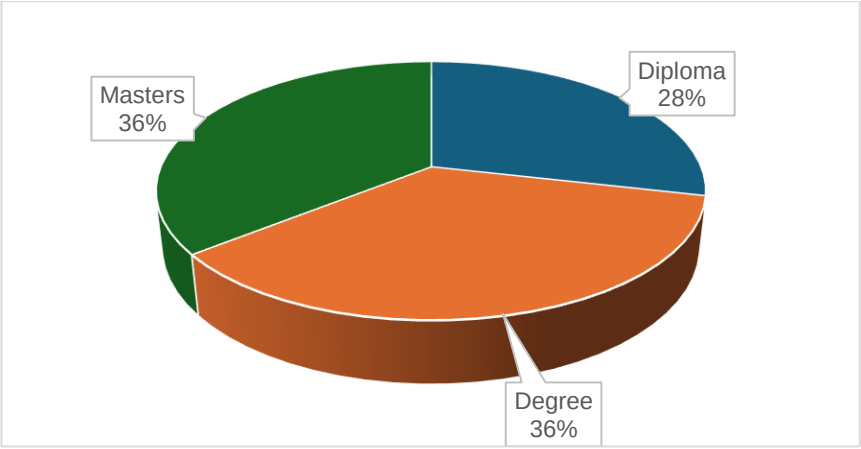


Level of Education

Respondents were requested to indicate their highest level of education, and the results are presented in Figure 8. The study findings indicate that respondents were distributed across three educational levels, with 36% pursuing master's degrees, 36% pursuing bachelor's degrees, and 28% pursuing diplomas. The equal representation of master's and bachelor's degree students suggests that motherhood challenges and their influence on self-concept are not confined to undergraduate experience but extend across all levels of Private education, a finding consistent with Rika (2021) in Kenya, who similarly found that student mothers pursuing both bachelor's and postgraduate degrees at Tangaza University College experienced significant role conflict and self-concept challenges.

The inclusion of diploma students further broadens the study's representativeness, reflecting the reality noted by Kiburi (2021) that motherhood challenges manifest across the entire spectrum of Private education in Kenya, regardless of the level or type of qualification being pursued.

Figure 8 Level of Education



Influence of Physical Challenges on the Perceived Self-Concept of Student Mothers

Descriptive Statistics

The descriptive statistics for physical challenges experienced by student mothers revealed varied levels of difficulty across different dimensions. The highest-rated item was *"I often feel physically exhausted from balancing academic work and childcare responsibilities"* with a mean of 4.07 (SD = 0.83), indicating that the majority of respondents (71.4%) agreed or strongly agreed that physical exhaustion was a significant challenge. This finding is consistent with Torres et al. (2020) in the Philippines, who similarly identified Physical Exhaustion as the most prominent physical challenge among student mothers, noting that the relentless demands of childcare combined with academic workload create a state of chronic fatigue that undermines both academic performance and personal well-being.

This was followed by *"I struggle to engage or participate in extracurricular activities in campus due to childcare responsibilities"* (M = 3.71, SD = 1.44), with 71.4% agreement, a finding that aligns with Bogossian (2020) in Scotland, who established that caring responsibilities significantly restrict student mothers' mobility and participation in university life beyond the classroom. The item *"I find it difficult to attend classes regularly*

because of the physical demands of motherhood" received a mean of 3.50 (SD = 1.09), with 50.0% of respondents agreeing or strongly agreeing, consistent with Kanana et al. (2021) in Kenya, who found that 92% of student mothers reported time management difficulties related to lecture attendance and childcare responsibilities.

The lowest-rated item was *"My academic performance is negatively affected by the physical strain of combining motherhood and school responsibilities"* (M = 3.43, SD = 1.40). Though still showing 64.3% agreement, a finding supported by Ngunyi et al. (2025) in Kenya, who established that motherhood caused considerable disruptions to academic attendance, with approximately 41% of student mothers missing classes due to childcare demands. These findings demonstrate that student mothers experience substantial physical challenges, with exhaustion and limited participation in campus activities being the most pronounced concerns.

Table 4 Physical Challenges

	S.D	D	N	A	S.A		
	%	%	%	%	%	Mean	Std. Dev
I often feel physically exhausted from balancing academic work and childcare responsibilities.	0.0	0.0	28.6	35.7	35.7	4.07	0.83
I find it difficult to attend classes regularly because of the physical demands of motherhood.	0.0	21.4	28.6	28.6	21.4	3.50	1.09
My academic performance is negatively affected by the physical strain of combining motherhood and school responsibilities.	14.3	14.3	7.1	42.9	21.4	3.43	1.40
I struggle to engage or participate in extracurricular activities in campus due to childcare responsibilities	14.3	7.1	7.1	35.7	35.7	3.71	1.44

Correlation Between Physical Challenges and Perceived Self-Concept of Student Mothers

A Pearson correlation coefficient was calculated to examine the relationship between physical challenges and the self-concept of student mothers. The results revealed a moderate positive correlation ($r = 0.509$, $p = 0.063$), indicating a borderline relationship between physical challenges and self-concept, approaching but not reaching statistical significance. While this correlation approaches statistical significance, it does not reach the conventional threshold of $p < 0.05$, suggesting a borderline relationship between physical challenges and self-concept among student mothers in this study.

This finding is consistent with Munyua et al. (2022), who noted that while physical demands of student motherhood are significant, their relationship to self-perception is complex and mediated by other factors including social support and university responsiveness.

Table 5 Correlation Between Physical Challenges and Perceived Self-Concept of Student Mothers

Correlations

		Physical Challenges	Self-Concept
Physical Challenges	Pearson Correlation	1	.509
	Sig. (2-tailed)		.063
	N	354	354
Self-Concept	Pearson Correlation	.509	1
	Sig. (2-tailed)	.063	
	N	354	354

Linear Regression Between Physical Challenges and Perceived Self-Concept of Student Mothers

A simple linear regression analysis was performed to predict self-concept based on physical challenges. The model demonstrated moderate predictive power, explaining

25.9% of the variance in perceived self-concept ($R^2 = 0.259$, Adjusted $R^2 = 0.197$), indicating that physical challenges are a moderate predictor of self-concept, though 74.1% of variance was attributed to other factors not examined in this study. This level of explanatory power is consistent with Van der Aar et al. (2022), who established that self-concept is a multidimensional construct shaped by a constellation of factors, and that no single category of challenge can fully account for variations in self-concept among young women navigating complex life transitions.

Table 6 Regression Between Physical Challenges and Perceived Self-Concept of Student Mothers

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.509[a]	.259	.197	.67072

a. Predictors: (Constant), Physical Challenges

ANOVA for Physical Challenges and Perceived Self-Concept of Student Mothers

ANOVA results indicated a borderline statistically significant linear relationship between physical challenges and self-concept ($F(1, 90) = 4.192$, $p = 0.063$). This finding suggests that the regression model approaches significance but does not quite meet conventional statistical thresholds. The relationship indicates that physical challenges have a meaningful but limited influence on self-concept, a finding that resonates with Ashipala and Natanael (2022) in Namibia, who similarly found that while physical demands on student nurse mothers were significant, their impact on psychological outcomes including self-perception was moderated by the availability of social and university support.

Table 7 ANOVA for Physical Challenges and Perceived Self-Concept of Student

Mothers

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.886	1	1.886	4.192	.063[b]
	Residual	5.398	353	.450		
	Total	7.284	354			

a. Dependent Variable: Self-Concept

b. Predictors: (Constant), Physical Challenges

Coefficients for Linear Regression Between Physical Challenges and Perceived Self-Concept of Student Mothers

The regression analysis revealed an unstandardized coefficient (B = 0.456) indicating that for each unit increase in physical challenges, self-concept is expected to increase by 0.456 units. The standardized coefficient (β = 0.509, t = 2.048, p = 0.063) approaches statistical significance. The constant term (1.078) represents the baseline self-concept level when physical challenges are minimal.

Regression equation is: Self-Concept = 1.078 + 0.456 × Physical Challenges + error term.

This model demonstrates that for every unit increase in physical challenges experienced by student mothers, their self-concept is expected to increase by 0.456 units, holding all other factors constant. The constant term of 1.078 represents the baseline self-concept level when physical challenges are absent or minimal, suggesting that student mothers maintain a foundational level of perceived self-concept even in the absence of significant physical demands, and that as physical challenges increase, student mothers may develop greater resilience and adaptive coping mechanisms that contribute positively to their overall sense of self, a pattern consistent with Munyua et al. (2022), who found that student mothers who persevere despite physical challenges often develop a stronger sense of purpose and identity

Table 8 Coefficients for Linear Regression Between Physical Challenges and Perceived Self-Concept of Student Mothers

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.078	.839		1.285	.223
	Physical Challenges	.456	.223	.509	2.048	.063

a. Dependent Variable: Perceived Self-Concept

Qualitative Evidence on Physical Challenges

Student mothers described the profound physical demands they face daily. One respondent stated: *"Attending lectures with my baby since I don't have the capability of paying for daycare,"* illustrating how childcare responsibilities prevent classroom attendance, a lived experience that resonates with Kanana et al. (2021), who found that 92% of student mothers reported difficulties attending classes due to the physical demands of childcare. Another expressed the relentless toll: *"Limited resting time, overworking,"* capturing the chronic physical exhaustion that Torres et al. (2020) similarly identified as a defining feature of student motherhood, where the absence of adequate rest compromises both academic functioning and physical health.

The temporal conflict was evident in one student's description: *"Balancing motherhood and studies. I do have evening classes which ends at 9pm and that's the time my kids go to sleep, so we rarely interact when I have classes,"* revealing how university scheduling forces impossible choices between academic attendance and family time, consistent with Bogossian (2020) in Scotland, who found that university structures inherently disadvantage student mothers by failing to account for the physical and temporal demands of caregiving.

These narratives demonstrate physical challenges as encompassing not merely exhaustion but the logistical impossibility of managing childcare while attending classes and the health consequences of sustained physical imbalance, thus, underscoring the urgent need for institutional interventions such as on-campus childcare and flexible scheduling highlighted by Ngunyi et al. (2025) in Kenya.

Influence of Psychological Challenges on Perceived Self-Concept of Student Mothers

Descriptive statistics

The descriptive statistics for psychological challenges revealed varied emotional and mental health impacts on student mothers. The highest-rated item was *"I often feel emotionally overwhelmed by balancing motherhood and academics"* with a mean of 3.71 (SD = 1.07), with 78.6% of respondents agreeing or strongly agreeing. This finding is consistent with Espiritu et al. (2023), who found emotional overwhelm as a prominent psychological challenge facing student mothers, stemming from the relentless demands of simultaneously fulfilling academic and maternal responsibilities.

Furthermore, *"I experience feelings of guilt when I cannot give enough attention to either my studies or my child"* recorded a mean of 3.29 (SD = 1.33), with 50.0% agreement. Consistent with these findings, Maluleke et al. (2023) found that guilt was a pervasive psychological experience among student mothers, arising from the perceived inability to adequately fulfil either the maternal or academic role.

The item *"I find it difficult to focus on my studies because of worries about my child's well-being"* received a mean of 2.86 (SD = 1.10), with 21.4% agreement. Specifically, Dasig (2020) established that anxiety about children's welfare was a significant source of cognitive disruption among student mothers that interfered with academic concentration and performance. Similarly, the lowest-rated item *"I sometimes*

doubt my ability to perform well academically because of motherhood responsibilities" recorded a mean of 2.86 (SD = 1.23), with 42.9% agreement.

Consistent with this finding, Bang et al. (2021) found that self-doubt related to academic capability was a common psychological manifestation of role conflict among student mothers. Taken together, these findings demonstrate that student mothers experience significant psychological stress, with emotional overwhelm and guilt being particularly pronounced concerns.

Table 9 Psychological Challenges

	S.D	D	N	A	S.A		Std.
	%	%	%	%	%	Mean	Dev
I find it difficult to focus on my studies because of worries about my child's well-being.	14.3	14.3	50.0	14.3	7.1	2.86	1.10
I experience feelings of guilt when I cannot give enough attention to either my studies or my child.	7.1	28.6	14.3	28.6	21.4	3.29	1.33
I often feel emotionally overwhelmed by balancing motherhood and academics.	7.1	7.1	7.1	64.3	14.3	3.71	1.07
I sometimes doubt my ability to perform well academically because of motherhood responsibilities.	21.4	14.3	21.4	42.9	0.0	2.86	1.23

Correlation Analysis Between Psychological Challenges and Perceived Self-Concept of Student Mothers

A Pearson correlation coefficient was calculated to examine the relationship between psychological challenges and the self-concept of student mothers. The results revealed a weak positive correlation ($r = 0.352$, $p = 0.217$), indicating a weak, non-significant relationship between psychological challenges and self-concept among student mothers in this study. This finding is noteworthy given the high levels of psychological distress reported descriptively, and suggests that, consistent with Bang et al. (2021) in Korea, student mothers with strong self-concept may develop coping mechanisms that prevent psychological distress from substantially undermining their overall sense of self-worth.

