Mount Saint Vincent University
Department of Applied Human Nutrition

Breastfeeding Self-efficacy among Newcomer Mothers of African Descent in Halifax Regional Municipality, Nova Scotia

by

Olayemi Deborah Oladipupo

A Thesis
Submitted in fulfilment of
The requirement for the degree of
Master of Science in Applied Human Nutrition

July 2026

Halifax, Nova Scotia

Mount Saint Vincent University
Department of Applied Human Nutrition

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Approved:

Irene Ogada, RD, PhD
Thesis Supervisor
Associate Professor, Department of Applied Human Nutrition
Mount Saint Vincent University

Elizabeth Onyango, PhD
Assistant Professor, School of Public Health
University of Alberta

Janine McClure RN, IBCLC
Lactation Consultant, Nurse, IWK – Nova Scotia Health

Acknowledgements

The completion of this thesis marks the end of a journey that has challenged me intellectually, strengthened me personally, and deepened my commitment to improving maternal and child health through research. It has been a journey of growth, perseverance, humility, and discovery that reminded me meaningful research requires not only knowledge but also patience, resilience, and a willingness to keep learning. This accomplishment is not mine alone but reflects the kindness, mentorship, encouragement, prayers, and unwavering support of many people who have walked this journey with me. It is with sincere gratitude that I acknowledge them.

Above all, I give all glory, honour, and praise to Almighty God, the author and finisher of my faith. Throughout this journey, He has been my source of wisdom, strength, peace, and unfailing grace. In moments of uncertainty, He granted clarity; in moments of exhaustion, He renewed my strength. This achievement is a testament to His faithfulness, and I am forever grateful.

My deepest appreciation goes to my supervisor, Dr. Irene Ogada, for your exceptional mentorship, patience, encouragement, and unwavering commitment to academic excellence. Thank you for challenging me to think critically, strive for excellence, and grow as a researcher. Your thoughtful guidance and belief in my abilities have profoundly shaped this work and will continue to influence my academic journey. I am equally grateful to my supervisory committee members, Dr. Elizabeth Onyango and Janine McClure, RN, IBCLC, for your valuable insights, constructive feedback, and support throughout this research.

To the women who generously shared their breastfeeding journeys with me, thank you for entrusting me with your stories. Your resilience, courage, and commitment to your children inspired this research, and I hope this work faithfully represents your voices and contributes to more culturally responsive breastfeeding support for newcomer families. I also sincerely appreciate the organizations and individuals who supported participant recruitment and made this study possible.

To my family, thank you for your unwavering love, prayers, and encouragement throughout this journey. To my parents, thank you for your sacrifices, for nurturing my dreams, and for laying the foundation that has shaped who I am today. To my amazing siblings, thank you for your constant encouragement, thoughtful check-ins, unwavering belief in my abilities, and for celebrating every milestone with me. Your love and confidence in me have been a constant source of strength. To my husband, thank you for your patience, understanding, and steadfast support. I am deeply grateful for your encouragement and for walking this journey with me.

Finally, I dedicate this thesis to newcomer mothers of African descent whose strength, resilience, and love for their children inspired this research. It is my hope that these findings will contribute, even in a small way, to improving breastfeeding support, advancing culturally responsive practice, and promoting equitable maternal and child health for newcomer families in Canada.

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Definition of terms

African Descent: Refers to individuals whose ancestral origins can be traced to the African continent, including those who identify as African immigrants, refugees, or members of the African diaspora. In this study, African descent refers specifically to newcomer mothers who self-identify as having African ancestry and who have migrated from an African country to Canada within the previous five years (Statistics Canada, 2021; United Nations, 2015)

Attachment & positioning: Refers to the way an infant is placed and aligned at the breast to achieve an effective latch and facilitate successful milk transfer during breastfeeding. Proper positioning involves aligning the infant's body toward the mother, while attachment (latch) refers to how the infant takes the breast into the mouth, including adequate mouth opening and effective suckling (World Health Organization, 2009; Riordan & Wambach, 2015).

Breastfeeding (BF): Breastfeeding refers to the practice of feeding and nourishing a baby with the milk produced by a breastfeeding mother, either directly from the breast or by "expressing" it then feeding the baby (World Health Organization [WHO], 2023).

Breastfeeding Self-Efficacy (BFSE): BFSE is the mother's confidence in her ability to breastfeed her child effectively (Nankumbi et al. 2019).

Breastfeeding Initiation (BFI): The process of starting breastfeeding, typically involving the newborn's first feed at the breast or the first expression of milk, ideally within the first hour of life (WHO, 2021).

Duration of Breastfeeding (DofBF): Breastfeeding duration refers to the length of time a mother breastfeeds her child or the length of time an infant is fed breast milk (WHO, 2024).

Exclusive breastfeeding (EBF): EBF refers to the practice of giving an infant breast milk only, up to the age of six months, except for oral rehydration solutions, vitamins/mineral supplements (WHO, 2023b).

Immigrants: An immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities (IRCC, 2024). In the context of this study, in recognition of Kohler et al., (2018), immigrants refer to individuals (Africans) who have moved directly from their country of origin to another country (Canada precisely Halifax Regional Municipality).

Newcomers (NC): In the Canadian context, a newcomer refers to an individual who has recently immigrated to Canada (IRCC, 2024). While Immigration, Refugees and Citizenship Canada (IRCC) do not provide an official definition, Statistics Canada classifies newcomers as individuals who obtained permanent resident status within the last five years (Statistics Canada, 2024). NC in

the context of this study refers to mothers of African descent who have recently immigrated to Halifax Regional Municipality, Nova Scotia directly from their country (Africa) (Chan et al., 2023).

Self-Efficacy (SE): Self-efficacy is a person's belief in their ability to complete a task or achieve a goal (He et al. 2021).

OPERATIONAL DEFINITION OF TERMS

Breastfeeding Self- Efficacy: In this study, breastfeeding self-efficacy refers to how newcomer mothers of African descent described their confidence in initiating, sustaining, adapting, and managing breastfeeding while navigating cultural expectations, emotional demands, social support, and structural conditions in Halifax Regional Municipality.

Exclusive Breastfeeding: In this study, exclusive breastfeeding refers to mothers' self-reported experiences of feeding their infants primarily or entirely with breast milk during the first six months, including cases where supplementation occurred due to medical, emotional, or structural constraints.

Responsive Breastfeeding: In this study, responsive breastfeeding refers to mothers' reported practices of feeding based on infant hunger cues, comfort needs, sleep routines, and emotional regulation, including feeding on demand and breastfeeding for soothing purposes.

Breastfeeding initiation: In this study, breastfeeding initiation refers to mothers' first attempts to breastfeed following childbirth, including immediate initiation and delayed initiation due to caesarean delivery, maternal recovery, or infant health concerns.

Breastfeeding Continuation: In this study, breastfeeding continuation refers to the duration and pattern of breastfeeding practices maintained by mothers, including exclusive, mixed, and comfort feeding, and the contextual factors influencing continuation or cessation.

Newcomers Mothers of African Descent (NCMAD): NCMAD refers to African immigrant mothers who have lived in Canada for no more than five years and have had a baby in the past two years**.**

Social Support: In this study, social support refers to emotional, informational, and practical assistance provided by partners, family members, healthcare providers, peers, and online communities that influenced breastfeeding confidence and decision-making.

Structural Factors: In this study, structural factors refer to institutional and environmental conditions such as maternity leave policies, employment or academic demands, hospital practices, access to healthcare services, housing, and settlement-related constraints affecting breastfeeding experiences.

Cultural and Informational Coping mechanisms: In this study, cultural and informational coping mechanisms refer to strategies used by mothers to sustain breastfeeding confidence, including traditional postpartum foods, culturally inherited knowledge, faith-based coping, and the use of digital platforms for breastfeeding information and support.

ABBREVIATIONS AND ACROYNMS

WHO: World Health Organization

UNICEF: United Nations International Children's Emergency Funds

HRM: Halifax Regional Municipality

BFSE: Breastfeeding Self Efficacy

BSES-SF: Breastfeeding Self Efficacy Scale- Short Form

BSET: Breastfeeding Self Efficacy Theory

EBF: Exclusive Breastfeeding

CBF: Continued Breastfeeding

BF: Breastfeeding

BFI: Baby-Friendly Initiative

FGD: Focus Group Discussion

IDI: In-Depth Interview

SEM: Socio-Ecological Model

NCMAD: Newcomer Mothers of African Descent

ISANS: Immigrant Services Association of Nova Scotia

ABSTRACT

Immigrant women in Canada generally report high rates of breastfeeding initiation, with these rates declining with longer stay in Canada. Several factors have been identified as predictors of breastfeeding initiation, exclusivity, and duration, with Breastfeeding self-efficacy (BFSE) contributing significantly. There is however, limited research on factors that influence breastfeeding among immigrant women. Even less explored, is how BFSE is experienced, negotiated, and sustained among newcomer mothers of African descent (NCMAD), particularly within Atlantic Canada. This study explored the breastfeeding self-efficacy experiences of NCMAD living in Halifax Regional Municipality (HRM), as well as the structural factors that influence breastfeeding confidence among these mothers, within the context of migration and settlement. Guided by Dennis's Breastfeeding Self-Efficacy Theory and the Socio-Ecological Model, this study employed a qualitative descriptive design. Data were collected through 10 in-depth interviews and two focus group discussions involving seven newcomer mothers of African descent who had breastfed within the previous two years. Data were analysed using a hybrid deductive-inductive reflexive thematic analysis involving transcript familiarization, manual coding, and iterative theme development to identify patterns across participants' lived experiences. Findings indicate that BFSE was a dynamic, context-dependent process shaped by mastery experiences, vicarious experiences, social persuasion, and emotional and physiological states. All participants initiated breastfeeding with strong prenatal intentions and high early confidence, largely influenced by culturally embedded beliefs that positioned breastfeeding as natural, expected, and central to maternal identity. Factors that strengthened BFSE included successful breastfeeding experiences, culturally transmitted breastfeeding knowledge, observational learning from family members and peers, emotional encouragement from partners and mothers, support from healthcare providers, adaptive coping strategies, and enabling structural conditions such as maternity leave. Traditional postpartum practices and intergenerational breastfeeding knowledge further reinforced confidence and breastfeeding continuation. In contrast, BFSE was challenged by migration-related disruptions in family support networks, breastfeeding difficulties, fatigue, emotional stress, return to work or school, caregiving demands, and limited access to culturally responsive support. Although most mothers aspired to practice exclusive and extended breastfeeding, continuation was influenced more by structural and environmental conditions, including return to work or school and reduced mother-infant proximity, rather than by low breastfeeding confidence alone. Overall, BFSE emerged as a multidimensional construct coproduced through individual experiences, interpersonal relationships, cultural influences, and broader social and policy environments. The findings highlight the need for culturally responsive breastfeeding support within healthcare and community settings, strengthened peer-support networks for newcomer mothers, and policies that facilitate breastfeeding continuation through flexible work and study arrangements, breastfeeding-friendly environments, and supports that promote mother-infant proximity. Nova Scotia Health, healthcare providers, community organizations, and policymakers should collaborate to develop inclusive breastfeeding interventions that recognize the influence of cultural, social, and structural factors on breastfeeding confidence. By centring the experiences of African newcomer mothers, this study contributes to addressing gaps in Canadian breastfeeding research and provides evidence to support equitable maternal and child health programming in Nova Scotia and other immigrant-receiving contexts

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Breastfeeding refers to the practice of feeding and nourishing a baby with milk produced by a breastfeeding mother, either directly from the breast or expressed and fed through other means (World Health Organization [WHO], 2023). The WHO and the United Nations Children's Fund (UNICEF) recommend initiating breastfeeding within the first hour of birth, maintaining exclusive breastfeeding (EBF) for the first six months, and continuing breastfeeding alongside complementary foods until the baby is at least 24 months of age or older (UNICEF, 2022; WHO, 2023). Similar recommendations are made in Canada and Nova Scotia by Health Canada, The Public Health Agency of Canada (PHAC), and Nova Scotia Health (NSH, 2024; PHAC, 2022).

The recommendations are based on evidence that breastfeeding benefits infants, mothers, and society. Among infants, studies have shown that breastfeeding has a significant positive impact on both short and long-term health outcomes (Ahmed et al., 2023; CDC, 2023; Muhammad, 2024; Roghair, 2024). For instance, the Centre for Disease Control (CDC, 2023) noted that infants are better protected against diseases and illnesses such as asthma, obesity, type 1 diabetes, and sudden infant death syndrome (SIDS) when they are adequately breastfed in accordance with the recommendations of WHO (2023) and UNICEF (2022). Similarly, Ahmed et al., (2023) found that infants who are breastfed following the recommendations of WHO (2023) on exclusive breastfeeding are less likely to suffer from gastrointestinal issues, skin and respiratory infections, protein energy deficiency or allergy disorders. Muhammad (2024) and Roghair (2024) also found that exclusive breastfeeding lowers the risk of diabetes and obesity in infants, among other chronic

conditions. Other findings have also found that infants who receive exclusive breastfeeding perform exceptionally well on intelligence tests later in life (AlThuneyyan et al., 2022; Hou et al., 2021; Peña-Ruiz et al., 2023).

The importance of breastfeeding is not limited to infants, as breastfeeding mothers also accrue positive short- and long-term health outcomes. Breastfeeding can reduce the risk of high blood pressure, diabetes, and hyperlipidemia as well as of ovarian, breast, and endometrial malignancies (Chowdhury et al., 2015; Del-Ciampo & Del-Ciampo, 2018; Sattari et al., 2019). In addition to nourishing the baby physically, the intimate skin-to-skin contact that occurs during breastfeeding also helps the mother and child feel emotionally attached (Froń & Orczyk-Pawiłowicz, 2024). Islami et al., (2015) estimated that the incidence of hormone receptor-negative breast cancer is 10% greater in women who never breastfed compared to those who breastfed for any duration. Among black women, who are disproportionately diagnosed with hormone receptor-negative breast cancer because of fewer treatment choices available, breastfeeding offers even greater protection (Sanderson et al., 2021).

Despite these benefits, global and Canadian breastfeeding rates are still sub optimal and do not meet the WHO targets of 60% EBF and 70% timely initiation. This is because breastfeeding is influenced by several interrelated factors, including maternal and child health, cultural beliefs, workplace conditions, and breastfeeding self-efficacy. Maternal physical and mental health significantly impact breastfeeding, as conditions like postpartum depression and mastitis can hinder milk production and feeding (Dennis et al., 2017; Victora et al., 2016). A mother's nutrition also plays a crucial role, affecting both the quality and quantity of breast milk (Lessen & Kavanagh,

2015). Social and cultural norms further shape breastfeeding practices. In some communities, formula feeding is perceived as modern, discouraging exclusive breastfeeding, while family and societal support can positively influence breastfeeding duration (Balogun et al., 2016; WHO, 2021). Additionally, employment and lack of workplace breastfeeding policies often disrupt breastfeeding routines, making it difficult for working mothers to maintain exclusive breastfeeding (Bai et al., 2016; Jones et al., 2015).

Studies on the factors that influence breastfeeding have shown mixed findings, with culture, financial problems, education and social support networks shown to influence the practice of breastfeeding, especially among women of African descent (Alade et al., 2021; Egwuda et al., 2015; Okafor et al., 2017). In Nigeria for instance, while most women are aware of and endorse exclusive breastfeeding, low literacy and cultural factors still impede exclusive breastfeeding within the regional council (Okoroiwu et al., 2021). In Canada, white women in the territories are more likely to exclusively breastfeed for ≥5 months than the national average, and this has been attributed to high socioeconomic position and distinct regional support systems (Chan et al., 2023). Newcomer mothers of African descent (NCMAD), particularly those settling in urban areas like the Halifax Regional Municipality (HRM), often experience intersecting challenges related to socioeconomic status, housing instability, and systemic inequities. Due to the high cost of living and limited employment opportunities, many reside in low-income communities where they encounter lifestyle stressors, food insecurity, and reduced access to culturally responsive healthcare (McKay et al., 2016; Osei-Kwasi et al., 2020; Vahabi & Damba, 2013). These conditions pose additional barriers to breastfeeding, resulting in lower rates compared to non-Black mothers (Chan et al., 2023; McKay et al., 2016). A key factor reported by several studies as

affecting breastfeeding (BF) is Breastfeeding Self-Efficacy (BFSE), which has been shown to influence breastfeeding initiation, duration, and exclusivity (Henshaw et al., 2018; Maleki-Saghooni et al., 2020).

Breastfeeding self-efficacy (BFSE) based on Dennis (1999) is described as a mother's confidence in her capacity to effectively engage in and perform well at breastfeeding (Al-Thubaity et al., 2023). It has been shown to influence the breastfeeding behaviour of mothers such as the duration of breastfeeding and the likelihood of exclusive breastfeeding (Awaliyah et al., 2019; Nankumbi et al., 2019; Pakseresht et al., 2017). Higher BFSE is associated with increased breastfeeding initiation and duration (Brown & Davies, 2020; Beck et al., 2018). According to Nankumbi et al. (2019), women with high BFSE are more likely to exclusively breastfeed their children than those with low BFSE. Furthermore, mothers who have a higher BFSE are more likely to overcome difficulties associated with breastfeeding, therefore increasing their chance of breastfeeding success (Awaliyah et al., 2019; Pakseresht et al., 2019).

In general, BFSE can be influenced by the following factors: (a) success/challenges in terms of previous breastfeeding practices; (b) indirect exposure through observation of others such as their peers or role models (c) social support through influential individuals like friends and family, or lactation specialists; and (d) physiological and/or affective states like pain, exhaustion, worry, and fatigue (Arike & John, 2020; Bengough et al., 2022; Maleki-Saghooni et al., 2019; Topuz et al., 2021).

Additionally, structural and contextual determinants such as cultural beliefs, migration-related stress, employment conditions, food insecurity, and limited access to culturally familiar foods also influence BFSE among immigrant mothers. For instance, Groleau et al. (2015) highlighted how cultural norms and family expectations significantly influence immigrant women's infant feeding decisions. Similarly, O'Brien et al. (2021) emphasized that unstable work conditions and lack of parental leave contribute to early breastfeeding cessation. Studies by Osei-Kwasi et al. (2020) and Vahabi and Damba (2013) further noted that food insecurity and limited access to culturally familiar foods among immigrants can impact maternal well-being and feeding choices, thereby affecting BFSE. BFSE has a significant influence on BF practices, increasing the levels of BFSE is an important intervention for improving breastfeeding outcomes, and this can be achieved through a good understanding of the factors that facilitate or challenge BFSE.

1.2. Statement of the Problem

Despite growing research on breastfeeding self-efficacy (BFSE) globally, limited studies have examined its determinants among newcomer mothers of African descent within Canadian contexts. Existing evidence consistently demonstrates that BFSE is a strong predictor of breastfeeding initiation, exclusive breastfeeding, and breastfeeding continuation across diverse populations and settings (Dennis, 1999, 2003; Blyth et al., 2002; McQueen et al., 2011; Brockway et al., 2017; Shorey et al., 2018; He et al., 2021; Pérez-Escamilla et al., 2023). However, while the relationship between BFSE and breastfeeding outcomes is well established, considerably less is known about how breastfeeding confidence is shaped among newcomer mothers of African descent living in Canada.

Canadian breastfeeding surveillance indicates that although approximately 91% of mothers initiate breastfeeding, only 38.2% exclusively breastfeed for the recommended first six months (PHAC, 2024). Regional disparities are also evident, with the Atlantic provinces reporting comparatively lower breastfeeding initiation (82.5%), exclusive breastfeeding (36.2%), and any breastfeeding at six months (50.8%) than other regions of Canada (PHAC, 2024). Evidence regarding BFSE in Atlantic Canada remains limited (Chan et al., 2023), despite the need to better understand factors influencing breastfeeding confidence in this region.

National data further show that immigrant mothers generally report more favourable breastfeeding practices than Canadian-born mothers. Immigrant women are more likely to exclusively breastfeed for six months (43%) and continue breastfeeding for at least six months (73.1%) than non-immigrant women (35.2% and 66.2%, respectively) (Government of Canada, 2024). While these findings are encouraging, they reflect breastfeeding behaviours rather than breastfeeding confidence and provide little understanding of how migration-related experiences influence mothers' ability to initiate, sustain, and adapt breastfeeding over time.

This knowledge gap is increasingly important given Canada's changing demographic profile. According to the 2021 Census, immigrants account for 23% of Canada's population, representing the highest proportion among G7 countries and the largest proportion recorded in more than 150 years (Statistics Canada, 2022). Immigration has become the primary driver of population growth in Nova Scotia, with Halifax Regional Municipality (HRM) receiving the largest proportion of newcomers. Between 2016 and 2021, the Black population in HRM increased substantially, largely because of immigration from African countries (African Nova Scotian Decade for People of

African Descent Coalition, 2024; Statistics Canada, 2022). Despite this demographic shift, Canadian studies involving immigrant mothers have largely been conducted in Ontario, British Columbia, Alberta, and Quebec (Gionet, 2013; Dennis et al., 2019), leaving limited evidence on BFSE among newcomer mothers of African descent living in Atlantic Canada.

Migration introduces unique contextual influences that may shape each of the four sources of BFSE proposed by Dennis's Breastfeeding Self-Efficacy Theory. Separation from traditional support networks, unfamiliar healthcare systems, culturally incongruent care, settlement-related stressors, language barriers, financial pressures, and racialized experiences may influence mothers' breastfeeding confidence throughout the breastfeeding journey (Boateng et al., 2019; Dennis, 2003; Kingston et al., 2020; Odeniyi et al., 2020; Pérez-Escamilla et al., 2023; Rollins et al., 2016; Tuthill et al., 2016). Emerging evidence further suggests that parenting information shared through social media may influence parental self-efficacy, including BFSE (Ouvrein, 2022), yet this remains largely unexplored among newcomer mothers of African descent in HRM.

Consequently, little is known about how migration, culture, healthcare interactions, social support, and broader structural influences shape breastfeeding self-efficacy among newcomer mothers of African descent in Nova Scotia. Addressing this gap is important because strengthening BFSE has the potential to improve breastfeeding initiation, exclusive breastfeeding, and breastfeeding continuation, thereby enhancing maternal and infant health outcomes (Victora et al., 2016; Rollins et al., 2016; He et al., 2021). Beyond these individual benefits, improving breastfeeding outcomes among newcomer mothers may contribute to healthier families, reduce healthcare utilization associated with preventable maternal and childhood illnesses, and support equitable maternal and

child health services for Nova Scotia's growing newcomer population. As immigration continues to shape the demographic profile of HRM, Nova Scotia, and Canada, findings from this study can inform culturally responsive breastfeeding policies, healthcare practice, and community-based interventions that strengthen breastfeeding support and improve health outcomes among newcomer families.

1.3. Purpose of the study

This purpose of the study was to explore maternal BFSE as experienced by NCMAD in HRM, in order to gain an understanding as to how these experiences might influence their breastfeeding outcomes.

1.4. Research Objectives

This study aimed to:

1. Explore the breastfeeding self-efficacy experiences of newcomer mothers of African descent living in HRM.
2. Identify the structural factors influencing breastfeeding self-efficacy among newcomer mothers of African descent in HRM.

1.5. Scope of the study

The study focused on newcomer mothers of African descent who had lived in Halifax Regional Municipality for five years or less and had delivered a baby within the last two years. A qualitative research design was used to capture the depth of mothers' experiences and perceptions of BFSE without assigning quantitative measures or scores to their BFSE.

1.6 Significance of study

This study addresses an important gap in Canadian breastfeeding research by exploring breastfeeding self-efficacy (BFSE) among newcomer mothers of African descent (NCMAD), a population whose breastfeeding experiences remain underrepresented in the literature. By examining the cultural, social, structural, and psychosocial factors that influence breastfeeding confidence, the study provides context-specific evidence on breastfeeding experiences within post-migration environments.

The findings have important implications for healthcare practice. For Nova Scotia Health and other maternal-child health service providers, the study offers evidence to support the development of culturally responsive breastfeeding services across the continuum of care, including prenatal education, hospital-based breastfeeding support, and community follow-up after discharge. For healthcare professionals, including dietitians, nurses, physicians, lactation consultants, and public health practitioners, the findings provide insight into the factors that strengthen or undermine breastfeeding confidence among NCMAD, thereby supporting more culturally appropriate counselling, education, and breastfeeding support strategies.

The study also has policy relevance. By identifying the social, cultural, and structural factors that influence BFSE, the findings can inform policies and programs aimed at improving access to breastfeeding support services, strengthening community-based resources, and reducing barriers that affect breastfeeding continuation among newcomer families. The findings may also support efforts to improve health equity and ensure that breastfeeding services are responsive to the needs of culturally diverse populations.

For newcomer mothers of African descent and their communities, the study provides a platform for mothers' experiences to be documented and understood. By highlighting both the challenges and strengths that shape breastfeeding confidence, the findings may inform the development of peer-support initiatives, culturally relevant educational resources, and community programs that promote positive breastfeeding experiences and improved breastfeeding outcomes.

The study is also significant for research. It contributes to the limited evidence on BFSE among immigrant populations in Canada, particularly within Nova Scotia, and provides a foundation for future qualitative, quantitative, and intervention-based studies aimed at strengthening breastfeeding confidence and outcomes among diverse populations.

More broadly, the study contributes to efforts to improve maternal and child health by identifying practical approaches to supporting breastfeeding initiation, exclusivity, and continuation among newcomer mothers. In doing so, it aligns with Canada's maternal and child health priorities and contributes to the achievement of the United Nations Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger) through improved infant nutrition and SDG 3 (Good Health and Well-Being) through improved maternal and child health outcomes.

CHAPTER TWO: LITERATURE REVIEW

This chapter critically examines the literature on breastfeeding and breastfeeding self-efficacy (BFSE), with particular attention to newcomer mothers of African descent (NCMAD) residing in Halifax Regional Municipality (HRM). Although breastfeeding is widely recognized as a major contributor to maternal and infant health, breastfeeding practices are not determined by biological capacity alone. Rather, they are shaped by a complex interaction of confidence, lived experience, social support, healthcare encounters, cultural meaning, and structural conditions. Within this broader context, BFSE has emerged as a central psychosocial construct for understanding why some mothers initiate and sustain breastfeeding despite challenges, while others discontinue earlier than intended.