Table 10 Correlation Analysis Between Psychological Challenges and Perceived Self-Concept of Student Mothers

Correlations

		Psychological Challenges	Self-Concept
Psychological Challenges	Pearson Correlation	1	.352
	Sig. (2-tailed)		.217
	N	354	354
Self-Concept	Pearson Correlation	.352	1
	Sig. (2-tailed)	.217	
	N	354	354

Linear Regression Between Psychological Challenges and Perceived Self-Concept of Student Mothers

A linear regression analysis was performed to predict self-concept based on psychological challenges. The model demonstrated weak predictive power, explaining 12.4% of the variance in self-concept ($R^2 = 0.124$, Adjusted $R^2 = 0.051$), indicating that psychological challenges are a weak predictor of self-concept, with 87.6% of variance attributed to other factors not examined in this study. This finding aligns with Schlechter

et al. (2022) in the United Kingdom, who established that the relationship between psychological distress and self-concept is complex and significantly moderated by factors such as self-efficacy and social support, suggesting that psychological challenges alone are insufficient to substantially determine self-concept outcomes.

Table 11 Linear Regression Between Psychological Challenges and Perceived Self-Concept of Student Mothers

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.352[a]	.124	.051	.72916

a. Predictors: (Constant), Psychological Challenges

ANOVA for Between Psychological Challenges and Perceived Self-Concept of Student Mothers

ANOVA results indicated a non-significant linear relationship between psychological challenges and self-concept ($F(1, 12) = 1.701$, $p = 0.217$). This finding demonstrates that the regression model does not provide a good fit for the data and that psychological challenges alone do not significantly predict variations in self-concept. The high p-value suggests the observed relationship is likely due to chance, a finding that is consistent with García et al. (2022), who established that self-concept operates at a deeper level of psychological functioning that is not easily destabilized by situational emotional distress alone.

Table 12 ANOVA for Between Psychological Challenges and Perceived Self-Concept of Student Mothers

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	.904	1	.904	1.701	.217[b]
	Residual	6.380	353	.532		
	Total	7.284	354			

a. Dependent Variable: Perceived Self-Concept
b. Predictors: (Constant), Psychological Challenges

Coefficients for Linear Regression Between Psychological Challenges and Perceived Self-Concept of Student Mothers

The regression analysis revealed an unstandardized coefficient (B = 0.280) indicating that for each unit increase in psychological challenges, self-concept is expected to increase by 0.280 units. The standardized coefficient (β = 0.352, t = 1.304, p = 0.217) is not statistically significant. The constant term (1.868) represents the baseline self-concept level when psychological challenges are minimal.

The regression equation is:

Self-Concept = 1.868 + 0.280 × Psychological Challenges + error term.

This model demonstrates that for every unit increase in psychological challenges experienced by student mothers, self-concept is expected to increase by 0.280 units, holding all other factors constant. The constant term of 1.868 represents the baseline self-concept level when psychological challenges are absent or minimal, suggesting that student mothers maintain a relatively stable foundational sense of self even in the absence of significant psychological demands. Equally, the weak and non-significant relationship between psychological challenges and self-concept indicates that psychological distress alone is insufficient to substantially alter student mothers' overall perception of themselves.

This points to the likelihood that other intervening factors such as social support, resilience, and coping strategies play a more prominent role in shaping their self-concept. It is consistent with Kakuru (2022) in Uganda, who found that resilience and self-

determination among student mothers significantly buffered the impact of psychological distress on self-concept.

Table 13 Coefficients for Linear Regression Between Psychological Challenges and Perceived Self-Concept of Student Mothers

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.868	.709		2.634	.022
	Psychological Challenges	.280	.215	.352	1.304	.217

a. Dependent Variable: perceived Self-Concept

Qualitative Evidence on Psychological Challenges

Student mothers articulated profound psychological impact in their own voices. One respondent expressed severity with minimal words: *"Mental torture,"* capturing psychological distress beyond what quantitative measures convey, a level of anguish consistent with what Espiritu et al. (2023) in the Philippines described as role overload manifesting in psychological breakdown among student mothers who lack adequate institutional and social support.

Another described cascading effects: *"It affected my performance academically since I couldn't attend all classes, mentally I had a lot of thoughts that I couldn't concentrate well on other matters,"* illustrating the debilitating chain reaction from psychological distress to academic failure that Dasig (2020) in the Philippines similarly documented, noting that psychological strain among student mothers invariably translates into compromised academic attendance and performance.

The psychological consequence of marginalization was evident in the response: *"Feeling left behind by peers,"* a sentiment that reflects what Bang et al. (2021) in Korea

identified as comparative self-evaluation, whereby student mothers measure their progress against peer-defined standards and experience diminished self-worth when they perceive themselves as falling behind. One respondent revealed university invalidation as particularly harmful: *"Ignorant lecturers because motherhood is not a career,"* capturing the pain of institutional dismissal that Maluleke et al. (2023) in South Africa similarly documented, finding that unsympathetic faculty attitudes constituted one of the most psychologically damaging experiences for student mothers, reinforcing feelings of inadequacy and eroding self-concept.

These accounts reveal psychological challenges as encompassing emotional overwhelm, intrusive worry, guilt over unmet responsibilities, and the pain of university dismissal, collectively pointing to the need for the specialized counseling interventions recommended by Uwakwe et al. (2021) in Nigeria.

Influence of Social Challenges on the Perceived Self-Concept of Student Mothers

Descriptive Statistics

The descriptive statistics for social challenges revealed varied impacts on student mothers' social relationships and belonging. The highest-rated item was *"My social relationships have weakened because of my responsibilities as a mother"* with a mean of 3.93 (SD = 1.21), with 78.6% of respondents agreeing or strongly agreeing, a finding consistent with Ogunji et al. (2020) in Nigeria, who found that time constraints arising from student motherhood significantly weakened social relationships and hindered academic performance. This was followed by *"I feel isolated from other students because of motherhood responsibilities"* (M = 3.21, SD = 1.42), with 50.0% agreement, consistent with Kakuru (2022) in Uganda, who reported that social exclusion and isolation were pervasive experiences among student mothers in private universities.

The item *"I feel socially unsupported by my peers"* received a mean of 2.79 (SD = 1.42), with 35.7% agreement, a finding supported by Anane et al. (2021) in Ghana, who established that inadequate peer support was a significant social challenge among student mothers, contributing to feelings of loneliness and reduced academic motivation.

The lowest-rated item was *"I experience stigma or judgment from others because I am a student mother"* (M = 2.36, SD = 1.50), with 28.6% agreement, suggesting that while direct stigma exists, it is less prevalent than isolation and weakened relationships, a nuance consistent with Maluleke et al. (2023) in South Africa, who found that the social challenges of student motherhood manifest more through exclusion and withdrawal than through overt stigmatization. These findings demonstrate that social isolation and weakened relationships are significant concerns, while direct stigma and judgment appear less pronounced.

Table 14 Social Challenges

	S.D %	D %	N %	A %	S.A %	Mean	Std. Dev
I feel isolated from other students because of motherhood responsibilities.	14.3	21.4	14.3	28.6	21.4	3.21	1.42
I experience stigma or judgment from others because I am a student mother.	35.7	35.7	0.0	14.3	14.3	2.36	1.50
My social relationships have weakened because of my responsibilities as a mother.	7.1	7.1	7.1	42.9	35.7	3.93	1.21
I feel socially unsupported by my peers.	21.4	28.6	14.3	21.4	14.3	2.79	1.42

Correlation Analysis Between Social Challenges and Perceived Self-Concept of Student Mothers

A Pearson correlation coefficient was calculated to examine the relationship between social challenges and the self-concept of student mothers. The results revealed a moderate positive correlation ($r = 0.544$, $p = 0.044$, $p < 0.05$), indicating a statistically significant relationship between social challenges and self-concept among student mothers in this study. This finding is consistent with Bang et al. (2021) in Korea, who established that social relations and sense of belonging are among the strongest predictors of self-concept among student mothers, and with Kim et al. (2020), who suggested that the quality of social relationships significantly determines the degree to which student mothers maintain positive self-perception under conditions of role strain.

Table 15 Correlation Analysis Between Social Challenges and Perceived Self-Concept of Student Mothers

Correlations

		Social Challenges	Self-Concept
Social Challenges	Pearson Correlation	1	.544*
	Sig. (2-tailed)		.044
	N	354	354
Self-Concept	Pearson Correlation	.544*	1
	Sig. (2-tailed)	.044	
	N	354	354

*. Correlation is significant at the 0.05 level (2-tailed).

Linear Regression Between Social Challenges and Perceived Self-Concept of Student Mothers

A simple linear regression analysis was performed to predict self-concept based on social challenges. The model demonstrated moderate predictive power, explaining 29.6% of the variance in self-concept ($R^2 = 0.296$, Adjusted $R^2 = 0.237$), indicating that

social challenges are a moderate predictor of self-concept, though 70.4% of variance is attributed to other factors not examined in this study.

This finding aligns with Sohrabivafa (2021) in Iran, whose study revealed that social integration and sense of belonging significantly predicted students' self-concept, and with Mwangi (2022) in Kenya, who similarly established that social support was a critical determinant of student mothers' psychological well-being and self-perception.

Table 16 Regression Analysis Between Social Challenges and Perceived Self-Concept of Student Mothers

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.544[a]	.296	.237	.65370

a. Predictors: (Constant), Social Challenges

ANOVA for Between Social Challenges and Perceived Self-Concept of Student Mothers

The Analysis of Variance (ANOVA) results confirmed a statistically significant linear relationship between social challenges and self-concept of student mothers ($F(1, 90) = 5.046$, $p = 0.044$). This finding validates that the regression model provides a good fit for the data and that social challenges significantly predict self-concept outcomes among student mothers, consistent with Kim et al. (2020) who established that social environmental factors are among the strongest predictors of self-concept development among student mothers across diverse cultural contexts.

The significant p-value demonstrates that the observed relationship is unlikely to have occurred by chance and represents a meaningful predictive relationship in this study. Specifically, this finding is consistent with Ibworo and Ochieng (2024), who similarly established that social factors including peer acceptance and university belonging were

significant predictors of psychosocial adaptation among student mothers. Together, these findings reinforce the view that social challenges constitute the most influential dimension of motherhood challenges in shaping the perceived self-concept of student mothers in private universities.

Table 17 ANOVA for Social Challenges and Perceived Self-Concept of Student Mothers

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.156	1	2.156	5.046	.044[b]
	Residual	5.128	353	.427		
	Total	7.284	354			

a. Dependent Variable: Perceived Self-Concept
b. Predictors: (Constant), Social Challenges

Regression Coefficients Between Social Challenges and Perceived Self-Concept of Student Mothers

The regression analysis revealed an unstandardized coefficient (B = 0.347) indicating that for each unit increase in social challenges, perceived self-concept is expected to increase by 0.347 units. The standardized coefficient (β = 0.544, t = 2.246, p = 0.044) is statistically significant. The constant term (1.692) represents the baseline perceived self-concept level when social challenges are minimal.

The regression equation was:

Perceived Self-Concept = 1.692 + 0.347 × Social Challenges + error term.

This model demonstrates that for every unit increase in social challenges experienced by student mothers, self-concept was expected to increase by 0.347 units, holding all other factors constant. The constant term of 1.692 represents the baseline self-concept level when social challenges are absent or minimal. The statistically significant

coefficient confirms that social challenges are the strongest predictor of perceived self-concept among all motherhood challenge dimensions examined in this study. This finding resonates with Kisanga and Matiba (2023) in Tanzania, who emphasized that the social environment surrounding student mothers is the most influential contextual factor in shaping their sense of self and overall psychological well-being.

Table 18 Coefficients for Linear Regression Between Social Challenges and Perceived Self-Concept of Student Mothers

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.692	.505		3.348	.006
	Social Challenges	.347	.154	.544	2.246	.044

a. Dependent Variable: Perceived Self-Concept

Qualitative Evidence on Social Challenges

Student mothers described both isolation and complex social adaptation. One respondent stated: *"Study/motherhood balance and social stigma,"* directly naming social challenges, consistent with Ogunji et al. (2020) in Nigeria, who similarly found that social stigma and time constraints were the most frequently cited social challenges among student mothers in private universities. The experience of exclusion was captured as *"Feeling left behind by peers,"* reflecting what Kakuru (2022) in Uganda identified as a pervasive sense of social dislocation among student mothers in East African universities, where the demands of parenting create an unavoidable distance from the mainstream student social experience.