This review is guided by Dennis's Breastfeeding Self-Efficacy Theory, adapted from Bandura's concept of self-efficacy, and the Socio-Ecological Model (SEM). Together, these frameworks provide a coherent basis for examining breastfeeding as both an individual and contextually situated practice. Dennis's theory explains how maternal confidence develops and influences breastfeeding behaviour, while the SEM situates that confidence within interacting interpersonal, organizational, community, and policy environments. This combined perspective is particularly relevant for NCMAD in HRM, whose breastfeeding experiences are likely shaped by the intersection of migration, race, culture, social integration, and access to culturally responsive support.

The chapter begins with an overview of breastfeeding and BFSE in global, Canadian, and Nova Scotian contexts. It then outlines the theoretical and conceptual frameworks guiding the study,

followed by a review of empirical literature linking BFSE to breastfeeding initiation, exclusivity, and duration. The chapter also examines the major determinants of BFSE, including mastery experience, vicarious experience, social persuasion, and emotional or physiological states, alongside broader structural influences such as socioeconomic position, migration, healthcare access, and cultural safety. It further considers policy and practice issues, including the role of digital and social media in shaping breastfeeding confidence. The chapter concludes by identifying key empirical and conceptual gaps that justify the present study.

2.1 Overview of Breastfeeding and Breastfeeding Self-Efficacy

Breastfeeding is widely recognized as the optimal form of infant feeding and one of the most effective strategies for promoting maternal and child health. Exclusive breastfeeding for the first six months of life, as recommended by the World Health Organization (WHO, 2023), supports infant nutrition, immune protection, growth, and neurodevelopment. For mothers, breastfeeding is associated with reduced risk of breast and ovarian cancers, type 2 diabetes, and cardiovascular disease (Chowdhury et al., 2015; Centers for Disease Control and Prevention [CDC], 2024). These benefits have positioned breastfeeding as a major public health priority across global and national maternal-child health agendas.

Despite this consensus, breastfeeding outcomes remain uneven across settings and populations. Although breastfeeding initiation is high in many countries, maintaining exclusivity for the recommended six months remains considerably more difficult. Existing literature attributes this gap to a range of factors, including socioeconomic inequality, inadequate maternity protection, inconsistent professional support, shifting social norms, and the commercialization of infant

feeding alternatives (Rollins et al., 2021; Victora et al., 2016). Importantly, these barriers are not distributed equally. Mothers who are socially or economically marginalized often encounter more obstacles to sustained breastfeeding, even when their intention to breastfeed is strong.

In Canada, breastfeeding initiation rates are relatively high, yet exclusivity and continuation remain suboptimal. National evidence indicates that many women begin breastfeeding, but far fewer sustain exclusive breastfeeding for the recommended duration, and provincial estimates suggest lower rates in Nova Scotia than in some other parts of the country (Canadian Community Health Survey [CCHS], 2021; Health Infobase, 2022). This pattern is significant because it suggests that initiation alone is an insufficient indicator of breastfeeding success. High initiation may reflect awareness, intent, or hospital-level encouragement, but continuation depends on whether mothers are able to navigate the demands of breastfeeding within their day-to-day social realities. For this reason, literature that moves beyond initiation and examines maternal confidence, environmental support, and structural constraints is especially important.

Breastfeeding is also more than a nutritional practice. It is socially produced, culturally interpreted, and institutionally mediated. Mothers do not breastfeed in isolation, and breastfeeding decisions are rarely based on knowledge alone. Cultural expectations, family norms, prior experiences, provider attitudes, work conditions, and emotional well-being all shape breastfeeding behaviour. This is particularly relevant for mothers of African descent, among whom breastfeeding is often understood not only as an infant-feeding method but also as a socially valued maternal responsibility embedded in cultural and communal norms (Odeniyi et al., 2020; PHAC, 2022).

However, migration may disrupt the continuity of these norms and the support systems that sustain them.

For newcomer mothers, the breastfeeding environment may change substantially after migration. Women may encounter unfamiliar healthcare systems, reduced access to extended family support, different expectations around infant feeding, language barriers, and social isolation (Groleau et al., 2016; Jones et al., 2015). These disruptions can complicate the translation of breastfeeding intention into sustained practice. The issue is even more complex for Black immigrant mothers, whose experiences may also be shaped by racialized inequities, precarious employment, housing insecurity, and differential treatment within health and social systems (Tarasuk & Mitchell, 2020). These structural realities matter because they may undermine breastfeeding persistence even when breastfeeding is highly valued.

Within this context, breastfeeding self-efficacy has become an especially important construct. Dennis (1999) defined BFSE as a mother's confidence in her ability to breastfeed her infant successfully. Adapted from Bandura's (1997) concept of self-efficacy, BFSE reflects the degree to which mothers believe they can initiate, manage, and sustain breastfeeding despite challenges. This concept is particularly useful because it helps explain why mothers facing similar external conditions may respond differently to breastfeeding difficulties. A growing body of literature shows that mothers with higher BFSE are more likely to initiate breastfeeding, maintain exclusivity, and continue breastfeeding for longer durations (He et al., 2021; McCarter-Spaulding & Dennis, 2015; Awaliyah et al., 2019).

At the same time, BFSE should not be understood as a purely individual trait. Confidence is produced relationally and contextually. It can be strengthened through successful breastfeeding experiences, observation of others, encouragement from trusted people, and emotionally supportive care. It can also be weakened by stress, pain, misinformation, cultural incongruence, or structural barriers that make breastfeeding difficult to sustain. For newcomer mothers of African descent, this contextual understanding is especially important because their confidence may be shaped by post-migration adjustment, the availability of culturally responsive support, and the extent to which local health systems affirm or challenge their breastfeeding identities and practices.

Although the literature consistently supports the importance of BFSE, two limitations remain evident. First, much of the evidence comes from cross-sectional and hospital-based studies, which are useful for identifying associations but less able to capture how confidence changes over time. Second, many BFSE studies are based in populations that do not explicitly reflect the intersecting realities of race, migration, and culturally incongruent care. These limitations are especially important in the Canadian context. In Nova Scotia, immigration has contributed to growing African newcomer communities, including women from Nigeria, Ghana, Ethiopia, and Sudan (African Nova Scotian Prosperity and Well-Being Index, 2024). Yet very little research has examined BFSE specifically among NCMAD in HRM. Without such knowledge, breastfeeding interventions risk remaining generic, culturally limited, and insufficiently responsive to the lived experiences of newcomer African-descent mothers.

2.2. Theoretical and Conceptual framework

This study is guided by Dennis's Breastfeeding Self-Efficacy Theory (BFST), (Dennis, 2003) and the Socio-Ecological Model (SEM) (Bronfenbrenner, 1977; McLeroy et al., 1988). These two frameworks have been integrated in this study to provide a complementary and more comprehensive contextualization of BFSE and outcomes. Dennis's theory provides a breastfeeding-specific account of maternal confidence and its influence on breastfeeding practices or behaviour, while the SEM broadens the analysis by locating breastfeeding confidence within wider social, institutional, and policy environments.

2.2.1 Dennis's Breastfeeding Self-Efficacy Theory

Dennis's Breastfeeding Self-Efficacy Theory (1999, 2003) was adapted from Bandura's concept of self-efficacy, which refers to an individual's belief in their ability to carry out behaviours necessary to achieve specific outcomes (Bandura, 1997). Dennis extended this concept to breastfeeding and argued that a mother's confidence in her ability to breastfeed influences whether she chooses to breastfeed, how much effort she invests, how she interprets difficulties, and how long she persists. A major strength of Dennis's theory is that it offers a breastfeeding-specific explanation of behaviour beyond knowledge or intention alone.

The empirical value of Dennis's theory is well established. Across diverse settings, higher BFSE has been associated with breastfeeding initiation, exclusivity, duration, and overall breastfeeding satisfaction (Huang et al., 2019; Wang et al., 2023; Al-Madani et al., 2023). Dennis's development of the Breastfeeding Self-Efficacy Scale and the Breastfeeding Self-Efficacy Scale Short Form further strengthened the application of the theory in research and practice (Dennis, 2003). However, while the theory is robust, much of the literature applying it has been generated in

contexts that do not explicitly account for migration, race, or the effects of culturally incongruent care. As a result, although BFSE is well validated as a construct, its contextual formation among African newcomer mothers in Canadian settings remains underexplored.

For the present study, Dennis's theory is useful not only because it focuses directly on breastfeeding confidence, but also because it allows confidence to be interpreted as socially influenced rather than psychologically isolated. This is especially important for NCMAD in HRM, whose confidence may be shaped by both prior breastfeeding histories and present post-migration realities.

The theory identifies four main sources of BFSE: mastery experience, vicarious experience, social support, and emotional or physiological states (Figure 1). These sources explain how confidence is built, reinforced, or weakened over time.

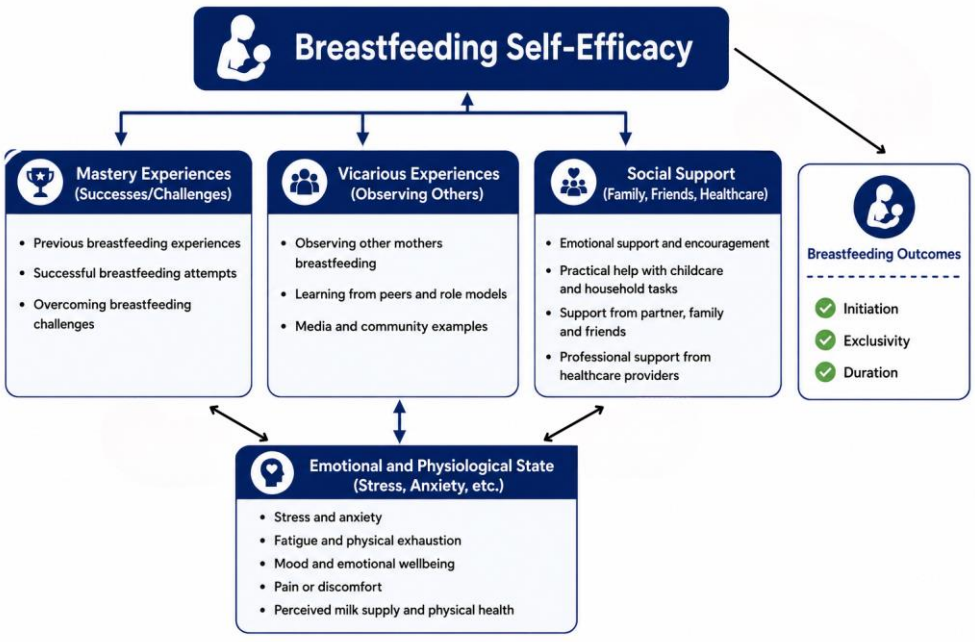

Figure 1: Breastfeeding Self-Efficacy Theory (Adapted from Dennis, 2003)

2.2.1.1 Mastery Experience (Previous Performance)

Mastery experience is widely regarded as the most influential source of self-efficacy because it is grounded in direct personal success or failure. In the context of breastfeeding, positive experiences such as successful latch, perceived adequate milk supply, infant satisfaction, and the ability to resolve feeding difficulties can reinforce confidence and strengthen a mother's belief in her capacity to continue breastfeeding (Brockway et al., 2017; Li et al., 2021). In contrast, unresolved pain, delayed milk production, perceived insufficiency, or prior early cessation may weaken confidence and reduce willingness to persist or attempt breastfeeding in the future (Huang et al., 2019).

For NCMAD, mastery experience may be complicated by migration. Mothers who previously breastfed successfully in their home countries may find that the social and healthcare conditions that once supported them are no longer present. Different postpartum expectations, reduced family assistance, and unfamiliar healthcare protocols may disrupt confidence and make previously manageable experiences feel more difficult (Odeniyi et al., 2020). This suggests that mastery is context-dependent rather than purely individual. Strengthening mastery experience therefore requires responsive, individualized, and culturally safe postpartum support that helps mothers interpret challenges constructively and build early success in the new environment (Pérez-Escamilla et al., 2023).

2.2.1.2 Vicarious Experience (Observational Learning)

Vicarious experience refers to learning through observing others perform a task successfully. In breastfeeding, seeing peers, relatives, or community members breastfeed can normalize the

practice, reduce uncertainty, and increase a mother's confidence in her own ability to do the same (Dennis, 1999). This source of efficacy may be especially important for first-time mothers or those who lack prior breastfeeding experience. Peer-based education, group programs, visual demonstrations, and digital storytelling have all been shown to support BFSE by providing relatable examples of breastfeeding success (Campos et al., 2022; Maizuputri et al., 2024; Yang et al., 2024).