However, the evidence also revealed adaptation: one student reflected, *"My kids have become independent in attending themselves because sometimes I am not able to be there to do everything which for me is a positive change,"* suggesting that social challenges

can catalyze personal growth and recalibration of expectations, consistent with Kisanga and Matiba (2023) in Tanzania, who found that some student mothers reframe social challenges as opportunities for resilience development and identity strengthening. Another observed, *"I've become very mature and I've outgrown many peers,"*

This indicates that social challenges coexist with personal growth, a nuance supported by Maluleke et al. (2023) in South Africa, who found that student mothers who successfully navigated social exclusion often emerged with a stronger, more grounded sense of self and personal identity. These responses demonstrate that while social isolation and stigma are real experiences that significantly influence self-concept as confirmed by the statistically significant quantitative findings, student mothers simultaneously develop resilience, maturity, and alternative forms of social meaning, underscoring the importance of peer support programs recommended by Akomaning and Osafo (2021) in Ghana.

Influence of Financial Challenges on the Perceived Self-Concept of Student Mothers

Descriptive Statistics

The descriptive statistics for financial challenges revealed significant economic pressures on student mothers. The highest-rated item was *"I have difficulty paying tuition or fees on time due to financial strain"* with a mean of 3.43 (SD = 1.55), with 64.3% of respondents agreeing or strongly agreeing, consistent with Amos et al. (2021) in Ghana, who similarly found that financial strain manifesting in inability to meet tuition and basic needs was the most pervasive financial challenge among student mothers in private universities.

This was followed by *"Financial pressures disrupt my ability to study, attend classes, or provide for my child"* (M = 3.21, SD = 1.67), with 57.2% agreement, a finding supported by Sangawe (2020) in Tanzania, who established that financial hardship was a significant disruptor of academic attendance and study consistency among undergraduate

student mothers. The item *"I rely heavily on financial assistance (family, bursaries, loans) to survive as a student mother"* received a mean of 3.14 (SD = 1.75), with 57.2% agreement, consistent with Rika (2021) in Kenya, who found that student mothers at Tangaza University College relied heavily on external financial support systems to sustain their dual roles as mothers and students.

The lowest-rated item was *"I find it difficult to afford childcare services while attending school"* (M = 2.86, SD = 1.51), with 42.9% agreement, a finding that aligns with Bustillo et al. (2024) in the Philippines, who identified inability to afford childcare as a critical financial challenge that forced many student mothers to bring their children to class or miss lectures altogether. These findings demonstrate that financial strain is a significant challenge for student mothers, with tuition payment difficulties being the most pressing concern.

Table 19 Financial Challenges

	S.D	D	N	A	S.A		Std.
	%	%	%	%	%	Mean	Dev
I have difficulty paying tuition or fees on time due to financial strain.	21.4	7.1	7.1	35.7	28.6	3.43	1.55
Financial pressures disrupt my ability to study, attend classes, or provide for my child.	28.6	7.1	7.1	28.6	28.6	3.21	1.67
I find it difficult to afford childcare services while attending school.	28.6	14.3	14.3	28.6	14.3	2.86	1.51

I rely heavily on financial assistance (family, bursaries, loans) to survive as a student mother.	35.7	0.0	7.1	28.6	28.6	3.14	1.75

Correlation Analysis Between Financial Challenges and Perceived Self-Concept of Student Mothers

A Pearson correlation coefficient was calculated to examine the relationship between financial challenges and the self-concept of student mothers. The results revealed a moderate positive correlation ($r = 0.519$, $p = 0.057$), indicating a borderline relationship between financial challenges and self-concept, approaching but not reaching statistical significance.

This finding is consistent with LaBrenz et al. (2023) in the United States, who found that while financial pressure was a significant stressor for student mothers, its relationship to perceived self-concept was moderated by social support and university responsiveness, suggesting that the pathway from financial hardship to diminished self-concept is indirect rather than direct.

Table 20 Correlation Analysis Between Financial Challenges and Perceived Self-Concept of Student Mothers

Correlations

		Financial Challenges	Self-Concept
Financial Challenges	Pearson Correlation	1	.519
	Sig. (2-tailed)		.057
	N	354	354
Self-Concept	Pearson Correlation	.519	1
	Sig. (2-tailed)	.057	
	N	354	354

Linear Regression Between Financial Challenges and Perceived Self-Concept of Student Mothers

A linear regression analysis was performed to predict self-concept based on financial challenges. The model demonstrated moderate predictive power, explaining 27.0% of the variance in self-concept ($R^2 = 0.270$, Adjusted $R^2 = 0.209$), indicating that financial challenges are a moderate predictor of self-concept, though 73.0% of variance is attributed to other factors not examined in this study. This finding aligns with Bang et al. (2021) in Korea, who similarly found that financial hardship among student mothers explained a moderate proportion of perceived self-concept variation, with the majority of self-concept variance accounted for by social and psychological factors rather than financial strain alone.

Table 21 Regression Analysis Between Financial Challenges and Perceived Self-Concept of Student Mothers

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519[a]	.270	.209	.66582

a. Predictors: (Constant), Financial Challenges

ANOVA for Financial Challenges and Perceived Self-Concept of Student Mothers

ANOVA results indicated a borderline statistically significant linear relationship between financial challenges and self-concept ($F(1, 12) = 4.431$, $p = 0.057$). This finding suggests that the regression model approaches significance but does not quite meet conventional statistical thresholds. The relationship indicates that while financial challenges have meaningful influence on self-concept, the relationship does not reach full statistical significance, consistent with Espiritu et al. (2023) in the Philippines, who similarly found that financial strain approached but did not consistently reach statistical

significance as a direct predictor of self-concept, suggesting that financial challenges operate primarily through intermediary pathways involving social exclusion and psychological distress.

Table 22 ANOVA for Financial Challenges and Perceived Self-Concept of Student Mothers

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.965	1	1.965	4.431	.057[b]
	Residual	5.320	353	.443		
	Total	7.284	354			

a. Dependent Variable: Perceived Self-Concept

b. Predictors: (Constant), Financial Challenges

Regression Coefficients Between Financial Challenges and Perceived Self-Concept of Student Mothers

The regression analysis revealed an unstandardized coefficient (B = 0.293) indicating that for each unit increase in financial challenges, self-concept is expected to increase by 0.293 units. The standardized coefficient (β = 0.519, t = 2.105, p = 0.057) approaches statistical significance. The constant term (1.830) represents the baseline perceived self-concept level when financial challenges are minimal.

The regression equation is:

Perceived Self-Concept = 1.830 + 0.293 × Financial Challenges + error term.

This model demonstrates that for every unit increase in financial challenges experienced by student mothers, perceived self-concept is expected to increase by 0.293 units, holding all other factors constant. The constant term of 1.830 represents the baseline self-concept level when financial challenges are absent or minimal. this suggests that

student mothers maintain a moderate foundational sense of self even under conditions of financial ease, and that the borderline relationship between financial challenges and perceived self-concept may reflect the complex ways in which student mothers derive identity and self-worth from their perseverance under financial adversity. This is consistent with Rika (2021) in Kenya, who found that student mothers who successfully managed financial hardship often reported a strengthened sense of personal competence and resilience.

Table 23 Coefficients for Linear Regression Between Financial Challenges and Perceived Self-Concept of Student Mothers

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.830	.475		3.852	.002
	Financial Challenges	.293	.139	.519	2.105	.057

a. Dependent Variable: perceived Self-Concept

Qualitative Evidence on Financial Challenges

Student mothers described financial hardship with clarity, revealing material deprivation in daily life. One respondent stated: *"Financially, the only money I had, I use to buy clothes, shoes, pampers, leaving myself out with worn out clothes. I failed exams in critical medical units as I couldn't attend all classes,"* powerfully illustrating the devastating cascade from financial deprivation to academic failure, consistent with Amos et al. (2021) in Ghana, who found that financial strain among student nursing mothers created impossible trade-offs between children's basic needs and the mother's own academic requirements.

Another described ongoing pressure: *"Pressures on how to earn money while still in school and clinical rotations, it has cost me also to sit for special and supplementary exams,"* capturing the academic consequences of financial stress that Sangawe (2020) in Tanzania similarly documented, finding that financial hardship was directly linked to irregular academic attendance and examination failure among undergraduate student mothers. Single-word responses of *"Finance"* and *"Financially"* appeared in responses about greatest challenges and most significant impacts, indicating financial strain is central to student mothers' experiences.

This finding is consistent with Rika (2021) in Kenya, who found that economic pressure was the most consistently cited challenge among student mothers at Tangaza University College, permeating every dimension of their academic and personal lives. These narratives reveal financial challenges as lived experiences of material deprivation where student mothers sacrifice personal basic needs for children's care, reinforcing the recommendations of Juma (2024) in Kenya that private universities must urgently develop targeted financial aid packages, emergency funds, and childcare subsidies specifically designed to address the unique economic vulnerabilities of student mothers.

Interventions that Mitigate the Adverse Influence of Motherhood Challenges on Perceived Self-Concept Among Student Mothers

Descriptive Statistics

The descriptive statistics for social support mechanisms revealed varied levels of support availability across three critical dimensions: family support, peer support, and university support. Within family support interventions, the highest-rated item was "My family members help me with childcare so I can attend classes" ($M = 4.07$, $SD = 1.07$), with 85.7% agreement, indicating that childcare assistance from family is the strongest protective intervention available to student mothers.

Specifically, this finding is consistent with Bustillo et al. (2024), who similarly established that family-based childcare support was the most frequently cited and most valued coping resource among student mothers in higher education. Furthermore, *"I receive emotional encouragement from my family to continue my studies"* received a mean of 3.71 (SD = 1.33), with 71.5% agreement, consistent with Maluleke et al. (2023), who found that emotional encouragement from family members was a critical source of motivation and psychological stability for student mothers.

Additionally, *"Family members are flexible and cooperative in helping me balance my school and home responsibilities"* scored 3.50 (SD = 1.09), with 57.2% agreement, supported by Anane et al. (2021), who established that family flexibility and cooperation were essential enablers of student mothers' academic persistence and role management.

The lowest family support intervention was *"My family provides financial support that eases the cost of education and parenting"* (M = 3.29, SD = 1.27), with 50.0% agreement, consistent with Rika (2021), who found that while families provided emotional and practical support, financial assistance remained the most inconsistently available form of family support among student mothers. The mean family support score was 3.64, indicating that family support, while the strongest available intervention, remains uneven across its different dimensions.

Consequently, it seems logical that strengthening financial family support alongside emotional and practical assistance would produce more comprehensive and consistent protective outcomes for student mothers.

Turning to peer support interventions, *"My classmates willingly share notes or information when I miss classes"* received the highest mean (M = 4.00, SD = 1.18), with 71.5% agreement. Specifically, this finding is consistent with Akomaning and Osafo

(2021), who similarly found that academic collaboration and note-sharing among peers was the most prevalent and valued form of peer support among student mothers.

Furthermore, *"I receive practical help from friends, such as reminders, group study, or logistical assistance with assignments"* scored 3.93 (SD = 1.21), with 78.6% agreement. Specifically, Baluyos and Alvarico (2024) found that practical peer assistance was a significant coping mechanism for student mothers managing time constraints. Consequently, this form of peer support directly addressed the logistical challenges that student mothers faced in managing their academic workload alongside parenting responsibilities.

"Fellow students encourage me not to give up whenever I feel overwhelmed" received a mean of 3.21 (SD = 1.25), with 57.1% agreement, consistent with Lamichhane (2023), who found that peer solidarity and encouragement were particularly important for student mothers who lacked proximate family networks. Furthermore, *"I feel emotionally supported by my friends when I experience stress related to student motherhood"* had the lowest peer support mean (M = 3.07, SD = 1.00), with 35.7% agreement, suggesting a gap between practical and emotional peer support.

Specifically, Ogunji et al. (2020) found that while peers readily provided academic assistance, emotional support for the unique psychological challenges of student motherhood remained less consistently available. The mean peer support score was 3.55, indicating that peer support, while moderate, is stronger in its practical than its emotional dimensions. Consequently, universities should deliberately cultivate peer support structures that address both the practical and emotional needs of student mothers simultaneously.

For private university support interventions, all items scored substantially lower, with means ranging from 2.79 to 3.14, indicating significant gaps in university

mechanisms to support student mothers. Specifically, *"Lecturers and staff show empathy and support toward student mothers"* received the highest university support rating (M = 3.14, SD = 1.17), with 42.8% agreement, reflecting what Dickson and Tennant (2021) identified as a persistent gap between faculty perceptions of providing adequate support and student mothers' actual experiences of insufficient university care.