For newcomer mothers, access to such modelling may be limited by migration-related disruption, modesty norms, or small local ethnic networks. In these cases, digital media may partially compensate by providing opportunities to observe culturally resonant breastfeeding experiences online (Abrahams et al., 2023; Rhodes et al., 2021). However, the value of vicarious experience depends on the relevance and realism of what is observed. When mothers are exposed to unrealistic, distressing, or conflicting portrayals of breastfeeding, confidence may decline rather than improve (Safon et al., 2021; Shorey & Lopez, 2021). For NCMAD, this highlights the importance of ensuring access to supportive, relatable, and culturally meaningful breastfeeding models within both community and digital spaces.

2.2.1.3 Social Support (Verbal Persuasion)

Social persuasion refers to encouragement, reassurance, and feedback received from others. In breastfeeding, positive support from partners, relatives, peers, and healthcare providers can strengthen maternal confidence, validate effort, and help mothers persevere through difficulties (McQueen et al., 2020; Giannì et al., 2022). Partner support and peer mentoring are particularly influential because they provide both emotional affirmation and practical assistance during the

postpartum period (Rempel et al., 2017; Bengough et al., 2022). Conversely, criticism, pressure, or dismissive responses may undermine confidence and increase the risk of discontinuation.

For NCMAD in HRM, social persuasion may be especially important because migration can reduce access to extended family and traditional support networks. In such settings, healthcare providers and community-based peers may become central sources of breastfeeding encouragement. However, language barriers, underrepresentation of Black healthcare professionals, and limited culturally competent care may weaken the effectiveness of this support. These conditions suggest that BFSE is not only influenced by the presence of support, but also by the quality, credibility, and cultural alignment of that support. Not all forms of support are equally effective. Support that is culturally incongruent, inconsistent, or perceived as judgmental may fail to enhance BFSE and may even undermine confidence. Strengthening BFSE among NCMAD therefore requires inclusive, culturally responsive, and contextually relevant systems of encouragement across healthcare and community settings.

2.2.1.4 Emotional and Physiological States

A mother's emotional and physical condition can significantly shape how she interprets her breastfeeding abilities. Fatigue, pain, stress, anxiety, and depressive symptoms may lower confidence by making breastfeeding challenges feel more overwhelming or by creating a sense of inadequacy (Kingston et al., 2015; Tsai et al., 2021). In contrast, emotional stability, resilience, and effective stress management can support confidence and strengthen a mother's ability to cope with breastfeeding demands (Fallahzadeh et al., 2020; Santos et al., 2022; Nayebinia et al., 2024).

For NCMAD, emotional and physiological states may be influenced by migration-related stressors such as isolation, financial uncertainty, changes in family structure, and the burden of adapting to a new environment (Groleau et al., 2016). These factors may increase psychosocial strain and reduce confidence, even when breastfeeding is strongly valued. This suggests that breastfeeding support should not be limited to feeding instruction alone. It should also include attention to maternal emotional well-being, rest, stress reduction, and mental health support. Culturally sensitive wellness supports may therefore play an important role in strengthening BFSE among newcomer mothers.

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sensitive wellness supports may therefore play an important role in strengthening BFSE among newcomer mothers.

2.2.2 Socio-Ecological Model (SEM)

The Socio-Ecological Model (Bronfenbrenner, 1977; McLeroy et al., 1988) provides a broader framework for understanding health behaviour within multiple, interacting levels of influence (Figure 2). These levels typically include the individual, interpersonal, organizational, community, and policy environments. In breastfeeding research, the SEM is particularly valuable because it helps explain why breastfeeding behaviour cannot be fully understood through maternal knowledge or confidence alone but must also be considered in relation to family support, healthcare practices, social norms, workplace policies, and public health systems.

At the individual level, breastfeeding outcomes may be influenced by knowledge, prior experience, BFSE, mental health, and physical well-being. At the interpersonal level, partners, family members, peers, and social networks shape how breastfeeding is encouraged, supported, or challenged. At the organizational level, hospital routines, provider communication, continuity of care, and access to lactation services matter. At the community level, breastfeeding is shaped by social norms, local support structures, and the degree to which breastfeeding is normalized in public and private life. At the policy level, maternity leave, workplace flexibility, immigration-related vulnerabilities, and broader equity structures influence whether breastfeeding can be sustained over time (Sinha et al., 2015; Robinson et al., 2019).

The SEM is especially relevant to this study because it supports the interpretation of BFSE beyond self-contained internal resources. A mother may have strong breastfeeding intentions and

relatively high confidence yet still face circumstances that undermine breastfeeding continuation. Similarly, supportive systems may strengthen confidence even where initial uncertainty exists. For NCMAD in HRM, the SEM helps capture how breastfeeding confidence may be produced through, or constrained by, healthcare access, social integration, cultural recognition, and local structural conditions and broader policy environments. Factors such as maternity leave provisions, employment protections, access to breastfeeding-supportive services, and policies that influence newcomer settlement and integration may shape mothers' opportunities to initiate, sustain, and continue breastfeeding.

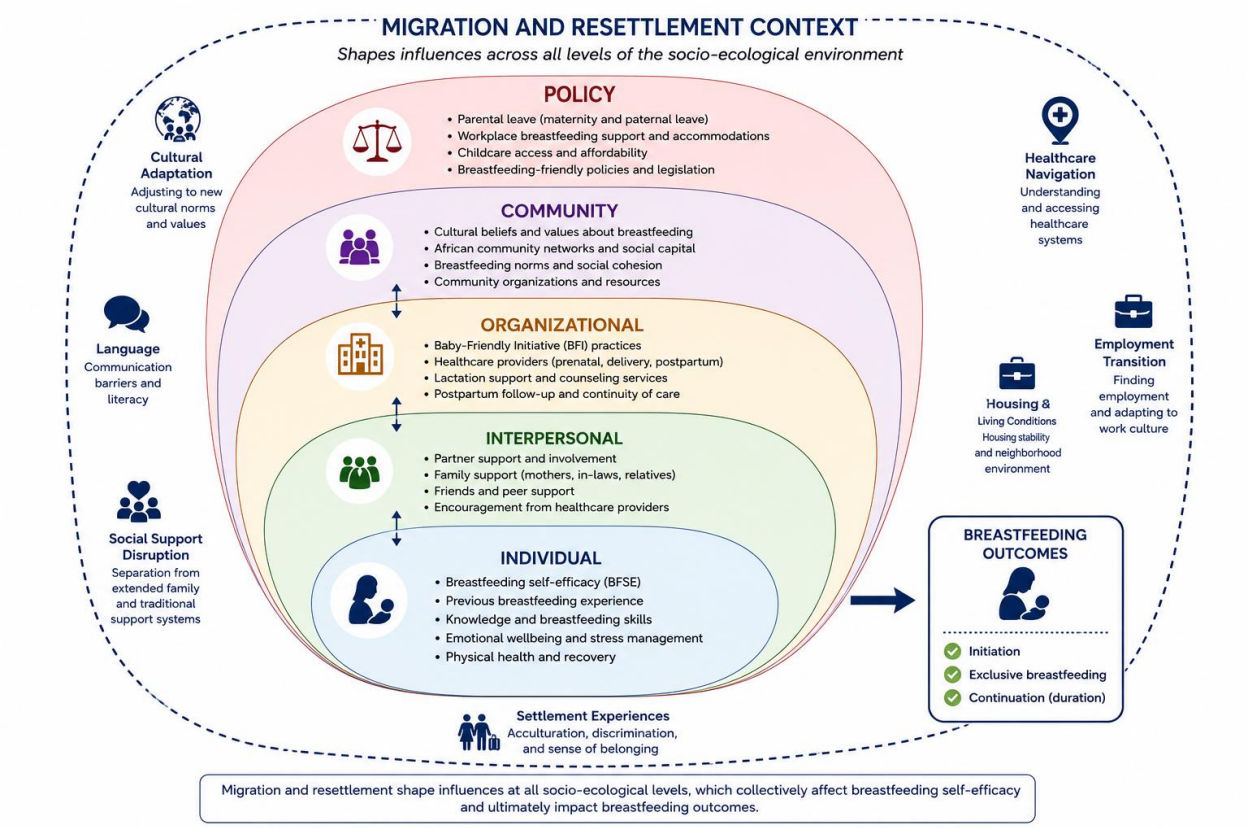

Figure 2: Socio-Ecological Model of Factors Influencing Breastfeeding Self-Efficacy Among Newcomer Mothers of African Descent in Halifax Regional Municipality (Adapted and Modified from Bronfenbrenner, 1977; McLeroy et al., 1988; Gómez-Pomar & Blubaugh, 2018)

2.2.3 Integration of Theoretical Frameworks

This study adopts an integrated theoretical framework that combines Dennis's Breastfeeding Self-Efficacy Theory (BSET) and the Socio-Ecological Model (SEM) to provide a comprehensive understanding of breastfeeding self-efficacy (BFSE) among newcomer mothers of African descent (NCMAD) in Halifax Regional Municipality (HRM). The integration of these frameworks offers a stronger explanatory lens than either framework alone. While Dennis's theory explains the psychosocial processes through which breastfeeding confidence is developed and influences breastfeeding behaviour, the SEM situates these processes within the broader social, cultural, institutional, and policy environments that shape maternal experiences.

At the centre of the integrated framework is BFSE, which Dennis conceptualizes as a mother's confidence in her ability to successfully breastfeed. According to the theory, BFSE is influenced by four primary sources: mastery experiences, vicarious experiences, social persuasion, and emotional or physiological states. These sources explain how confidence is developed, reinforced, or weakened through mothers' experiences and interactions. However, the theory provides limited attention to the broader contextual conditions that influence these experiences.

The SEM complements Dennis's theory by recognizing that breastfeeding behaviours and experiences are shaped by multiple interacting levels of influence. Within this study, the four sources of BFSE are understood as operating within individual, interpersonal, organizational, community, and policy environments. For example, mastery experiences may be influenced by access to breastfeeding education and healthcare support, vicarious experiences may be shaped by exposure to breastfeeding role models within families and communities, social persuasion may

arise through encouragement from partners, peers, and healthcare providers, while emotional and physiological states may be affected by settlement stressors, social isolation, and broader life circumstances.

The integration of these frameworks is particularly relevant for NCMAD in HRM because breastfeeding confidence is unlikely to be determined solely by individual beliefs or experiences. Migration may alter family structures, social networks, cultural environments, and access to support systems, creating conditions that either strengthen or undermine BFSE. A mother may enter Canada with strong breastfeeding intentions, prior breastfeeding experience, and high confidence, yet encounter challenges such as social isolation, culturally incongruent care, unfamiliar healthcare systems, or competing settlement demands that affect her ability to sustain breastfeeding. Conversely, supportive healthcare encounters, culturally safe services, peer support networks, and enabling policies may strengthen confidence and facilitate positive breastfeeding experiences.

The integrated framework therefore conceptualizes BFSE as both an individual and contextual phenomenon. It assumes a reciprocal relationship between confidence and environment, whereby social, cultural, institutional, and policy contexts influence maternal confidence, while mothers actively interpret, respond to, and navigate these contexts in ways that shape their breastfeeding experiences. By combining Dennis's Breastfeeding Self-Efficacy Theory with the Socio-Ecological Model, the framework provides a comprehensive lens for examining how breastfeeding confidence is developed, experienced, and sustained among NCMAD in HRM and supports the

study's exploration of the complex factors influencing breastfeeding initiation, exclusivity, and continuation within post-migration contexts.

2.3 Breastfeeding Self-Efficacy and Breastfeeding Practices

BFSE is consistently identified as one of the strongest psychosocial predictors of breastfeeding behaviour. Unlike general breastfeeding intention, BFSE captures a mother's perceived ability to carry out breastfeeding successfully in the presence of real or anticipated obstacles. This distinction is important because many women intend to breastfeed, but intention alone does not explain whether they continue when confronted with pain, fatigue, uncertainty, social pressure, or competing demands. BFSE therefore provides a more behaviourally relevant lens for understanding breastfeeding outcomes.

Across the literature, higher BFSE has been associated with earlier initiation, greater likelihood of exclusive breastfeeding, and longer breastfeeding duration (Dennis, 1999; He et al., 2021; McCarter-Spaulding & Dennis, 2015). However, while this association is robust, the magnitude and expression of BFSE may vary across populations and contexts. Studies differ in terms of design, timing of BFSE measurement, and sociocultural setting, which means findings should not be generalized uncritically. This is particularly relevant when considering newcomer African-descent mothers in Canada, whose social realities may differ substantially from populations typically represented in breastfeeding research.

The following subsections examine the relationship between BFSE and three key breastfeeding outcomes: initiation, exclusivity, and duration.

2.3.1 BFSE and Breastfeeding Initiation

Early initiation of breastfeeding, commonly defined as placing the infant to the breast within the first hour after birth, is widely recognized as important for both neonatal survival and subsequent breastfeeding success (WHO, 2023; PHAC, 2021). Prenatal BFSE plays a significant role in this early behaviour. Mothers who feel confident about breastfeeding during pregnancy are generally more prepared to initiate breastfeeding soon after delivery and are better able to respond to immediate postpartum challenges (He et al., 2021; Çimen et al., 2024).