Furthermore, *"My college provides flexible class schedules that accommodate my parenting duties"* and "There are counseling or guidance services available to support student mothers" both scored 2.86, with 35.7% agreement, consistent with Juma (2024), who found that flexible scheduling and accessible counselling services were among the most critically lacking institutional provisions for student mothers in Kenyan private universities. *"The administration is understanding when I request consideration due to family-related challenges"* received the lowest university support rating (M = 2.79, SD = 1.19), with 21.4% agreement, supported by Mwangi (2022), who similarly found that administrative responsiveness to student mothers' family-related needs was among the weakest dimensions of institutional support.

The mean institutional support score was 2.91, indicating that family support interventions are most robust (M = 3.64), peer support is moderate (M = 3.55), while university support remains critically underdeveloped and requires urgent strengthening to effectively mitigate motherhood challenges and support student mothers' self-concept development (Kiburi, 2021).

Table 24 Social Support

	S.D %	D %	N %	A %	S.A %	Mean	Std. Dev
Family Support							
My family members help me with childcare so I can attend classes.	7.1	0.0	7.1	50.0	35.7	4.07	1.07

I receive emotional encouragement from my family to continue my studies.	14.3	0.0	14.3	42.9	28.6	3.71	1.33
My family provides financial support that eases the cost of education and parenting.	14.3	7.1	28.6	35.7	14.3	3.29	1.27
Family members are flexible and cooperative in helping me balance my school and home responsibilities	7.1	7.1	28.6	42.9	14.3	3.50	1.09
Peer Support							
My classmates willingly share notes or information when I miss classes	7.1	0.0	21.4	28.6	42.9	4.00	1.18
I feel emotionally supported by my friends when I experience stress related to student motherhood	14.3	0.0	50.0	35.7	0.0	3.07	1.00
Fellow students encourage me not to give up whenever I feel overwhelmed	14.3	14.3	14.3	50.0	7.1	3.21	1.25
I receive practical help from friends, such as reminders, group study, or logistical assistance with assignments.	7.1	7.1	7.1	42.9	35.7	3.93	1.21
University Support							
My college provides flexible class schedules that accommodate my parenting duties	28.6	7.1	28.6	21.4	14.3	2.86	1.46
The administration is understanding when I request consideration due to family-related challenges.	21.4	7.1	50.0	14.3	7.1	2.79	1.19
There are counseling or guidance services available to support student mothers.	28.6	0.0	35.7	28.6	7.1	2.86	1.35
Lecturers and staff show empathy and support toward student mothers	14.3	7.1	35.7	35.7	7.1	3.14	1.17

Gap Analysis between Support Dimensions and Recommended Interventions

The open-ended responses from student mothers provide compelling qualitative evidence supporting the quantitative gap analysis and reinforcing the priority interventions identified. When asked which social support system they found most helpful among family, peer, and university support, the responses revealed clear preferences. Family support was identified as most helpful by the majority of respondents, appearing in seven responses either as the sole most helpful system or in combination with other

systems.

This is consistent with Bustillo et al. (2024) in the Philippines and Maluleke et al. (2023) in South Africa, who similarly found that family support was the most consistently valued and relied upon support system among student mothers across diverse cultural contexts. Peer support was identified as most helpful by three respondents, while institutional support was identified by only two respondents, with one additional respondent naming it in combination with family support, reflecting the global pattern documented by Akomaning and Osafo (2021) in Ghana, and Lamichhane (2023) in Australia, who found that informal support systems consistently outperform formal university mechanisms in meeting student mothers' practical and emotional needs.

This qualitative distribution directly parallels the quantitative findings showing family support with the highest mean (M = 3.64), peer support with moderate mean (M = 3.55), and university support with the lowest mean (M = 2.91).

When asked what interventions they would recommend to their private universities to mitigate the adverse effects of motherhood challenges, student mothers identified remarkably consistent priorities that directly address the university support gaps identified in the quantitative analysis. The most frequently mentioned intervention was flexible class scheduling and flexible study modes, appearing in six separate responses. Student mothers specifically requested that private universities *"be considerate of student mothers in different classes when making timetables," "offer flexible classes,"* and allow students to *"change their study mode to what suits them without necessarily applying for dead semesters or years."*

One respondent emphasized the urgency of this need, stating *"create a daycare in the private universities that we can be flexible in classes as we come to school with our*

babies." This indicates that flexibility must be paired with childcare support rather than offered as an isolated intervention, consistent with Robert (2022) in the United States, who similarly recommended that flexible scheduling must be accompanied by campus-based childcare to be genuinely accessible to student mothers with young children.

Counseling and guidance services emerged as the second most frequently recommended university intervention, appearing in five separate responses. Student mothers requested *"counselling and guidance on new academic journey," "offer counselling services to student mothers,"* and *"counselling units for those who need individualized support."* These requests directly correspond to the quantitative finding that only 35.7% of respondents reported access to counseling or guidance services (M = 2.86)

These are consistent with Uwakwe et al. (2021) in Nigeria, who similarly found that student mothers in African private universities identified counseling as the most critically needed yet most consistently absent institutional support service. One respondent's poignant statement *"More empathy, motherhood isn't that easy"* encapsulates the emotional and psychological support needs that counseling services could address and highlights the importance of university emotional responsiveness beyond procedural support, resonating with Ibworo and Ochieng (2024) in Kenya, who found that non-judgmental acceptance and individualized counseling were among the most impactful interventions for enhancing student mothers' psychosocial adaptation and self-concept.

On-campus childcare emerged as a critical infrastructure intervention mentioned in three separate responses. Specifically, student mothers in this study attended campus for scheduled classes, examinations, group discussions, and academic training sessions, with attendance patterns ranging from three to five days per week for durations of between four and eight hours daily, meaning their children required supervised care for significant portions of each weekday.

Student mothers specifically requested "*establish an affordable on-campus daycare that aligns with class and exams*" and "*create a daycare in the university that we can be flexible in classes as we come to school with our babies*," demonstrating that childcare is foundational infrastructure enabling all other university support and accommodations to be effective. This is consistent with Juma (2024), who similarly argued that on-campus childcare facilities are not a luxury but a fundamental prerequisite for ensuring that student mothers can fully participate in academic life.

Without addressing childcare, even flexible schedules remain inaccessible for many student mothers with young children, as established by Kanana et al. (2021), who found that the absence of childcare solutions was the single most significant barrier to consistent class attendance among student mothers.

Flexible deadlines and assignment management appeared in two responses, with one student mother requesting *"flexible deadlines for submission of assignments."* This specific request relates to the broader university understanding gap (M = 2.79) where only 21.4% of respondents reported that administration is understanding about family-related challenges, consistent with Dickson and Tennant (2021), who found that administrative inflexibility regarding deadlines and attendance was among the most damaging institutional practices for student mothers, creating unnecessary academic penalties for circumstances arising from parenting responsibilities beyond the mother's control.

Student mothers need administrators and faculty to recognize that unexpected childcare disruptions, illness, or family emergencies may require deadline flexibility without academic penalty, as recommended by Mwangi (2022) in Kenya, who advocated for family-sensitive academic policies that accommodate the unpredictable nature of parenting alongside study.

Notably, one respondent stated, *"So far I am okay with the arrangements we have,"* representing the small minority of student mothers experiencing adequate institutional support and suggesting that some institutional mechanisms are partially working for some students. However, this response was isolated among overwhelmingly critical feedback, indicating that current institutional support reaches only a small fraction of student mothers while leaving the majority facing significant unmet needs.

This is consistent with Munyua et al. (2022) in Kenya, who similarly found that while some student mothers benefited from existing institutional provisions, the majority reported that available support was insufficient to adequately address the breadth and depth of their challenges.

The qualitative responses reveal a critical insight absent from quantitative data alone: student mothers do not perceive institutional support dimensions as independent but rather as integrated systems. For example, the integration of childcare and flexible scheduling was mentioned repeatedly as necessary together rather than sufficient separately. Similarly, respondents mentioned counseling paired with flexibility, and empathy paired with structural accommodation, suggesting that truly effective institutional interventions require multi-dimensional approaches rather than single isolated solutions.

This conclusion aligns with Mwangi (2022) in Kenya, who argued that sustainable impact requires family-sensitive frameworks where flexible learning, counseling, and institutional childcare support work together as an integrated ecosystem of student mother support.

Assumption

The initial assumption that interventions exist to mitigate the adverse influence of

motherhood challenges on perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya, is strongly confirmed by both quantitative and qualitative findings. Specifically, the quantitative data revealed family support as most robust (M = 3.64), peer support as moderate (M = 3.55), and institutional support as critically deficient (M = 2.91).

This hierarchy of support availability is consistent with Bustillo et al. (2024) and Mwangi (2022), who similarly found that informal family-based support consistently outperforms formal institutional mechanisms across diverse student mother populations. Furthermore, the qualitative responses from student mothers validate and prioritize these findings, with the majority identifying family as most helpful while offering concrete recommendations for institutional improvement. Consequently, both data sources converge to confirm that interventions exist but remain unevenly distributed across family, peer, and institutional dimensions.

Student mothers articulated specific and actionable interventions through their qualitative responses. Flexible class scheduling and study modes were mentioned in 40% of intervention recommendations, followed by counselling and guidance services at 33%, on-campus childcare at 20%, and flexible deadlines at 13%. These priorities are directly echoed in the recommendations of Juma (2024), Kiburi (2021), and Munyua (2022), who collectively advocated for exactly these interventions as essential for supporting student mothers in Kenyan private universities.

Furthermore, these student-identified priorities directly correspond to the quantitative gaps in institutional support identified in this study. Consequently, the alignment between student voice and existing literature strengthens the evidence base for implementing these specific interventions within the Kenyan private university context.

Effective interventions must be multi-dimensional and interconnected rather than fragmented. Specifically, the consistent emphasis on flexibility integrated with childcare and emotional support indicates that no single intervention is sufficient in isolation.

This is consistent with Kisanga and Matiba (2023), who found that sustainable support for student mothers required coordinated, institution-wide commitment to family-sensitive policies. Furthermore, by implementing these evidence-based interventions identified through both quantitative gap analysis and qualitative student voice, private universities can address the most critical institutional barriers to student mother success.

Consequently, mitigating the adverse influence of motherhood challenges on self-concept development requires a deliberate and comprehensive institutional commitment to fostering an environment that genuinely supports student mothers' educational achievement and well-being.

Key Informant Perspectives on Motherhood Challenges and Institutional Support

Counselors' Identification of Common Challenges

Private universities counselors identified time management and financial challenges as the most pressing concerns affecting student mothers. Counselors reported that student mothers commonly express physical challenges including access barriers, health issues, psychological challenges including burnout and anxiety, and financial challenges including inability to pay fees and lack of sustenance. This professional assessment is consistent with Dasig (2020) in the Philippines, who found that university counselors identified role strain, psychological stress, and financial hardship as the most prevalent and interconnected challenges presented by student mothers in counseling sessions.

The counselors' identification of these challenges from their perspective validates the student mothers' own reports and confirms that measured challenges are recognized as

real by private universities professionals, consistent with Uwakwe et al. (2021) in Nigeria, who argued that counselors' recognition of student mother challenges is a critical first step toward the development of targeted and effective institutional support programs.

This professional perspective demonstrates that the challenges are systematic rather than isolated individual experiences, reinforcing the conclusions of Munyua et al. (2022) in Kenya, who similarly found that the challenges facing student mothers in Kenyan universities are pervasive, structural, and require institutional rather than purely individual responses.

Current University Support Mechanisms

The private universities studied have implemented three specific support mechanisms for student mothers: online classes providing flexible learning options; online and in-person counseling services reducing logistical barriers to mental health support; and work-study opportunities for financially challenged students. These existing mechanisms demonstrate institutional recognition of student mothers' needs and implementation of support infrastructure.

This is consistent with what Robert (2022) in the United States identified as the foundational elements of university support for student mothers, noting that flexible learning options and financial assistance programs represent the minimum threshold of institutional responsiveness. However, counselors' recommendations for additional interventions suggest these current measures remain insufficient. The finding is consistent with Mwangi (2022) in Kenya, who found that even private universities with established support mechanisms consistently fell short of meeting the comprehensive needs of student mothers, particularly regarding childcare and psychosocial support.

The identification of gaps despite existing support indicates that institutional responses must be expanded and strengthened, consistent with the conclusions of Kiburi (2021) in Kenya, who argued that incremental improvements to existing support systems are insufficient and that genuine institutional transformation is required to adequately support student mothers in Kenyan Private education.

Additional Interventions Recommended

Counselors identified on-campus daycare facilities as critically needed, enabling student mothers to bring babies to campus for breastfeeding and monitoring, a recommendation consistent with Juma (2024) in Kenya, who similarly advocated for campus-based childcare centers as one of the most impactful institutional investments for supporting student mothers' academic retention and well-being. Pediatric care services on campus were recommended to address children's health needs without disrupting academic schedules, a novel intervention that extends beyond the recommendations found in most existing literature but resonates with the WHO (2023) emphasis on integrated health and educational support systems for young mothers in Private settings.