Evidence suggests that BFSE can be strengthened prenatally through breastfeeding education, peer-led preparation, counselling, and partner-inclusive interventions. These strategies help mothers develop realistic expectations, reduce anxiety, and build confidence before birth (Ahmed et al., 2021; García et al., 2023). However, breastfeeding initiation is not determined by confidence alone. Hospital routines, mode of delivery, provider communication, immediate postpartum support, and institutional practices all shape whether breastfeeding is initiated successfully.

For immigrant and African-descent mothers, initiation may be further affected by communication barriers, cultural incongruence with care providers, or a lack of interpreters and culturally responsive support (Boateng et al., 2018; Otsuka et al., 2015). For NCMAD in HRM, migration-related stress, differing postpartum care expectations, and limited familiarity with local breastfeeding systems may influence early feeding experiences. The literature suggests that timely encouragement from nurses, partners, and peers in the first hours and days after birth can significantly enhance maternal confidence and support initiation (McQueen et al., 2020; Rempel

et al., 2017). These findings underscore the importance of culturally safe, supportive, and responsive maternity care in promoting both BFSE and early initiation.

2.3.2 BFSE and Exclusive Breastfeeding

Exclusive breastfeeding for the first six months of life is strongly associated with maternal breastfeeding self-efficacy. Because exclusive breastfeeding requires sustained commitment, problem-solving, and persistence, mothers with higher BFSE are generally better equipped to navigate common postpartum difficulties such as fatigue, nipple pain, uncertainty about milk adequacy, and social pressure to introduce formula or other feeds (McCarter-Spaulding & Dennis, 2015; Economou et al., 2021; Shorey et al., 2022).

Research indicates that BFSE not only predicts exclusive breastfeeding but also mediates the effects of breastfeeding support interventions. Mothers who participate in breastfeeding education, peer support, or postnatal follow-up counselling often demonstrate greater confidence and improved rates of exclusive breastfeeding (Duffy et al., 2019; Pérez-Escamilla et al., 2023; Permatasari et al., 2023). These interventions appear effective because they strengthen key efficacy sources, particularly mastery experience and social persuasion, while also reducing anxiety and uncertainty.

However, exclusive breastfeeding is often more difficult to sustain within immigrant and racialized populations because of intersecting structural and cultural constraints. Traditional beliefs about infant satiety, economic pressure, return to work, caregiving demands, and inadequate maternity protection may all contribute to mixed feeding or early supplementation (Racine et al., 2020; Smith

et al., 2022). For NCMAD in HRM, pressures related to settlement, employment, and childcare may undermine the continuity of exclusive breastfeeding even when breastfeeding intentions are strong.

Psychosocial conditions are also important. Isolation, acculturative stress, and emotional fatigue may weaken BFSE and reduce adherence to exclusive breastfeeding (Tsai et al., 2021; Fallahzadeh et al., 2020). At the same time, the literature suggests that the relationship between BFSE and exclusive breastfeeding is not purely linear. In contexts where mothers face early return to work, limited maternity protection, or weak structural support, high BFSE does not always translate into sustained exclusivity. This is a significant limitation in the literature, which often treats BFSE as an individual-level predictor without giving sufficient attention to the ways structural constraints may override or weaken its influence. For NCMAD in HRM, this interaction between confidence and context is likely to be particularly important.

2.3.3 BFSE and Duration of Breastfeeding

Breastfeeding duration is another key outcome consistently associated with BFSE. Mothers with stronger breastfeeding confidence are more likely to continue breastfeeding over time, even after accounting for other factors such as age, parity, and education (De Jager et al., 2015; Karimi et al., 2022). This relationship is consistent with the broader self-efficacy proposition that confidence influences persistence, resilience, and coping in the face of barriers (Bandura, 1997).

Longitudinal studies show that mothers with higher BFSE are more likely to breastfeed at later postpartum stages, including six and twelve months (De Jager et al., 2015; Salarvand et al., 2023).

Interventions that increase BFSE during pregnancy or early postpartum have also been associated with longer breastfeeding duration (Gökçen et al., 2023). These findings suggest that BFSE does not simply affect breastfeeding initiation but remains relevant throughout the breastfeeding journey, particularly when mothers are confronted with practical, emotional, or social challenges.

For NCMAD in HRM, maintaining breastfeeding over time may be shaped by settlement-related demands, limited family support, changing work conditions, and the absence of familiar social networks. Community-based initiatives and peer support models that reflect shared cultural identity may be especially valuable in extending breastfeeding duration because they reinforce confidence, normalize breastfeeding, and create a sense of solidarity (Odeniyi et al., 2020; Bengough et al., 2022). The available evidence therefore suggests that sustaining breastfeeding duration requires more than individual motivation. It depends on whether mothers continue to experience confidence, validation, and practical support within their everyday environments.

It is also important to note that many studies examining breastfeeding duration rely on self-reported data and may not fully account for changing contextual conditions over time. Although longitudinal evidence strengthens the argument that BFSE predicts persistence, even these studies do not always capture how confidence fluctuates as mothers encounter new challenges related to work, childcare, or social support. This temporal dimension remains underexplored in much of the literature and further supports the need for qualitative approaches that can capture how confidence evolves throughout the breastfeeding journey.

2.4.5 Broader Contextual Factors Associated with BFSE

Although Dennis's four efficacy sources remain central, BFSE is also shaped by broader contextual factors that operate across the SEM. These influences are particularly important in understanding the experiences of NCMAD, whose breastfeeding confidence may be shaped by settlement realities, structural inequities, and culturally specific meanings of motherhood and infant feeding.

2.4.5.1 Socioeconomic and Educational Factors

Maternal education and socioeconomic position are consistently associated with breastfeeding outcomes and BFSE (Khresheh et al., 2018; Racine et al., 2020; Smith et al., 2022). Education can improve health literacy, increase confidence in decision-making, and strengthen a mother's ability to understand and apply breastfeeding information (Adewuyi & Adefemi, 2016). Socioeconomic stability may also reduce stress and create more favourable conditions for breastfeeding continuation. In contrast, financial hardship, precarious employment, and housing insecurity can intensify fatigue and anxiety, thereby undermining BFSE (Tarasuk & Mitchell, 2020).

Among NCMAD in HRM, these relationships may be shaped by underemployment, credential recognition barriers, and the economic demands of settlement. Even highly educated newcomer mothers may face constrained opportunities and unstable work conditions, which may affect their confidence, mental well-being, and available time for breastfeeding. These realities suggest that BFSE should not be interpreted solely as an internal psychological resource. It is also shaped by whether mothers have the material conditions needed to breastfeed successfully.

2.4.5.2 Migration and Acculturation Influences

Migration and acculturation can significantly influence maternal confidence in breastfeeding. Language barriers, unfamiliar healthcare systems, social isolation, and the loss of traditional support structures may all reduce confidence and complicate breastfeeding adaptation (Groleau et al., 2016; Odeniyi et al., 2020). In many African settings, postpartum support is embedded within extended family and communal caregiving arrangements. After migration, these systems may be weakened or absent, leaving mothers with less practical and emotional support.

At the same time, positive acculturation experiences can strengthen BFSE. Engagement with culturally responsive services, supportive multicultural networks, and community programs may help mothers adapt without losing valued cultural practices (Bich et al., 2021). For NCMAD in HRM, this suggests that breastfeeding confidence may be enhanced when support systems recognize both the realities of migration and the cultural meanings attached to breastfeeding.

2.4.5.3 Healthcare Access and Cultural Safety

Access to respectful, culturally responsive healthcare is an important determinant of BFSE. When mothers feel heard, validated, and supported by healthcare providers, they are more likely to trust guidance, seek help early, and feel confident in their breastfeeding ability (Rempel et al., 2017; Otsuka et al., 2018). By contrast, experiences of bias, cultural misunderstanding, poor communication, or inadequate follow-up can undermine trust and reduce confidence (McFadden et al., 2021).

For NCMAD, cultural safety is particularly relevant. Language barriers, limited provider diversity, and insufficient recognition of culturally specific breastfeeding practices may create environments in which mothers feel misunderstood or excluded. Cultural safety frameworks emphasize reflective practice, respect, partnership, and the removal of systemic barriers (CPHA, 2020). Applying these principles within breastfeeding support services may strengthen BFSE by helping mothers feel seen, respected, and capable within healthcare encounters. In Nova Scotia, initiatives linked to the Baby-Friendly Initiative may offer important opportunities to embed these principles in maternity and postpartum care.

2.4.5.4 Work and Family Balance

Workplace and family conditions can either support or constrain breastfeeding confidence. Flexible employment, adequate maternity leave, partner support, and shared caregiving responsibilities are associated with improved breastfeeding continuation and stronger maternal confidence (Fein et al., 2021; Chung et al., 2008). In contrast, early return to work, rigid schedules, and heavy domestic demands may increase stress and reduce a mother's confidence in her ability to sustain breastfeeding.

For newcomer mothers, balancing employment, settlement, and childcare may be especially difficult. These pressures may be heightened where family support is limited, or economic needs require early workforce participation. For NCMAD in HRM, this suggests that work-family balance is not simply a lifestyle issue, but an important structural determinant of BFSE.

2.4.5.5 Intersectional and Psycho-Social Dimensions

BFSE is also shaped by the intersecting influences of race, migration status, gender, and class. African-descent mothers in Canada may experience multiple forms of marginalization, including racial discrimination, reduced social capital, and structural inequities that affect both health and well-being (Odeniyi et al., 2020; Groleau et al., 2016). These experiences may generate stress, weaken confidence, and complicate breastfeeding persistence.

At the same time, protective factors such as cultural resilience, faith-based support, community solidarity, and positive ethnic identity may buffer these effects. Supportive African and immigrant community networks can reinforce breastfeeding as a valued practice, provide role models, and strengthen maternal confidence through belonging and affirmation (Akbar et al., 2023). This indicates that BFSE is not only vulnerable to structural disadvantage but may also be sustained through culturally grounded forms of resilience and support.

Taken together, these findings show that BFSE is shaped by a constellation of interrelated factors extending beyond individual belief alone. Education, socioeconomic conditions, migration, healthcare access, cultural safety, work-family pressures, and intersectional identity all contribute to how breastfeeding confidence is formed and sustained. These determinants operate across the levels of the SEM and reinforce the need for multilevel interventions that address both personal and structural influences on breastfeeding.

2.5 Policy and Practice Context

Canada's public health framework positions breastfeeding as a key strategy for promoting maternal and child health. Health Canada and the Public Health Agency of Canada recommend exclusive breastfeeding for the first six months of life, with continued breastfeeding for up to two years and beyond alongside appropriate complementary feeding, in alignment with WHO guidance (PHAC, 2021; WHO, 2023). At the provincial level, breastfeeding promotion is supported through clinical and public health initiatives, including the Baby-Friendly Initiative, which seeks to improve maternity care practices, protect breastfeeding, and enhance maternal confidence (Nova Scotia Health Authority, 2022).

Despite these commitments, inequities remain evident in breastfeeding experiences and outcomes. National and provincial data often do not adequately disaggregate breastfeeding indicators by race, ethnicity, or immigration status, limiting understanding of the specific experiences of racialized newcomer populations. This lack of detailed data may obscure important disparities and reduce the visibility of barriers faced by African-descent mothers. Structural issues such as language barriers, limited representation within the health workforce, and inconsistent implementation of culturally safe care may all reduce access to effective breastfeeding support and undermine BFSE (Groleau et al., 2016; Odeniyi et al., 2020).

Canadian health equity frameworks, including those emphasizing equity impact assessment and culturally safe care, call for the reduction of barriers that prevent fair access to health services (CPHA, 2020). Applied to breastfeeding, these frameworks support approaches such as multilingual resources, culturally responsive education, community partnerships, and peer support

delivered by women from similar backgrounds. For NCMAD in HRM, such approaches may be especially important in strengthening confidence, improving support-seeking, and fostering more inclusive breastfeeding environments.

This policy context is also relevant to broader equity goals, including reducing maternal-child health disparities and promoting inclusive health systems. A key limitation within the Canadian context, however, is the lack of disaggregated breastfeeding data by race and immigration status. This gap constrains the ability to identify and address inequities in breastfeeding outcomes and support access. As a result, while national and provincial policies promote breastfeeding broadly, they may not adequately reflect the specific needs and experiences of populations such as NCMAD. Addressing this limitation requires not only improved data collection but also the integration of culturally responsive approaches into policy implementation and service delivery.

2.6 Digital and Social Media Influence on Breastfeeding Self-Efficacy

Digital and social media platforms have become increasingly important sources of maternal information, peer connection, and health-related support. For many mothers, online spaces now complement or sometimes substitute for in-person networks, making them relevant to the development of breastfeeding attitudes and confidence. Their influence on BFSE, however, is mixed. Depending on the quality, tone, and cultural relevance of the content encountered, digital media can either support or undermine maternal confidence (Ouvrein, 2022; Morris et al., 2023).

From a theoretical perspective, digital media can influence BFSE through mechanisms of vicarious experience and social persuasion. Exposure to relatable breastfeeding experiences may strengthen

confidence, while negative or unrealistic portrayals may undermine it. Unlike traditional in-person support, however, digital environments are less regulated and more variable in quality, which introduces additional complexity in how BFSE is shaped, particularly for newcomer mothers navigating multiple cultural and informational contexts simultaneously.