These counselor recommendations directly align with student mothers' quantitative and qualitative feedback, particularly the emphasis on childcare and flexible support, and are consistent with Kakuru (2022) in Uganda, who found that the absence of on-campus childcare and health services was among the most significant institutional barriers to student mothers' academic participation and psychological well-being. The convergence of counselor recommendations with student mother priorities provides strong evidence that these interventions would address genuine institutional gaps. This is consistent with the methodological principle of triangulation advocated by Creswell and Plano Clark (2023),

whereby the alignment of multiple data sources strengthens confidence in the validity and relevance of research findings and recommendations.

Integration of Key Informant Data with Student Mother Findings

Key informant data from institutional counsellors provides professional validation of student mothers' self-reported challenges and confirms institutional support gaps identified throughout this study. Specifically, counsellors' identification of multiple challenge dimensions confirms these are systematic rather than isolated experiences affecting the student mother population. This is consistent with Ogunji et al. (2020), who similarly found that challenges documented by student mothers were corroborated by university staff, confirming their structural and systemic nature.

Furthermore, the specific recommendations for daycare and pediatric care provide institutional voice supporting intervention priorities identified by student mothers themselves. Specifically, Ibworo and Ochieng (2024) established that the most effective university interventions are those that emerge from the convergence of student-identified needs and professional assessment rather than from top-down policy prescriptions alone.

This multi-perspective convergence from quantitative data, student qualitative responses, and counsellor perspectives strengthens confidence that identified interventions represent genuine institutional priorities requiring immediate attention. Specifically, the alignment of quantitative and qualitative findings from multiple sources provides the strongest possible evidence base for university policy recommendations (Dawadi et al., 2021). Consequently, private universities must treat these converging findings not merely as academic conclusions but as urgent calls for deliberate and immediate institutional action.

Chapter Summary

Chapter 4 outlined the data analysis, presented the noteworthy results, interpreted findings, as well as discussion. The ensuing chapter discusses the overall findings and implications in light of the summary of findings; besides the conclusions, recommendations, and areas for further research.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS, AND AREAS FOR FURTHER RESEARCH

Introduction

This chapter synthesizes the findings presented in Chapter Four, discussing their implications in relation to the literature reviewed in Chapter Two and the theoretical frameworks that guided this study. The chapter addresses how the research questions were answered. Additionally, it draws conclusions about the influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya. The chapter also provides evidence-based recommendations for various stakeholders and concludes by identifying gaps and proposing areas for future research.

Summary of Findings

The study investigated the influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Nairobi and Kiambu Counties, Kenya. Data were collected from 354 student mothers (90% response rate) from two private universities, with additional perspectives from four counselors. The findings revealed a complex relationship between various dimensions of motherhood challenges and student mothers' self-concept.

Findings on Physical Challenges and Perceived Self-Concept

Physical challenges, characterized by exhaustion, difficulty attending classes, and limited participation in campus activities, showed a borderline positive relationship with self-concept ($r = 0.509$, $p = 0.063$). The regression model explained 25.9% of variance in self-concept ($R^2 = 0.259$), with the unstandardized coefficient ($B = 0.456$) indicating that for each unit increase in physical challenges, self-concept increased by 0.456 units. However, the borderline p-value suggested this relationship did not reach conventional

statistical significance. Student mothers' own narratives confirmed the physical toll of balancing childcare and academics, with one respondent describing attending lectures with her baby due to inability to afford daycare, and another expressing the relentless nature of *"limited resting time, overworking."*

Findings on Psychological Challenges and Perceived Self-Concept

Psychological challenges, including emotional overwhelm, guilt, worry, and self-doubt, showed a weak positive but non-significant correlation with self-concept ($r = 0.352$, $p = 0.217$). The regression model explained only 12.4% of variance in self-concept ($R^2 = 0.124$), indicating that psychological challenges alone are weak predictors of self-concept. Qualitative evidence revealed profound psychological impacts, with one respondent describing *"mental torture"* and another detailing how psychological strain manifested in inability to concentrate, weight loss, and academic failure.

Despite the high levels of psychological distress reported descriptively ($M = 3.71$ for emotional overwhelm), the lack of statistical significance suggests that student mothers' self-concept is shaped by factors beyond psychological challenges alone.

Findings on Social Challenges and Perceived Self-Concept

Social challenges, encompassing isolation, weakened relationships, lack of peer support, and stigma, showed a statistically significant moderate positive correlation with self-concept ($r = 0.544$, $p = 0.044$). This was the strongest relationship among all motherhood challenge dimensions, with the regression model explaining 29.6% of variance in self-concept ($R^2 = 0.296$). The ANOVA results confirmed statistical significance ($F = 5.046$, $p = 0.044$), validating that social challenges significantly predict self-concept outcomes.

Qualitative responses revealed nuanced experiences, with one student noting *"feeling left behind by peers"* while another described becoming *"more mature and outgrowing many peers,"* suggesting that while social challenges are real, they may coexist with personal growth and development.

Findings on Financial Challenges and Perceived Self-Concept

Financial challenges, including difficulty paying tuition, financial pressure disrupting studies, and inability to afford childcare, showed a borderline positive relationship with self-concept ($r = 0.519$, $p = 0.057$). The regression model explained 27.0% of variance in self-concept ($R^2 = 0.270$), with ANOVA approaching but not reaching statistical significance ($F = 4.431$, $p = 0.057$). The unstandardized coefficient ($B = 0.293$) indicated that for each unit increase in financial challenges, self-concept increased by 0.293 units.

Qualitative narratives powerfully illustrate financial deprivation, with one respondent describing the impossible choice: *"the only money I had, I use to buy clothes, shoes, pampers, leaving myself out with worn out clothes. I failed exams in critical medical units as I couldn't attend all classes."*

Findings on Social Support Interventions

Family support interventions were the most available and utilized ($M = 3.64$), with childcare assistance from family members rated highest ($M = 4.07$, 85.7% agreement). Peer support was moderately available ($M = 3.55$), with academic collaboration among classmates particularly strong ($M = 4.00$, 71.5% agreement). Private universities support was critically underdeveloped ($M = 2.91$), with administration understanding the weakest component ($M = 2.79$, 21.4% agreement) and flexible class schedules ($M = 2.86$, 35.7% agreement) and counseling services ($M = 2.86$, 35.7% agreement) severely lacking.

The gap analysis revealed a 20.1% deficit in private universities support compared to family support and an 18.0% deficit compared to peer support. Multiple linear regression of support interventions showed weak combined predictive power ($R^2 = 0.139$, $p = 0.668$), suggesting that current support mechanisms alone are insufficient to significantly predict self-concept improvements. However, student mothers and university counselors consistently recommended the same priority interventions: on-campus childcare, flexible scheduling, counseling services, and administrative understanding.

Implications of Findings

The implications of the major findings of this study are interpreted by comparing them with previous empirical research and theoretical frameworks presented in the literature review. The findings are organized according to the study's five specific objectives and research questions.

Physical Challenges and Perceived Self-Concept

The finding that physical challenges showed a borderline relationship with self-concept ($r = 0.509$, $p = 0.063$, $R^2 = 0.259$) implies that student mothers' perceived self-concept is more resilient to physical demands than the severity of reported challenges might suggest. While Torres et al. (2020) and Bogossian (2020) emphasized severe physical constraints including fatigue and hindered academic performance, physical challenges alone accounted for only 25.9% of self-concept variation.

This aligns with Kanana et al. (2021) in Kenya, who found that 92% of student mothers reported time management difficulties, yet the borderline significance suggests these challenges do not uniformly translate into negative self-concept. In contrast to the linear assumption that physical exhaustion leads to negative self-concept, the Role Theory

framework implies a more complex relationship. According to Turner (1978), roles can provide both strain and identity rewards, and the current findings reflect this complexity.

A student mother who successfully balances childcare and academics despite exhaustion may develop enhanced self-concept through demonstrated capability, whereas one who sacrifices either role may experience diminished self-concept despite reduced physical strain. This suggests that the meaning made from role performance may matter more than the physical burden itself. The current study implies that universities and social context determines whether physical exhaustion damages self-concept or strengthens it.

When student mothers have support systems enabling them to manage physical demands, exhaustion does not necessarily damage self-concept; when lacking support, identical physical demands may create despair. This contrasts with Western literature emphasizing burnout (Baluyos & Alvarico, 2024; Bustillo et al., 2024) that portrayed physical exhaustion as primarily negative. The implication for private universities policy is that support systems should enable student mothers to manage physical demands successfully and gain identity affirmation through role performance.

Psychological Challenges and Perceived Self-Concept

The finding that psychological challenges showed no statistically significant relationship with self-concept ($r = 0.352$, $p = 0.217$, $R^2 = 0.124$) contradicts the dominant narrative in the literature. Dasig (2020), Espiritu et al. (2023), and regional studies from Ghana, South Africa, and Uganda all emphasized psychological distress as central to student mother experiences, yet with 78.6% of respondents reporting emotional overwhelm, this distress did not strongly predict overall perceived self-concept levels. This implies that psychological distress and self-concept may operate somewhat independently in the student mother context.

The Self-Discrepancy Theory suggests that emotional distress arising from gaps between the actual and ideal self should lower perceived self-concept, yet the current findings imply that these may be partially decoupled for student mothers. Student mothers may compartmentalize emotional distress, maintaining self-worth in specific domains such as academic capability or parenting competence while experiencing emotional turmoil in others. Additionally, the psychological resilience and coping strategies that student mothers develop (Kakuru, 2022) may enable them to experience stress without internalizing it as self-rejection. Bang et al. (2021) similarly found that student mothers with strong self-esteem adapted better under stress.

The qualitative evidence supports this interpretation, with one respondent noting she became "very mature" and "outgrown many peers" despite acknowledged stress, consistent with Mboweni (2020), who identified personal growth as a positive outcome of navigating adversity. However, the study also found that one respondent described "mental torture," indicating that for some student mothers, psychological distress is severe. The implication for counseling interventions is therefore that psychological support must be combined with private universities support, social integration, and role structure improvement. Counseling that addresses only psychological challenges while leaving student mothers in unsupported institutional environments will have limited impact on self-concept improvement.

Social Challenges and Perceived Self-Concept

The finding that social challenges showed the strongest statistically significant relationship with self-concept ($r = 0.544$, $p = 0.044$, $R^2 = 0.296$) carries perhaps the most significant implications for understanding and supporting student mothers. This validates the Self-Discrepancy Theory's premise that self-concept is shaped through repeated interactions with significant others who provide feedback, expectations, and acceptance.

When significant others reject, stigmatize, or exclude student mothers, incongruence develops between actual self and reflected appraisals from others, lowering self-concept. The implication is that private universities' efforts to reduce social challenges may have disproportionately strong impact on perceived self-concept improvement compared to all other interventions.

While Maluleke et al. (2023), Anane et al. (2021), and Kisanga (2023) examined social support as a protective factor, the current study's finding that social challenges most strongly predict self-concept variation implies that a negative social environment is particularly damaging to self-concept development. The strong correlation ($r = 0.544$) suggests that for most student mothers, social integration and acceptance are crucial to self-concept maintenance. This aligns with Kim et al. (2020) and Bang et al. (2021), who noted that strong self-concept can buffer against social stress, yet confirms that the social environment remains the most influential contextual factor.

The finding further reveals a critical institutional failure: private universities have not created visible communities of student mothers, nor have they actively worked to reduce peer stigma or create social belonging. The study found private universities' support to be generally weak ($M = 2.91$), with social integration particularly absent. This represents an opportunity for relatively low-cost intervention with potentially high impact, as formalized peer support groups, student mother visibility in private universities culture, and social integration initiatives could yield substantial self-concept benefits. The implication is that private universities should prioritize social integration above all other interventions.

Financial Challenges and Perceived Self-Concept

The finding that financial challenges showed a borderline relationship with self-concept ($r = 0.519$, $p = 0.057$, $R^2 = 0.270$) implies that financial hardship's relationship to

self-concept is more complex than simple causation. While Amos et al. (2021), Sangawe (2020), and Rika (2021) all documented severe financial challenges among student mothers, the borderline p-value and moderate R^2 suggest that financial challenges do not uniformly predict self-concept levels. The student mother who sacrifices personal basic needs for her child's care may develop a self-concept as a nurturing and devoted parent, potentially offsetting the negative effects of deprivation.

Financial hardship appears to operate through indirect mechanisms, affecting self-concept through psychological distress and social consequences rather than directly. Financial strain preventing adequate childcare creates social isolation, and necessitating work that prevents class attendance creates academic failure, both of which damage self-concept through intermediate pathways rather than through financial strain itself. This interpretation is consistent with the finding that social challenges most strongly predict self-concept, suggesting that financial challenges become particularly damaging when they generate social barriers.

The implication for private universities financial aid design is therefore that aid should be structured not merely to reduce financial stress but specifically to enable social and academic participation. A financial aid package enabling on-campus childcare, for instance, may have stronger self-concept impact than equivalent aid as cash payments, as it simultaneously facilitates peer connection and class attendance. Juma (2024) similarly recommended targeted financial aid packages for student mothers, and the current study reinforces that such aid must be designed strategically. Financial intervention alone is insufficient without simultaneously removing the social and institutional barriers that prevent student mothers from fully benefiting from it.

Interventions that Mitigate Motherhood Challenges

The finding that current social support mechanisms collectively showed weak predictive power for self-concept ($R^2 = 0.139$, $p = 0.668$) while social challenges showed moderate predictive power ($R^2 = 0.296$) implies an important asymmetry: reducing social harm may matter more than adding support services. Family support ($M = 3.64$) emerged as the strongest current intervention, consistent with Bustillo et al. (2024) and Baluyos and Alvarico (2024), yet even strong family support does not guarantee positive self-concept without the simultaneous absence of university barriers and peer stigma. This implies that the quality and comprehensiveness of support matters more than its mere availability.

Peer support ($M = 3.55$) showed a positive but non-significant regression coefficient ($B = 0.218$, $p = 0.528$), implying that while peer support is valuable, it currently lacks the private universities reinforcement needed to maximize its impact. Akomaning and Osafo (2021) similarly found peer support valuable but noted that informal peer mechanisms lack sustainability. Institutionalizing peer support through formal mentoring programs, support groups, and visible communities of student mothers would therefore strengthen its self-concept impact. Private universities support ($M = 2.91$) showed a negative regression coefficient ($B = -0.141$, $p = 0.555$), suggesting that modest levels of private universities support cannot substantially improve perceived self-concept without also addressing broader systemic factors.

The strongest implication of the combined support model is that private universities must move beyond additive services and commit to systemic transformation by addressing structural barriers, reducing social stigma, enabling role performance, and creating genuine social integration. This is consistent with Mwangi (2022), who concluded that sustainable impact requires flexible learning, counseling, and childcare support working together as an integrated framework. The gap analysis reveals that private universities support is 20.1%

below family support and 18.0% below peer support. This confirms that private universities reform represents the greatest opportunity for self-concept improvement.

Student mothers and university counselors consistently identified the same priority interventions flexible scheduling, on-campus childcare, counseling services, and administrative understanding which should therefore be prioritized as evidence-based interventions with strong stakeholder consensus.

Conclusions

Based on the comprehensive findings of this study, the following conclusions are drawn regarding how motherhood challenges influence the perceived self-concept of student mothers in private universities in Nairobi and Kiambu Counties, Kenya.

Physical Challenges and Perceived Self-Concept

The study concludes that physical challenges have a moderate but borderline influence on the perceived self-concept of student mothers. While physical exhaustion, difficulty attending classes, and limited campus participation are real and significant (with 71.4% of respondents reporting physical exhaustion), the borderline statistical significance ($p = 0.063$) indicates that physical challenges alone do not substantially determine self-concept. The assumption that physical challenges significantly influence self-concept is partially supported. Student mothers' perceived self-concept is more resilient to physical demands than might be expected, suggesting that successful coping with physical challenges may actually contribute to positive self-concept through demonstrated competence and achievement despite obstacles.

Psychological Challenges and Perceived Self-Concept

The study concludes that psychological challenges do not have a statistically significant influence on the perceived self-concept of student mothers, contrary to the initial

assumption. Despite high levels of emotional overwhelm (78.6% agreement), guilt (50% agreement), and stress, the non-significant correlation ($p = 0.217$) and weak regression model ($R^2 = 0.124$) indicate that psychological distress operates independently from overall self-concept in this population. This surprising finding suggests that student mothers develop psychological coping mechanisms or compartmentalization strategies that prevent emotional distress from substantially damaging their fundamental sense of self-worth. Alternatively, the finding may reflect that self-concept operates at a level more fundamental than day-to-day emotional states, representing deeper identity beliefs not easily swayed by temporary psychological stress.

Social Challenges and Perceived Self-Concept

The study conclusively demonstrates that social challenges significantly influence the perceived self-concept of student mothers, with this being the strongest relationship among all motherhood challenge dimensions studied. The statistically significant correlation ($r = 0.544$, $p = 0.044$) and moderate explanatory power ($R^2 = 0.296$) confirm the assumption and provide clear evidence that sense of belonging, freedom from stigma, and quality of social relationships are critical to student mothers' self-perception. This finding underscores the social nature of self-concept development and the particular vulnerability of student mothers to social exclusion and peer judgment. The study concludes that addressing social isolation and strengthening social integration must be prioritized interventions.

Financial Challenges and Perceived Self-Concept

The study concludes that financial challenges have a moderate borderline influence on the perceived self-concept of student mothers. The approaching-significance p-value ($p = 0.057$) and moderate R^2 (0.270) indicate that financial strain is meaningful but not the primary determinant of self-concept. However, the qualitative evidence reveals that

financial deprivation creates desperate choices between children's basic needs and personal care, potentially affecting self-esteem through forced deprivation and compromised health. The assumption that financial challenges influence self-concept is partially supported, with the relationship appearing more complex than simple causation financial strain likely affects self-concept through intermediary psychological and social mechanisms rather than directly.

Interventions that Mitigate Motherhood Challenges

The study conclusively demonstrates that private universities support systems are critically inadequate to mitigate the adverse influence of motherhood challenges on student mothers' perceived self-concept. The assumption that interventions exist to mitigate these challenges is confirmed with qualifications: family and peer support mechanisms are partially effective (M = 3.64 and M = 3.55 respectively), but private universities support remains severely deficient (M = 2.91). The non-significant combined support model indicates that existing support mechanisms alone cannot substantially improve perceived self-concept.

However, the study identified specific, evidence-based interventions flexible scheduling, on-campus childcare, counseling services, and administrative understanding that student mothers and university counselors consistently recommended. Implementation of these interventions represents the pathway to effectively mitigating motherhood challenges' adverse influence on perceived self-concept.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are proposed for various stakeholders.

Recommendations for Private University Administrators

Private university administrators in Nairobi and Kiambu Counties, and throughout Kenya, may implement comprehensive policy reforms that prioritize student mother support. Specifically, administrators should develop written policies that explicitly support student mothers and establish clear administrative procedures. This would ensure responsiveness to accommodation requests. Furthermore, universities should urgently develop on-campus childcare facilities or subsidize quality childcare access as a foundational institutional commitment. Administrators should also design flexible class schedule options including evening, weekend, online, and asynchronous learning opportunities, and establish counselling services specifically trained in student mother issues.

Additionally, financial aid packages including emergency funds and childcare subsidies should be implemented, with regular university audits conducted to verify that policies genuinely support rather than merely symbolize commitment to student mothers.

These comprehensive reforms should recognize student mothers as a distinct population requiring specialized support rather than generic student services. Specifically, clear accountability measures must be established to ensure that policies function as intended and produce measurable improvements in student mothers' academic persistence and well-being. Furthermore, administrators should collect and regularly review data on student mothers' retention, academic achievement, and satisfaction to inform continuous policy improvement.

Interestingly, the convergence of student-identified needs and counsellor recommendations in this study provides administrators with a clear and evidence-based roadmap for reform. Consequently, private universities that implement these reforms will

not only enhance student mothers' perceived self-concept and academic success but will also demonstrate genuine institutional commitment to equity and inclusion in higher education.

Recommendations for Faculty and Staff

Faculty and private universities staff should undergo professional development training on student mother issues, trauma-informed pedagogy, and inclusive teaching practices, with incentives and recognition programs rewarding those demonstrating exceptional support through teaching awards and promotion consideration. Staff should establish clear communication channels allowing student mothers to explain circumstances and request accommodations without shame or judgment, develop and widely distribute resource guides explaining university policies and available accommodations, and create explicitly supportive environments where student mothers proactively engage rather than suffer silently.

These efforts should move beyond symbolic gestures toward genuine implementation of inclusive practices that validate student mothers' dual roles and enable their academic success through practical support and emotional affirmation.

Recommendations for Counseling Professionals

Counseling professionals in private universities should develop specialized competency in student mother counseling, move beyond individual therapy toward systemic advocacy identifying and removing institutional barriers, establish or facilitate student mother support groups enabling peer connection and mutual support, develop preventive and psychoeducational programs addressing role conflict and identity integration, and integrate families into counseling processes where appropriate to strengthen family support systems.

Counselors should recognize that their role extends beyond therapeutic intervention to institutional transformation, using their professional authority and direct knowledge of student mothers' experiences to advocate for policy changes that address systemic barriers. This systemic orientation should complement individual support with upstream prevention and advocacy.

Recommendations for Policymakers

National and county policymakers should develop comprehensive education policies explicitly supporting student mothers in private universities by mandating minimum standards of support including flexible scheduling, accessible counseling, and non-discrimination protections, establishing dedicated funding mechanisms supporting on-campus childcare development, requiring private universities to collect and report data on student mother retention and graduation rates to create accountability, and exploring workplace flexibility policies supporting student mothers' families and partners.

Policymakers should recognize that student mother support is not merely an institutional responsibility but a national commitment to gender equity and educational access, with resource allocation and regulatory frameworks reflecting this commitment. Policy should address both private universities and systemic barriers, creating enabling environments where student mothers can succeed.

Recommendations for Student Mothers

While recognizing that student mothers are not responsible for private universities failures, student mothers should actively seek and build peer connections with other student mothers; proactively communicate with faculty about needs and circumstances framing these as necessary accommodations rather than special requests; engage in self-compassion and realistic self-evaluation recognizing that perfect balance is impossible and "good

enough" performance in both roles is genuine achievement; utilize available support services including counseling and support groups, and advocate collectively for private universities changes addressing systemic barriers.

Student mothers should recognize their own resilience and capability while also demanding that private universities fulfill their responsibility to support student success. Individual coping strategies are necessary but insufficient without systemic change.

Recommendations for Future Research and Program Development

Private universities should develop and implement evidence-based programs specifically designed to enhance student mother perceived self-concept. These programs should integrate the findings of this study particularly the significance of social challenges and the critical gap in institutional support into program design.

Private universities should implement and rigorously evaluate the specific interventions recommended by student mothers and counselors: on-campus childcare, flexible scheduling, counseling services, and administrative understanding. Rather than assuming these interventions will help, private universities should collect pre- and post-intervention data on student mothers' perceived self-concept, retention, academic achievement, and mental health to verify effectiveness.

Private universities should establish psychoeducation and mentoring programs, pair experienced student mothers with new student mothers, formalize and support the peer mechanisms that the study demonstrated as effective. Private universities may conduct annual student mother satisfaction surveys and focus groups, using findings to continuously improve policies and support. Student mothers may have a regular voice in institutional decision-making affecting their experiences.

Areas for Further Research

The current study examined the influence of motherhood challenges on the perceived self-concept of student mothers in two selected private universities in Nairobi and Kiambu Counties, Kenya, employing an embedded mixed methods design with a purposive sample of 393 student mothers and four private universities counselors, guided by the Role Theory and the Self-Discrepancy Theory. The study focused specifically on physical, psychological, social, and financial challenges as dimensions of motherhood challenges; and self-esteem, self-identity, body image, social relations, and role performance as dimensions of self-concept.

While the study has made a meaningful contribution to understanding student mother experiences within the Kenyan private university context, its contextual, methodological, scope, population, and theoretical boundaries leave several areas open for further investigation.

The current study adopted a cross-sectional design limited to two private universities, which constrains both the ability to track self-concept changes over time and the generalizability of findings to other universities types and regions. Future research should therefore employ longitudinal designs following student mothers from entry through graduation, and expand to public universities, TVETs, and community colleges across other regions of Kenya to examine whether findings generalize across diverse educational settings.

Additionally, since the current study identified critical gaps in private universities support without testing the effectiveness of specific interventions, future evaluation research should measure the impact of on-campus childcare, flexible scheduling, counseling programs, and policy reform on student mother retention, academic achievement, and self-concept.

Since the current study was anchored on only two theoretical frameworks,

future research could explore complementary perspectives such as Bronfenbrenner's Ecological Systems Theory to examine how broader environmental systems shape student mothers' self-concept. Research should also employ intersectional analysis examining how dimensions of identity beyond motherhood including socioeconomic status, marital status, ethnicity, and disability shape challenges and self-concept differently across diverse student mother populations.

Finally, future qualitative phenomenological research capturing the deeper lived experiences of student mothers, as well as studies examining child developmental outcomes, would extend the significance of this research beyond the mother herself and strengthen the overall body of knowledge in this field.