Digital spaces such as Facebook groups, WhatsApp communities, Instagram, TikTok, online forums, and YouTube tutorials often provide accessible and immediate sources of breastfeeding information and social support. Mothers who engage in online breastfeeding communities frequently report increased knowledge, reassurance, and confidence, especially when these spaces offer practical guidance and encouragement from others with similar experiences (Bridges, 2022; Vargas et al., 2021). Such platforms may reinforce BFSE through both social persuasion and vicarious experience by allowing mothers to receive encouragement, observe breastfeeding success, and normalize challenges. For newcomer mothers, digital spaces may be especially valuable because they can compensate for reduced in-person support, language barriers, or the absence of extended family nearby. Social media also enables women to maintain cultural connections and interact with others from similar backgrounds who share breastfeeding values, stories, and strategies (D'Souza et al., 2021). For NCMAD in HRM, these digital communities may provide culturally familiar narratives that strengthen confidence while helping mothers navigate breastfeeding within an unfamiliar healthcare system.

At the same time, online engagement carries psychosocial risks. Unrealistic portrayals of motherhood idealized breastfeeding experiences, and misinformation can increase self-comparison, guilt, and anxiety, thereby undermining confidence (Ouvrein, 2022; Morrison et al.,

2021). Exposure to contradictory advice on feeding schedules, formula use, or weaning can also create confusion, particularly for mothers who lack access to professional guidance (Morris et al., 2023). Research suggests that the impact of digital content on BFSE is mediated by mothers' ability to critically appraise information and access credible sources (Nguyen et al., 2022). When digital engagement is guided through moderated forums, evidence-based campaigns, or healthcare-linked resources, it can reinforce self-efficacy. However, unmoderated spaces may perpetuate myths that undermine breastfeeding intentions or fuel self-doubt (Hussein et al., 2023). Among NCMAD in HRM, digital misinformation may intersect with cultural transition challenges, as mothers may receive conflicting advice between Canadian health guidelines and traditional practices from online African communities.

Public health systems increasingly recognize digital communication as a useful component of maternal health promotion. Mobile health interventions, online education, tele-lactation support, and moderated peer groups have shown promise in improving breastfeeding confidence and exclusive breastfeeding outcomes (Baker et al., 2022; Tan et al., 2023). In Nova Scotia, culturally tailored digital breastfeeding resources could help extend support to newcomer mothers who face practical or social barriers to accessing services. Multilingual educational materials, culturally representative videos, and community-informed online support groups may be particularly beneficial. Partnerships with African Canadian organizations and trusted community leaders could help ensure that digital interventions are both scientifically accurate and culturally meaningful. In this way, digital platforms may become an important complement to in-person care in strengthening BFSE among NCMAD in HRM.

2.7 Summary of Literature Review and Identified Gaps

The literature reviewed in this chapter demonstrates that breastfeeding outcomes are influenced by a complex interplay of individual, social, cultural, healthcare, and structural factors. Across diverse settings, breastfeeding self-efficacy (BFSE) consistently emerges as a significant predictor of breastfeeding initiation, exclusivity, and duration (Dennis, 1999; He et al., 2021; Pérez-Escamilla et al., 2023). Dennis's four sources of BFSE, mastery experiences, vicarious experiences, social persuasion, and emotional or physiological states, provide an important theoretical foundation for understanding how mothers develop confidence and respond to breastfeeding challenges.

The review further demonstrates that BFSE is influenced by factors operating across multiple levels of the socio-ecological environment, highlighting the importance of examining breastfeeding confidence within broader social, healthcare, community, and policy contexts. This perspective is particularly relevant when exploring breastfeeding among newcomer populations whose experiences are shaped by migration-related transitions and changing support systems.

Despite the growing global literature on BFSE, important gaps remain. There is limited Canadian research examining BFSE specifically among mothers of African descent, and evidence from Nova Scotia is particularly scarce. Breastfeeding data are rarely disaggregated by race, ethnicity, or immigration status, making it difficult to identify the unique barriers and protective factors relevant to newcomer mothers of African descent (NCMAD). In addition, few studies have explored how psychosocial well-being, digital media, social isolation, or culturally specific meanings of breastfeeding influence BFSE within newcomer African communities in Canada.

Another important gap concerns the qualitative understanding of BFSE. Much of the existing literature emphasizes quantitative associations between BFSE and breastfeeding outcomes, but fewer studies examine how mothers themselves interpret, negotiate, and express confidence within specific social and cultural contexts. Existing evidence is also largely derived from populations that do not fully reflect the intersecting influences of race, migration, and cultural adaptation. As a result, there is limited understanding of how BFSE is constructed, interpreted, and sustained within the realities of post-migration life.

This study addresses these gaps by adopting a qualitative approach to explore how NCMAD in Halifax Regional Municipality experience and make meaning of BFSE within their social, cultural, and structural contexts. In doing so, it moves beyond prediction to provide a deeper understanding of how breastfeeding confidence is shaped, negotiated, and sustained in everyday life.

2.8 Chapter Summary

This chapter reviewed the literature on breastfeeding and breastfeeding self-efficacy, with particular emphasis on its relevance to newcomer mothers of African descent in Halifax Regional Municipality. The review demonstrated that breastfeeding provides important health and psychosocial benefits for both mothers and infants, yet optimal breastfeeding practices, particularly exclusive breastfeeding and sustained duration, remain difficult to achieve for many women.

Across the literature, BFSE emerged as a key predictor of breastfeeding initiation, exclusivity, and duration. The review further demonstrated that breastfeeding confidence is influenced by both

individual experiences and broader social, cultural, healthcare, and structural conditions that shape mothers' breastfeeding opportunities and experiences.

The chapter established the theoretical foundation for the study by integrating Dennis's Breastfeeding Self-Efficacy Theory with the Socio-Ecological Model. Together, these frameworks provide a comprehensive understanding of how breastfeeding confidence is shaped through interactions between individual, interpersonal, organizational, community, and policy-level influences. This integrated perspective is particularly relevant for understanding the breastfeeding experiences of NCMAD in HRM, whose breastfeeding journeys may be influenced by migration-related transitions, changing support systems, and broader social contexts.

The chapter also highlighted the growing role of digital and social media in shaping BFSE. Online platforms may provide information, encouragement, and opportunities for observational learning, but they may also expose mothers to misinformation, unrealistic comparisons, and conflicting breastfeeding advice. These dual influences further emphasize the need for culturally relevant and evidence-informed breastfeeding support.

Importantly, the review identified significant gaps in the literature. There is limited research in Canada, and particularly in Nova Scotia, examining BFSE among newcomer mothers of African descent. Existing data are rarely disaggregated by race or immigration status, and there is insufficient qualitative evidence exploring how breastfeeding confidence is experienced, interpreted, and negotiated within this population. These gaps justify the need for the present study.

Building on this foundation, Chapter Three presents the methodology used to explore BFSE among NCMAD in HRM, including the research design, study setting, sampling strategy, data collection procedures, and approach to analysis.

CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter outlines the methodological framework adopted for the study, describing the research design, study location, target population, sampling strategies, data collection procedures, data analysis, and ethical considerations. The study employed a qualitative descriptive approach to explore breastfeeding self-efficacy (BFSE) among newcomer mothers of African descent (NCMAD) in the Halifax Regional Municipality (HRM), Nova Scotia.

Given the limited research examining BFSE within this population, a qualitative approach was appropriate to capture the depth and contextual complexity of participants' lived experiences. This approach enabled an exploration of how NCMAD interpret and navigate breastfeeding within a new sociocultural and healthcare environment.

The study is grounded in Dennis's Breastfeeding Self-Efficacy Theory and the Socio-Ecological Model, which together provide a comprehensive framework for examining both individual-level and broader contextual influences on breastfeeding confidence and practices. This theoretical integration informed the development of data collection tools and guided data interpretation. A positionality statement is also included to enhance transparency and reflexivity.

3.1 Positionality Statement

My positionality in conducting this research was shaped by my identity as a woman of African descent living in Halifax, Canada, and by my commitment to advancing health and nutrition equity. Although I am not a mother and do not have personal experience with breastfeeding, I approached

this study as a learner, committed to listening to and learning from the lived experiences of NCMAD. My intention was to ensure that their voices were authentically represented and valued throughout the research process.

I recognize that my cultural and professional background offers both strengths and potential biases. Growing up in an African context where breastfeeding is widely practiced and socially normalized provided me with cultural sensitivity and contextual understanding. This shared background facilitated rapport, trust, and openness with participants, while I remained mindful that individual experiences differ across migration and settlement contexts.

Reflexivity was maintained throughout the study. I kept a reflexive journal to document evolving thoughts, emotional responses, and interactions with participants. This process enabled continuous critical reflection on how my assumptions and positionality might shape data interpretation. My role was not to speak for participants but to facilitate a platform through which their voices could be authentically represented.

3.2 Study Design

A qualitative descriptive design was adopted to explore breastfeeding self-efficacy (BFSE) experiences and influencing factors among NCMAD residing in HRM. This approach is appropriate for studies seeking to provide comprehensive, low-inference descriptions of phenomena grounded in participants' own accounts (Sandelowski, 2000; Neergaard et al., 2009).

Qualitative description is widely used in health research when the objective is to understand complex psychosocial experiences and inform practice-oriented interventions (Lambert &

Lambert, 2022). In this study, the design facilitated an in-depth exploration of participants' perceptions, emotions, and challenges related to BFSE within a new sociocultural and healthcare environment.

Importantly, this approach allowed for the integration of Dennis's Breastfeeding Self-Efficacy Theory, which focuses on individual confidence, with the Socio-Ecological Model, which situates these experiences within interpersonal, community, and structural contexts. Given the exploratory nature of this research and the limited literature on BFSE among NCMAD, this design provided a flexible yet rigorous framework for generating contextually relevant insights.

3.3 Study location

The study was conducted in Halifax Regional Municipality (HRM), Nova Scotia, a major urban centre that has become an increasingly important destination for newcomers to Atlantic Canada (Halifax Regional Municipality, 2022). HRM has implemented strategic initiatives, including the Halifax Regional Municipality Immigration Action Plan 2022–2026, to support newcomer attraction, retention, inclusion, and equitable access to services through collaboration with community and immigrant-serving organizations (Halifax Regional Municipality, 2022).

According to the African Nova Scotian Prosperity and Well-Being Index (2024), approximately 72.9% of Nova Scotia's Black population resides in Halifax Regional Municipality (HRM). Between 2016 and 2021, Nova Scotia's Black population increased by approximately 36.7%, growing more rapidly than the provincial population overall and driven largely by international migration from African countries, particularly Nigeria. In 2021, 28,220 Nova Scotians identified

as Black, representing approximately 3% of the provincial population. This demographic shift has contributed to a growing population of newcomer mothers navigating pregnancy, motherhood, and breastfeeding within a new social, cultural, and healthcare environment. The presence of key institutions such as the African Nova Scotian Affairs Integration Office, the Immigrant Services Association of Nova Scotia (ISANS), and the Newcomer Health Clinic further supports HRM as an appropriate and relevant setting for this study.

3.4 Study Population

The study focused on newcomer mothers of African descent (NCMAD) residing in the Halifax Regional Municipality (HRM). According to the African Nova Scotian Prosperity and Well-Being Index (2024), approximately 20.4% of Nova Scotia's Black population were immigrants as of 2021, and Statistics Canada (2021) reported that 25% of this group were women of reproductive age. Between 2016 and 2021, 1,345 Black females aged 20–44 migrated to HRM, representing a growing family-forming demographic.

For this study, NCMAD were defined as women who had migrated to Canada within the past five years, identified as being of African descent, and had given birth within the previous two years. These criteria captured women currently navigating breastfeeding within a new sociocultural and healthcare environment. Participants self-reported their duration of residence and newcomer status to confirm eligibility.

Newcomer mothers often encounter challenges such as cultural adjustment, limited social networks, language barriers, and constrained access to healthcare services (Nguyen et al., 2019).

These factors can influence maternal and child-feeding practices and may affect breastfeeding self-efficacy (Alade et al., 2021; Okafor et al., 2017). Exploring the experiences of this group was therefore essential to understanding how migration and adaptation shape BFSE in the Nova Scotia context.

3.4.1 Inclusion Criteria

Participants were eligible if they met the following criteria:

1. Were mothers of African descent.
2. Were at least 18 years old (to ensure legal capacity for informed consent).
3. Had resided in HRM for no more than five years.
4. Had delivered within the past 24 months to allow accurate recall of breastfeeding experiences.

3.4.2 Exclusion criteria

Participants were excluded if they:

1. Had relocated to HRM less than six months before data collection.
2. Had medical conditions that contraindicated breastfeeding or did not initiate breastfeeding.
3. Were unable to provide informed consent (Sil & Das, 2017).

3.5 Sampling

3.5.1 Sampling Strategy

A purposive sampling strategy (Figure 3.1) was adopted to recruit participants who met the study's inclusion criteria; NCMAD residing in HRM for less than five years and who had recently breastfed (Robinson, 2023). This approach ensured that participants possessed relevant experiences and could provide rich, detailed data aligned with the study objectives.