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APPENDICES

Appendix I: Respondent's Informed Consent Form

Introduction:

Dear participant. My name is Lilian N. Kasanga, a student at Pan Africa Christian University pursuing a Masters degree in Counselling Psychology (MACP). As part of the academic requirements, I am undertaking research titled the *'Influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Kiambu and Nairobi counties, Kenya.'*

The purpose of this study is to investigate how challenges experienced by student mothers, impact their perceived concept of self and identify possible interventions that might lessen the adverse effects of these challenges. I therefore request and appreciate your kind participation.

Confidentiality Measures- Information you provide will be treated confidentially. None of your identifying details will be featured in the final report or any publications resulting from this study. Data will be stored securely in password-protected files and accessible only to the researcher and academic supervisor and any audio recordings will be destroyed after transcription and verification. Responses will be coded and analyzed anonymously to ensure privacy and protect personal identity throughout the research process.

Voluntary Participation- Participation is voluntary. You reserve the right to decline, skip any question you are not comfortable answering, or withdraw from the study all together at any time without any repercussions. Your choice not to participate in this research will not affect your relationship with your university in any way; your decision will be respected.

Risks and Benefits- It is believed that this study carries minimal risks. Nevertheless, in case any of the questions evoke psychological discomfort due to personal experiences in your motherhood and academic life journey, you are at liberty to discontinue. Further, the researcher will be available to offer free counselling sessions if needed.

Contact Information- For further clarification concerning this study, contact the researcher (Lilian N. Kasanga) on 0718 652 437 or write to the Department of Psychology of PAC University via dept.psychology@pacuniversity.ac.ke

Statement of Agreement- By inserting your signature below, you declare and consent that you have read and understood the information provided in this consent form, that you have had the opportunity to ask questions with satisfactory response.

Respondent's Signature: _____ Date: _____

Researcher's Signature: _____ Date: _____

Appendix II: Questionnaire for Student Mothers

Instructions: Thank You for your willingness to participate in this study *titled 'Influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Kiambu and Nairobi counties, Kenya.'* As honestly as possible, respond to every section of the questionnaire and the interview document with an appropriate answer for each item. Be assured that your feedback is solely meant for research purposes. The purpose of this research study is to establish the effects of motherhood challenges on the perceived self-concept of student mothers in private universities in Kiambu County, Kenya.

Venue……. Time…… Date……

Section A: Student Mother's Demographic Profile (Tick or fill appropriately)

1. Name _____ University _____
2. Age of Student Mother (Tick appropriately) 18-20□ 21-25 □ 26-30□ Over 30 □
3. Relationship status: Single □ Married □ Separated□ Divorced □ Widowed □ Dating & Courting □ Other _____
4. Parenting status: Both Parents living together with child/ children □

   Co Parenting□ Single Parenting□
5. Number of children _____
6. Ages of youngest child: Less than 1 yr □ 1 to 5 yrs □ 6 to 10 Yrs □ 10+ Yrs □
7. Level of study: Certificate □ Diploma □ Degree □ Masters □ PhD. □ Other □
8. Current year of study _____
9. Course/ Program of study: _____
10. Support system (Tick all that apply): Spouse /Partner □ Parents □ Sibling(s) Peers/friends □ Childcare centre □ Extended family □ Any other e.g. …….

Section B: Motherhood Challenges

11. In this section, indicate the extent to which you agree or disagree with the following statements:

Key: 1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5= Strongly agree

Items	1	2	3	4	5
Physical Challenges					
I often feel physically exhausted from balancing academic work and childcare responsibilities.					
I find it difficult to attend classes regularly because of the physical demands of motherhood.					
My academic performance is negatively affected by the physical strain of combining motherhood and school responsibilities.					
I struggle to engage or participate in extracurricular activities in campus due to childcare responsibilities					
Psychological Challenges					
I find it difficult to focus on my studies because of worries about my child's well-being.					
I experience feelings of guilt when I cannot give enough attention to either my studies or my child.					
I often feel emotionally overwhelmed by balancing motherhood and academics.					
I sometimes doubt my ability to perform well academically because of motherhood responsibilities.					
Social Challenges					
I feel isolated from other students because of motherhood responsibilities.					
I experience stigma or judgment from others because I am a student mother.					
My social relationships have weakened because of my responsibilities as a mother.					
I feel socially unsupported by my peers.					
Financial Challenges					
I have difficulty paying tuition or fees on time due to financial strain.					
Financial pressures disrupt my ability to study, attend classes, or provide for my child.					
I find it difficult to afford childcare services while attending school.					
I rely heavily on financial assistance (family, bursaries, loans) to survive as a student mother.					

12. In your own words, what has been the greatest challenge you have experienced as a student mother? _____

13. In your own words, what has been the most significant impact on you as a student mother? _____

Section C: Robson Self-Concept Questionnaire (RSCQ)

Code……. **Date: / /**

14. From the statements listed, indicate how much you agree or disagree with each of the 20 statements by ringing the single number in each section, which represents how you typically feel most of the time as a student-mom. There are no right or wrong answers-simply circle the number that best describes you.

No.	Items	Completely Disagree						Completely Agree
1.	I have control and balance over my own life.	1	2	3	4	5	6	7
2:	I am overwhelmed by the dual role	1	2	3	4	5	6	7
3.	I never feel down about the issues of life for very long.	1	2	3	4	5	6	7
4:	I feel I do not have much to be proud of.	1	2	3	4	5	6	7
5:	There are lots of things I'd change about my image if I could.	1	2	3	4	5	6	7
6:	I don't feel I have people around me who love and support me.	1	2	3	4	5	6	7
7:	All in all, I am inclined to think that I am a failure.	1	2	3	4	5	6	7
8:	I am quite dissatisfied with my physical image.	1	2	3	4	5	6	7
9.	I feel that I am a person of worth.	1	2	3	4	5	6	7
10:	I often think that I am a failure	1	2	3	4	5	6	7
11.	If a task is difficult, that just makes me even more determined.	1	2	3	4	5	6	7
12:	I often feel humiliated and rejected by others.	1	2	3	4	5	6	7
13:	Everyone else seems much more confident and more content than me.	1	2	3	4	5	6	7
14:	I sometimes feel guilty over focusing more on my studies than on my child/children.	1	2	3	4	5	6	7
15:	I often worry about what other people are thinking about me.	1	2	3	4	5	6	7
16:	I look awful these days.	1	2	3	4	5	6	7
17:	I do not feel I have people around me who love and support me.	1	2	3	4	5	6	7
18:	It's pretty tough to be a student and a mother at the same time.	1	2	3	4	5	6	7
19.	Being a mother strongly defines who I Am.	1	2	3	4	5	6	7
20.	I appreciate the unique characteristics of my body.	1	2	3	4	5	6	7
	Total Score							

Check that you have responded to every statement by circling the score that suits you most.

Scoring The RSCQ Tool

This tool is a self-reporting scale. The scoring page was not issued to participants. Participants responded to the twenty statements to the degree to which they agreed with them, on a Likert scale of 1-7. The tool consists of both positively and negatively worded statements scored either as they are printed (marked by a full stop) or in reverse (marked by a semicolon). The scores are tallied by summing up. Higher scores indicate a stronger self-concept (80- 140) while a low score (0-79) indicates a poor self-concept.

Section D: Social Support

15. In this section, indicate the extent to which you agree or disagree with the following statements:

Key: 1= Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5= Strongly agree

Items	1	2	3	4	5
Family Support					
My family members help me with childcare so I can attend classes.					
I receive emotional encouragement from my family to continue my studies.					
My family provides financial support that eases the cost of education and parenting.					
Family members are flexible and cooperative in helping me balance my school and home responsibilities					
Peer Support					
My classmates willingly share notes or information when I miss classes					
I feel emotionally supported by my friends when I experience stress related to student motherhood					
Fellow students encourage me not to give up whenever I feel overwhelmed					
I receive practical help from friends, such as reminders, group study, or logistical assistance with assignments.					
University Support					
My college provides flexible class schedules that accommodate my parenting duties					
The administration is understanding when I request consideration due to family-related challenges.					
There are counseling or guidance services available to support student mothers.					
Lecturers and staff show empathy and support toward student mothers					

16. What social support system do you find most helpful among the three (family, peer, university)? Please explain? _____

17. What intervention would you recommend to your private universities that could help mitigate the adverse effects of motherhood challenges among student mothers? _____

THE END.

Appendix III: Key Informant Interview with Student Counsellors

1. In your experience, what are the most common challenges faced by student mothers in this university?

   _____
   _____

2. What issues do student mothers commonly express during counselling sessions?

   □Psychological _____

   □Social _____

   □Financial _____

   □Physical challenges_____

3. How does your university currently support student mothers in these challenges (policies, programs, facilities, etc.?)
   _____
   _____

4. In your opinion, what additional interventions or programs could better support student mothers in navigating these challenges better?
   _____
   _____

Thank you for your time and cooperation

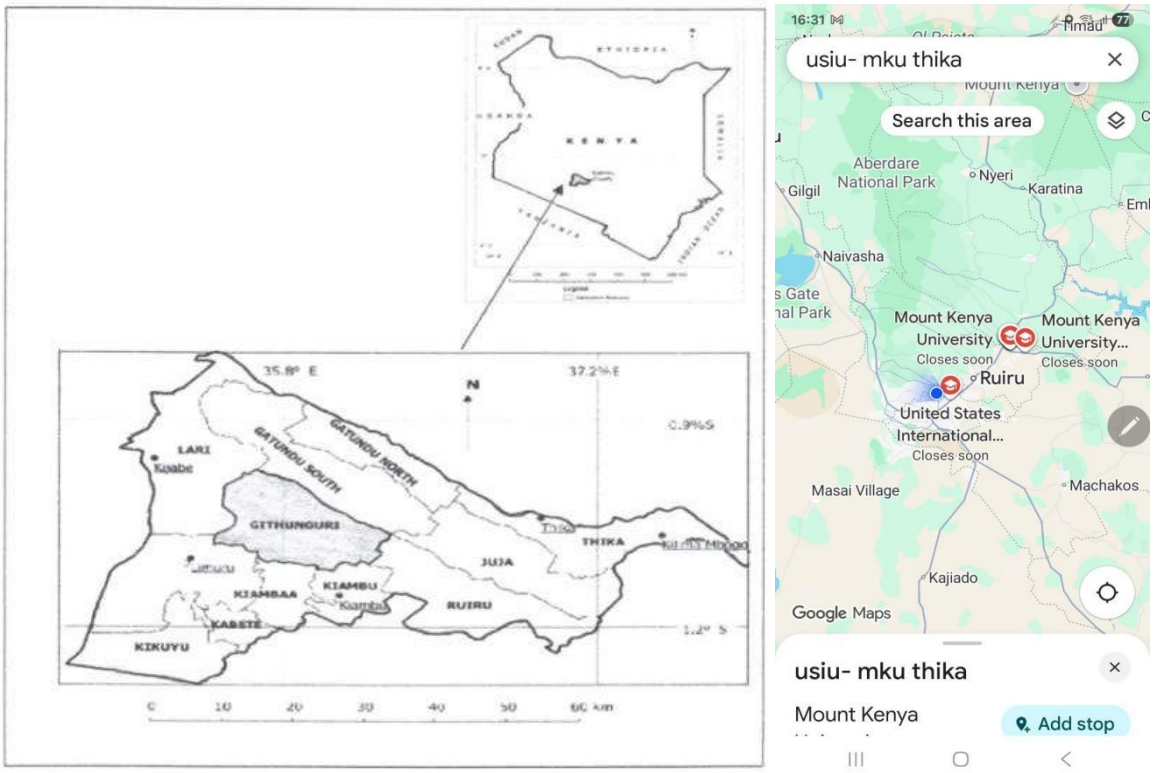
Appendix IV: Time Schedule

Activity	2025			2026					
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Proposal defense and corrections									
Ethical clearance and research permits									
Pilot testing and review									
Data collection and analysis									
Thesis writing and defense									
Conference presentation									
Final thesis printing and submission									

Appendix V: Research Budget

Item	Amount
Stationery	10,000
Internet subscription	25,000
Ethical clearance and permits	3,000
Travel and communication	20,000
Research assistant	60,000
Data processing	30,000
Thesis editing	10,000
Conference presentation	3,000
Printing and binding	10,000
Miscellaneous	9,000
Total	182,000

Appendix VI: Maps



Source: Google maps

Appendix VII: Research Permit- NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 471811

Date of Issue: 22/December/2025

RESEARCH LICENSE



This is to Certify that Ms.. Lilian Kasanga N. Kasanga of Pan Africa Christian University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu on the topic: INFLUENCE OF MOTHERHOOD CHALLENGES ON PERCEIVED SELF-CONCEPT AMONG STUDENT MOTHERS IN SELECTED TERTIARY INSTITUTIONS IN KIAMBU COUNTY, KENYA for the period ending : 22/December/2026.