Recruitment of participants occurred through community organizations, cultural associations, and immigrant-support agencies such as the Newcomer Health Clinic, the Immigrant Services Association of Nova Scotia (ISANS), and the United African Communities of Western Africa (UACWA) (Kohler et al., 2018). Posters were sent to officials in these community organizations to share with their members. Additionally, snowball sampling was employed, whereby participants referred other eligible mothers within their social networks. This strategy was both ethical and practical, it leveraged community trust, encouraged participation, and facilitated access to a population that can be difficult to reach through conventional recruitment methods.

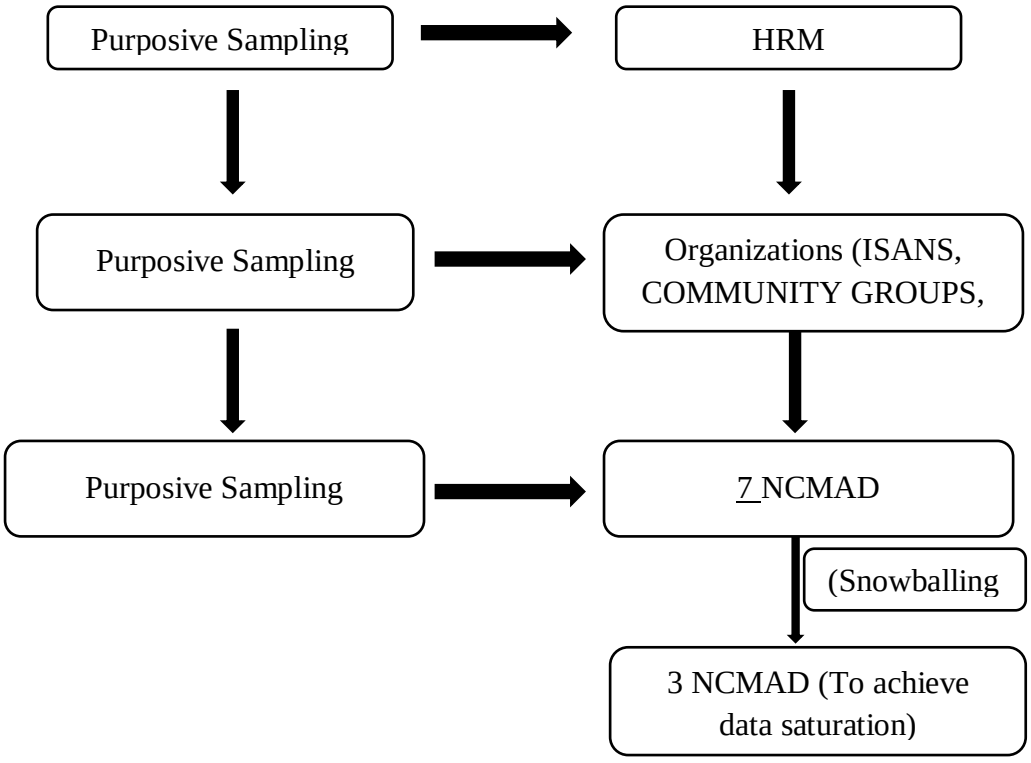

Figure 3: A flow chart on the recruitment and sampling procedure

3.5.2 Sampling Size

A total of 10 participants participated in individual in-depth interviews (IDIs), with 7 participants participating in two focus group discussions (FGDs). This sample size was sufficient to achieve data saturation, defined as the point at which no new themes or insights emerged during analysis (Fusch & Ness, 2015; Malterud et al., 2016).

In qualitative research, smaller samples can yield substantial depth when participants share similar demographic and experiential characteristics. The homogeneity of this group, NCMAD with recent breastfeeding experiences facilitated a rich exploration of shared and divergent perspectives while ensuring manageability during data collection and analysis.

3.6 Data collection tools

To ensure the collection of rich, credible, and culturally grounded data, two complementary tools were used: an In-Depth Interview (IDI) Guide (Appendix A) and a Focus Group Discussion (FGD) Guide (Appendix B). Both instruments were semi-structured to allow flexibility in exploring participants' unique experiences while maintaining consistency with the study objectives. The tools were developed based on Dennis's Breastfeeding Self-Efficacy (BFSE) Theory (1999, 2003) and informed by constructs from the Socio-Ecological Model (Bronfenbrenner, 1977; McLeroy et al., 1988).

3.6.1 In-depth interview (IDI) Guide

The In-Depth Interview (IDI) Guide (Appendix A) was developed as the primary instrument to explore participants' personal experiences, confidence levels, and influencing factors related to breastfeeding. The guide was semi-structured and grounded in Dennis's Breastfeeding Self-Efficacy (BFSE) Theory (1999, 2003), which identifies four key sources of efficacy—previous performance, vicarious experience, social support (verbal persuasion), and emotional or psycho-social state. These constructs were further contextualized using the Socio-Ecological Model (SEM) (Bronfenbrenner, 1977; McLeroy et al., 1988) to situate individual experiences within interpersonal, community, and structural settings.

The guide comprised four major sections, designed to move from general to specific reflections while allowing participants to tell their stories in their own words:

1. **Part 1: Breastfeeding History** – Explored mothers' general breastfeeding experiences, decisions on infant feeding, initiation timing, duration, and complementary feeding practices. This section provided contextual grounding for subsequent questions and linked to mastery experiences in BFSE, identifying prior successes or challenges that might shape current confidence.
2. **Part 2: Breastfeeding Confidence** – Assessed participants' confidence in their breastfeeding ability, techniques, and perseverance. Open-ended probes invited reflection on self-perceived competence in positioning, latching, managing supply, recognizing baby cues, and maintaining exclusivity. These items directly aligned with the self-efficacy dimension of BFSE and captured emotional and psycho-social nuances of confidence and motivation.
3. **Part 3: Factors Influencing Breastfeeding Self-Efficacy** – Examined contextual determinants influencing mothers' confidence and behaviors, including social support, employment, access to culturally meaningful foods, health-service experiences, and emotional well-being. Questions also explored perceived discrimination, cultural beliefs, and differences between experiences in Canada and mothers' countries of origin. This section reflected the verbal persuasion, emotional/psycho-social state, and broader SEM levels—interpersonal, community, and policy.
4. **Part 4: Demographic Information** – Collected background variables such as age, marital status, education, occupation, and length of residence in Halifax and Canada. These data supported contextual interpretation of qualitative findings.

Probes were used throughout to encourage elaboration, clarify meaning, and maintain conversational flow while preventing researcher bias. The semi-structured design allowed mothers

to express themselves freely, providing detailed narratives that reflected both individual and collective realities.

To ensure cultural and contextual validity, the IDI guide underwent expert review by two qualitative researchers specializing in maternal and child health and was pilot tested with eligible participants. Minor adjustments were made to enhance question flow, cultural sensitivity, and conceptual alignment with the BFSE and SEM frameworks.

3.6.2 Focus Group Discussion (FGD) Guide

The Focus Group Discussion (FGD) Guide (Appendix B) was designed to complement individual interviews by capturing the collective and interactive dimensions of breastfeeding self-efficacy (BFSE) among newcomer mothers of African descent (NCMAD) in the Halifax Regional Municipality (HRM). While the in-depth interviews (IDIs) explored personal experiences and individual confidence, the FGDs provided a social space for participants to share, compare, and validate their experiences in dialogue with others. This approach aligned with the Socio-Ecological Model (SEM) (Bronfenbrenner, 1977; McLeroy et al., 1988), which emphasizes the influence of interpersonal and community-level interactions on health behaviors.

The FGD guide was semi-structured and grounded in Dennis's Breastfeeding Self-Efficacy Theory (1999, 2003), ensuring that discussions reflected the four efficacy sources; previous performance, vicarious experiences, verbal persuasion (social support), and emotional/psycho-social states. Open-ended questions and flexible probes facilitated exploration of shared understandings and social dynamics surrounding breastfeeding in a new cultural environment.

The guide comprised ten major discussion domains, each designed to generate in-depth dialogue and reflection:

1. **Expectations and Realities of Breastfeeding in Canada** – Explored mothers' prenatal expectations and postnatal realities, highlighting changes in perception after childbirth.
2. **Confidence and Emotional Aspects** – Encouraged participants to discuss moments of confidence, uncertainty, or emotional distress during breastfeeding, linking to self-efficacy and affective state constructs.
3. **Social Support and Influence** – Examined the roles of partners, family members, peers, and community networks in reinforcing or undermining breastfeeding confidence, reflecting the verbal persuasion component of BFSE.
4. **Cultural Perceptions and Norms** – Investigated how participants' cultural backgrounds and traditions shaped their attitudes toward breastfeeding and how these intersected with Canadian norms and healthcare practices.
5. **Challenges as Newcomer Mothers** – Identified structural and personal barriers such as migration stress, limited family networks, language challenges, and adaptation to unfamiliar health systems.
6. **Work, Lifestyle, and Breastfeeding Balance** – Explored how participants balanced breastfeeding with work or study responsibilities and their access to supportive workplace or community policies.
7. **Public Breastfeeding and Comfort Levels** – Focused on mothers' comfort and experiences breastfeeding in public, probing perceptions of acceptance, stigma, or empowerment.

8. **Interactions with Healthcare Professionals** – Discussed the quality, cultural sensitivity, and impact of healthcare support received before and after childbirth.
9. **Access to Lactation Support and Information** – Explored participants' engagement with lactation consultants, peer-support groups, and online resources, as well as the influence of these supports on their breastfeeding confidence.
10. **Reflections and Recommendations** – Allowed participants to express unmet needs, suggest improvements in breastfeeding support, and share advice for other newcomer mothers.

Each domain included prompts designed to foster dialogue, validate experiences, and encourage participants to engage with others' viewpoints. Discussions were conducted in a respectful, open-ended manner that valued collective insight and mutual learning.

To ensure cultural appropriateness and theoretical consistency, the FGD guide underwent expert review by two qualitative researchers experienced in maternal health and cross-cultural studies. Questions were refined for linguistic clarity, contextual sensitivity, and cultural relevance before use.

3.7 Pre-test

Prior to the main data collection, both the In-Depth Interview (IDI) and Focus Group Discussion (FGD) guides were pre-tested with two eligible participants who met the inclusion criteria but were not included in the final study sample. The pre-test served to assess questions' clarity, flow, cultural appropriateness, and emotional sensitivity (Hurst et al., 2015).

Feedback from these preliminary sessions informed several refinements. Ambiguous questions were rephrased for simplicity, repetitive probes were removed, and transitions between discussion domains were adjusted to create a more natural conversational rhythm. In addition, culturally specific expressions and examples were integrated to improve relatability for NCMAD.

The pre-test also allowed the researcher to practice reflexive interviewing techniques including tone, pacing, and the use of non-verbal cues, to ensure that participants felt comfortable sharing personal experiences. This process enhanced both researcher preparedness and data quality by fostering trust and minimizing potential discomfort during the actual interviews and virtual group discussions.

As part of methodological rigor, reflections from the pre-test were documented in the researcher's reflexive journal, noting lessons learned, emotional responses, and emerging insights about how cultural sensitivity and question framing might affect participant engagement (Hoda, 2024). These insights informed final adjustments to both tools and strengthened the overall validity and reliability of the data collection process.

3.8 Data Collection Procedures

Data collection took place after informed consent. The process was designed to uphold the principles of respect, confidentiality, and cultural sensitivity while creating an environment that encouraged open dialogue and authentic sharing.

3.8.1. In-depth interview (IDI)

Semi-structured in-depth interviews were conducted with ten participants who met the inclusion criteria. Each session lasted between 45 to 60 minutes and took place at a location chosen by the participant, such as community centers like the library, private homes, ensuring safety and convenience.

At the beginning of each interview, participants were briefed about the study purpose, confidentiality measures, and their right to withdraw at any stage. Written informed consent was obtained prior to participation. The interviews followed the IDI guide (Appendix A), which explored participants' breastfeeding histories, confidence, and influencing factors.

Open-ended questions and follow-up probes were used to elicit detailed narratives, enabling participants to describe their lived experiences in their own words. The researcher adopted a reflexive and empathetic approach, actively listening and adapting to the emotional tone of the discussion.

All interviews were audio-recorded with participants' permission and supplemented with field notes capturing contextual details and non-verbal cues. Immediately after each interview, the researcher made detailed entries in the reflexive journal to record initial impressions, emotional reflections, and potential contextual information that could shape interpretation.

3.8.2. Focus Group Discussions (FGDs)

Two Focus Group Discussions (FGDs) were conducted virtually via Microsoft Teams with a total of seven participants (five in the first group and two in the second). These participants had

previously completed the individual interviews, which helped build rapport and comfort for collective dialogue.

The virtual format was chosen to provide a safe, accessible, and culturally sensitive environment for mothers to share their experiences while ensuring anonymity and confidentiality. Each participant used a pseudonym during login and discussion to maintain privacy. Conducting the FGDs online also accommodated participants' family and childcare responsibilities, reducing travel constraints and scheduling conflicts.