License No: **NACOSTI/P/25/4183070**

471811

Applicant Identification Number

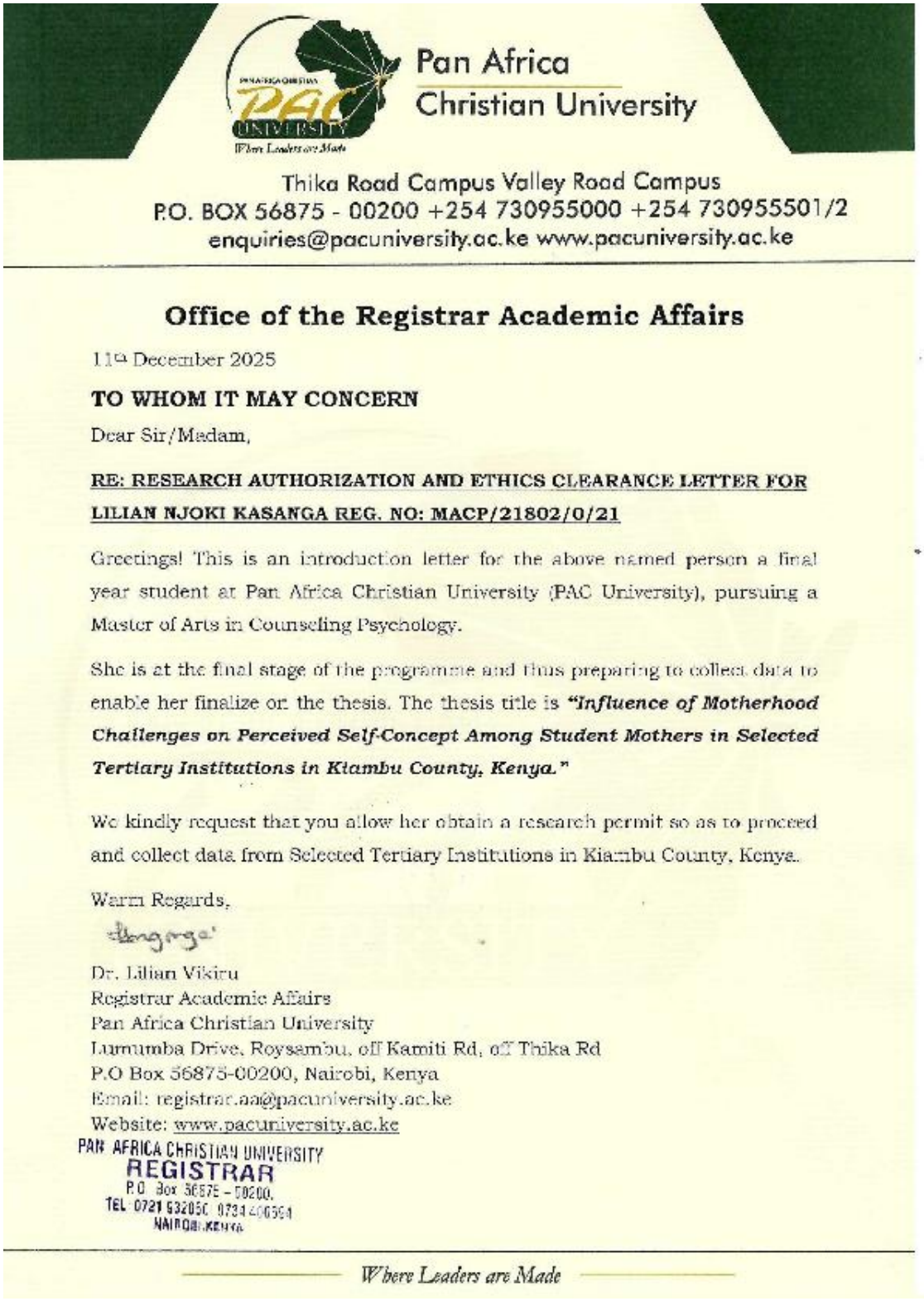
Ag. Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix VIII: Research Authorization and Ethics Clearance Letter



Pan Africa Christian University

Thika Road Campus Valley Road Campus
P.O. BOX 56875 - 00200 +254 730955000 +254 730955501/2
enquiries@pacuniversity.ac.ke www.pacuniversity.ac.ke

Office of the Registrar Academic Affairs

11th December 2025

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION AND ETHICS CLEARANCE LETTER FOR LILIAN NJOKI KASANGA REG. NO: MACP/21802/0/21

Greetings! This is an introduction letter for the above named person a final year student at Pan Africa Christian University (PAC University), pursuing a Master of Arts in Counseling Psychology.

She is at the final stage of the programme and thus preparing to collect data to enable her finalize on the thesis. The thesis title is ***"Influence of Motherhood Challenges on Perceived Self-Concept Among Student Mothers in Selected Tertiary Institutions in Kiambu County, Kenya."***

We kindly request that you allow her obtain a research permit so as to proceed and collect data from Selected Tertiary Institutions in Kiambu County, Kenya.

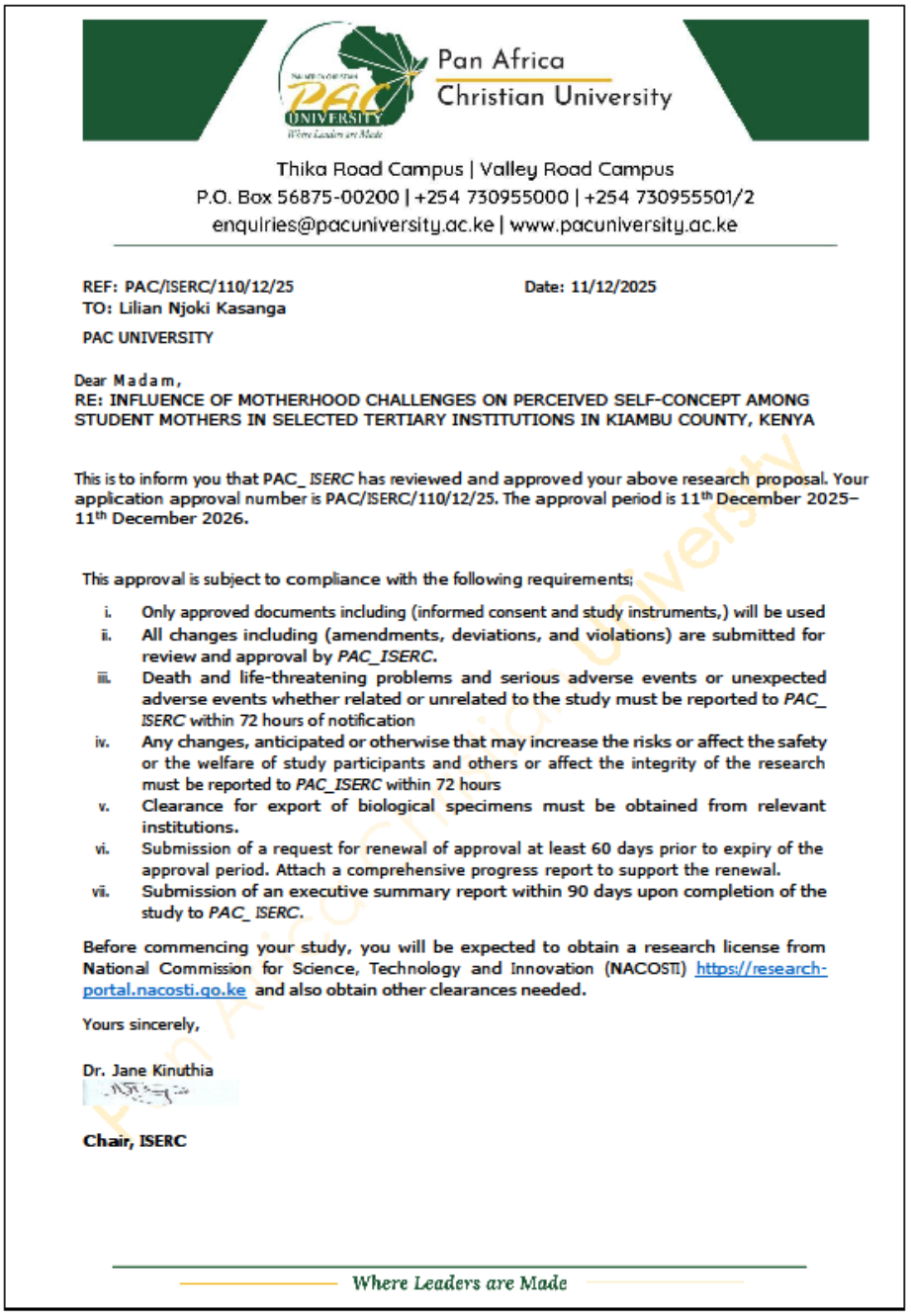
Warm Regards,

Dr. Lilian Vikiru
Registrar Academic Affairs
Pan Africa Christian University
Lumumba Drive, Roysambu, off Kamiti Rd, off Thika Rd
P.O Box 56875-00200, Nairobi, Kenya
Email: registrar.aa@pacuniversity.ac.ke
Website: www.pacuniversity.ac.ke

PAN AFRICA CHRISTIAN UNIVERSITY
REGISTRAR
P.O. Box 56875 – 00200,
TEL 0721 632050 0734 400394
NAIROBI, KENYA

Where Leaders are Made

Appendix IX: ISERC Approval Certificate



Pan Africa Christian University

Thika Road Campus | Valley Road Campus
P.O. Box 56875-00200 | +254 730955000 | +254 730955501/2
enquiries@pacuniversity.ac.ke | www.pacuniversity.ac.ke

REF: PAC/ISERC/110/12/25 Date: 11/12/2025
TO: Lilian Njoki Kasanga
PAC UNIVERSITY

Dear Madam,
RE: INFLUENCE OF MOTHERHOOD CHALLENGES ON PERCEIVED SELF-CONCEPT AMONG STUDENT MOTHERS IN SELECTED TERTIARY INSTITUTIONS IN KIAMBU COUNTY, KENYA

This is to inform you that PAC_ *ISERC* has reviewed and approved your above research proposal. Your application approval number is PAC/ISERC/110/12/25. The approval period is 11th December 2025–11th December 2026.

This approval is subject to compliance with the following requirements;

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

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

Yours sincerely,

Dr. Jane Kinuthia

Chair, ISERC

Where Leaders are Made

Appendix X: Letters to Request Permission to Conduct research

Letter to Request Permission to Conduct research- MKU

Lilian Kasanga

Pan Africa Christian (PAC) University

Student No. MACP/21802/0/21

Tel: 0718652437

Email: Lnkasanga@gmail.com

To: The Dean of Students

Mount Kenya university

Date: 6/ 2 / 2026

Ref: Request For Permission to Conduct Research Amongst Student Mothers at MKU

Dear Sir/ Madam,

Greetings.

My name is Lilian Kasanga, a student at Pan Africa Christian University pursuing a master's degree in counselling psychology (MACP). As part of the academic requirements, I am undertaking research titled the *'influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Kiambu and Nairobi counties, Kenya.'*

I am therefore writing to request your permission to conduct research amongst the student mothers at your university. I believe the study findings will benefit not only the student mothers, but the institutional administrators too in policy development, besides informing the development of targeted, comprehensive support programs tailored to student mothers' unique needs.

I look forward to your support and approval to proceed with the study. Attached herein, find the research permit by NACOSTI, the ISERC approval certificate as well as the research authorization and ethics clearance letter. I am willing to comply with any requirements from the university.

Thank you for considering my request.

Yours sincerely,



Lilian Kasanga

Letter To Request Permission to Conduct Research- USIU

Lilian Kasanga

Pan Africa Christian (PAC) University

Student No. MACP/21802/0/21

Tel: 0718652437

Email: Lnkasanga@gmail.com

To Whom It May Concern

United States International University (USIU)

Date: 6/ 2 / 2026

Ref: Request For Permission to Conduct Research Amongst Student Mothers at USIU

Dear Sir/ Madam,

Greetings.

My name is Lilian Kasanga, a student at Pan Africa Christian University pursuing a master's degree in counselling psychology (MACP). As part of the academic requirements, I am undertaking research titled the '*influence of motherhood challenges on perceived self-concept among student mothers in selected private universities in Kiambu and Nairobi counties, Kenya.*'

I am therefore writing to request your permission to conduct research amongst the student mothers at your university. I believe the study findings will benefit not only the student mothers, but the institutional administrators too in policy development, besides informing the development of targeted, comprehensive support programs tailored to student mothers' unique needs.

I look forward to your support and approval to proceed with the study. Attached herein, find the research permit by NACOSTI, the ISERC approval certificate as well as the research authorization and ethics clearance letter. I am willing to comply with any requirements from the university.

Thank you for considering my request.

Yours sincerely,



Lilian Kasanga