The first FGD lasted about 90 minutes and the second FGD lasted for approximately 60 minutes and followed the semi-structured FGD guide (Appendix B). The discussions encouraged participants to exchange ideas, identify shared challenges, and explore the social and cultural meanings of breastfeeding within their communities. The facilitator ensured equitable participation by gently prompting quieter members and maintaining a respectful and inclusive atmosphere.

Both FGDs were audio-recorded and transcribed verbatim, with additional notes taken to capture group dynamics and emotional cues. These discussions offered valuable collective insights, helping to identify patterns and divergences in the experiences of NCMAD in HRM.

3.8.3. Journaling

Throughout the study, the researcher maintained a reflexive journal to document observations, contextual insights, and analytical reflections. The journal included notes on participants' non-verbal cues, the interview environment, and the researcher's evolving interpretations. This practice

enhanced transparency and analytic depth by allowing continuous reflection on how personal experiences and assumptions could shape engagement with the data. The reflexive journal also served as an important record for validating decisions made during coding and theme development, contributing to the study's credibility and dependability (Bradshaw et al., 2017)

3.9. Quality Control

To ensure the credibility, dependability, and trustworthiness of the data collected, multiple quality control measures were integrated throughout the research process. These measures enhanced the validity of interpretations and ensured that findings authentically reflected the experiences of NCMAD in the HRM.

3.9.1 Member Checking

Member checking was employed throughout the research process to validate the accuracy of data and interpretations. After each interview, participants were invited to review the verbatim transcripts and brief summaries of their responses to confirm that their perspectives were captured accurately (Birt et al., 2016). They were encouraged to clarify or elaborate on any misrepresentations or missing details. This iterative engagement enhanced the credibility of the data and reinforced participants' ownership of their narratives.

3.9.2 Triangulation

Data triangulation was achieved using different methods—In-Depth Interviews (IDIs), and Focus Group Discussions (FGDs). The combination of these methods allowed for comparison and cross-verification of findings across different data sources. The IDIs provided in-depth individual

perspectives, the FGDs revealed collective and interactive dimensions, and the reflexive journal offered a researcher-centered account of the data collection process. Together, these sources enhanced the richness and depth of the study while minimizing the influence of researcher bias.

3.9.3 Memoing and Reflexive Journaling

Memoing and reflexive journaling were integral components of the data collection and analysis process. Memoing involved recording analytical insights, emerging patterns, and reflections immediately after each interview and FGD session. These memos captured both participant dynamics and researcher thought processes, supporting the systematic development of themes (Bradshaw et al., 2017).

The reflexive journal, maintained throughout the study, served as a tool for ongoing self-awareness. It allowed the researcher to examine how personal assumptions, emotions, and cultural background might influence interpretation. This continuous reflexivity helped maintain a transparent link between the raw data and analytical outcomes, thereby enhancing dependability and confirmability.

3.9.4 Rich and Thick Descriptions

To promote transferability, the research process was documented in detail, including participant recruitment, study context, and data collection settings. Rich, thick descriptions were maintained to convey the depth and complexity of participants' experiences. This approach enables other researchers and practitioners to determine the applicability of findings to similar populations or settings (Lincoln & Guba, 1985).

By combining these quality control measures, the study ensured methodological rigor and transparency at every stage, thereby reinforcing the trustworthiness and integrity of the findings.

3.10 Data Analysis

Data were analyzed using reflexive thematic analysis, guided by the six-phase framework developed by Braun and Clarke (2006, 2021). Reflexive thematic analysis was selected for its flexibility and suitability for exploring meaning, patterns, and experiences within qualitative data, particularly in studies focused on lived experiences and sociocultural contexts. This approach recognizes the active role of the researcher in knowledge construction and emphasizes interpretation as an integral part of the analytic process (Braun & Clarke, 2021).

The analysis aimed to generate themes that capture how newcomer mothers of African descent (NCMAD) construct, experience, and negotiate breastfeeding self-efficacy (BFSE) within their personal, cultural, and structural environments. A hybrid deductive-inductive reflexive thematic analysis was employed. Deductive analysis was informed by Dennis's Breastfeeding Self-Efficacy Theory (Dennis, 2003) and focused on exploring participants' experiences through the four sources of BFSE: mastery experiences, vicarious experiences, social support, and emotional and physiological states. The Socio-Ecological Model (Bronfenbrenner, 1977; McLeroy et al., 1988) informed the interpretation of contextual influences operating across individual, interpersonal, organizational, community, and policy levels. Simultaneously, inductive analysis allowed additional themes to emerge directly from participants' narratives without being constrained by the theoretical frameworks. This approach enabled the identification of findings that both aligned with

and extended beyond the predefined constructs of BSET, ensuring that participants' experiences remained central to the analysis.

The hybrid approach strengthened the analysis by balancing theory-informed interpretation with openness to unexpected findings. While deductive approaches may overlook experiences that fall outside predetermined theoretical constructs, inductive analysis facilitated the identification of novel, context-specific insights emerging directly from the data. Conversely, the deductive component provided theoretical guidance, enhanced conceptual coherence, and supported deeper interpretation of findings within established frameworks.

All interviews and focus group discussions were audio-recorded and transcribed verbatim. The researcher manually engaged with the data by repeatedly reading and re-reading transcripts to achieve deep familiarization with participants' accounts. Transcripts were reviewed for accuracy and completeness, and identifying information was removed to protect participant confidentiality. Pseudonyms were used throughout the analysis and reporting of findings.

Data analysis was conducted manually without the use of qualitative analysis software. Instead, the researcher relied on close reading of transcripts, handwritten and electronic notes, analytic memos, and iterative categorization of data segments. This approach facilitated close engagement with participants' narratives and supported nuanced interpretation of meaning, emotion, and context, consistent with qualitative research traditions that prioritize depth and contextual understanding (Braun & Clarke, 2021; Nowell et al., 2017).

3.10.1 Analytic Phases

Phase 1: Familiarization with the Data

The researcher immersed herself in the dataset by reading and re-reading transcripts, listening to audio recordings, and reviewing reflexive journal entries. Initial observations, recurring patterns, and potential areas of analytic interest were documented. This phase enabled a holistic understanding of participants' breastfeeding experiences and the contexts within which those experiences occurred.

Phase 2: Generating Initial Codes

Transcripts were examined line by line, and meaningful segments of data were identified and manually coded. Codes captured both semantic and latent meanings related to breastfeeding confidence, breastfeeding practices, challenges, support systems, emotional experiences, and contextual influences. Coding remained flexible and iterative, allowing multiple codes to be assigned to the same data segment where appropriate.

Phase 3: Searching for Themes

Codes were compared and grouped into preliminary themes and subthemes. This involved identifying relationships between codes and clustering them into broader patterns that reflected shared experiences across participants. Some themes were developed deductively based on the four sources of BFSE outlined in Dennis's theory, while others emerged inductively from participants' narratives. The inductive process enabled the identification of breastfeeding experiences, practices, techniques, and contextual influences that were not fully captured by the predefined BSET constructs. This ensured that both theory-informed and participant-driven understandings of BFSE were represented in the analysis.

Phase 4: Reviewing Themes

Preliminary themes were reviewed in relation to the coded data and the dataset as a whole to ensure internal coherence and clear distinctions between themes. Themes were refined, merged, reorganized or separated where necessary to ensure that they accurately reflected participants' experiences and addressed the study objectives. Throughout this phase, the researcher moved iteratively between the data, codes, themes, and theoretical frameworks.

Phase 5: Defining and Naming Themes

Each theme was clearly defined to articulate its central meaning, scope, and boundaries. Theme names were developed to be concise, descriptive, and analytically meaningful. The researcher selected illustrative participant quotes to exemplify each theme and preserve the authenticity of mothers' voices while supporting analytic interpretation.

Phase 6: Writing and Interpretation

The final themes were integrated into a coherent analytic narrative that addressed the study objectives and research questions. Findings were interpreted through the lens of Dennis's BFSE Theory and the Socio-Ecological Model. BSET informed the interpretation of BFSE-related experiences, while the SEM facilitated understanding of the broader social, cultural, healthcare, migration-related, and policy influences shaping breastfeeding confidence. Themes that emerged inductively were interpreted alongside, rather than forced within, the theoretical frameworks, allowing for a richer and more comprehensive understanding of participants' experiences.

3.10.2 Reflexivity in Data Analysis

Reflexivity was central to the analytic process. The researcher maintained a reflexive journal throughout data collection and analysis to document assumptions, emotional responses, methodological decisions, and evolving interpretations. Ongoing self-reflection helped ensure that findings remained grounded in participants' lived experiences rather than the researcher's preconceptions. Peer debriefing with qualitative research colleagues further supported critical reflection, challenged assumptions, and enhanced analytic rigor.

The iterative nature of reflexive thematic analysis allowed the researcher to move continuously between the data, codes, themes, reflexive insights, and theoretical perspectives. This process enhanced the depth, credibility, and contextual sensitivity of the analysis while ensuring that both participant voices and theoretical interpretations were meaningfully represented (Braun & Clarke, 2021).

3.11 Methodological Rigor

Methodological rigor was ensured by adhering to the four criteria of trustworthiness proposed by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability.

- **Credibility** was enhanced through prolonged engagement with the data, triangulation across interviews and focus group discussions, and member checking.
- **Transferability** was supported through rich, thick descriptions of participants' contexts and experiences.
- **Dependability** was strengthened by maintaining a clear audit trail of analytic decisions, reflexive notes, and theme development.

- **Confirmability** was supported through reflexive journaling and peer debriefing, ensuring that findings were grounded in the data rather than researcher bias.

Together, these strategies ensured that the analysis was systematic, transparent, and theoretically grounded.

3.12 Ethical Consideration

This study followed the ethical principles outlined in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2) (Canadian Institutes of Health Research, 2018). Ethical approval was obtained from the Mount Saint Vincent University Research Ethics Board before data collection.

Participants received written and verbal explanations of the study's purpose, procedures, and their rights, including voluntary participation and withdrawal without penalty. Written informed consent was obtained prior to all interviews and focus group discussions.

To ensure confidentiality, pseudonyms were used in transcripts and reports, and all identifiable information was removed immediately after transcription. Audio recordings and transcripts were securely stored on password-protected, encrypted devices, accessible only to the researcher. Consent forms and demographic data were stored separately to prevent identification.

All data will be retained for five years following publication and permanently deleted in accordance with Mount Saint Vincent University's data management policies.

Cultural sensitivity guided all interactions with participants. Interviews and FGDs were conducted in environments of participants' choosing to promote comfort and safety. Virtual FGDs on Microsoft Teams provided a secure and inclusive platform for participants to share experiences anonymously, reducing logistical and emotional barriers.

Participants were reminded that participation was voluntary and could be paused or discontinued at any time, ensuring respect for autonomy and emotional well-being. By upholding these ethical and cultural standards, the study-maintained integrity, trust, and participant dignity throughout the research process.

3.13 Chapter Summary

This chapter outlined the methodological framework for exploring BFSE among NCMAD in the HRM. It detailed the researcher's positionality, qualitative descriptive design, participant selection, and the multi-method approach involving in-depth interviews, focus group discussions, and reflexive journaling.

Data were analyzed using thematic analysis (Braun & Clarke, 2006; 2021) to identify recurring patterns and themes grounded in participants lived experiences. Dennis's Breastfeeding Self-Efficacy Theory (2003) and the Socio-Ecological Model (Bronfenbrenner, 1977; McLeroy et al., 1988) provided the theoretical foundation for exploring individual and contextual influences on BFSE.

Rigorous procedures including member checking, triangulation, audit trails, reflexivity, and ethical safeguards ensured the trustworthiness of the findings. Ethical approval, confidentiality measures, and culturally sensitive engagement practices further reinforced research integrity.

Overall, Chapter 3 established a transparent, reflexive, and culturally grounded methodology to explore the psychosocial and structural factors influencing BFSE among NCMAD in HRM. The next chapter presents the results and thematic analysis, highlighting participants' voices and the key themes that emerged from the data.

CHAPTER FOUR: FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the findings and discussions from the in-depth interviews (IDIs) and focus group discussions (FGDs) conducted with newcomer mothers of African descent (NCMAD) residing in the Halifax Regional Municipality (HRM).

The chapter begins with a description of the participants' socio-demographic characteristics, followed by the findings addressing the two study objectives:

1. To explore the breastfeeding self-efficacy experiences of newcomer mothers of African descent living in HRM and
2. To identify the structural factors influencing breastfeeding self-efficacy among newcomer mothers of African descent in HRM.

Discussions are integrated at the end of each sub-section to facilitate interpretation of the findings in relation to other existing literature, the Breastfeeding Self-Efficacy Theory (BSET), and the Socio-Ecological Model (SEM). This approach enabled the exploration of BFSE experiences and influencing factors among newcomer mothers of African descent in Halifax Regional Municipality within the context of existing evidence.

4.1 Demographic and socio-economic characteristics of the study participants

A total of ten NCMAD residing in the HRM participated in this study. All ten participants participated in individual in-depth interviews (IDIs), and seven of them also participated in virtual

focus group discussions (FGDs). The participants represented a diverse yet relatively homogenous group in terms of socio-economic and demographic characteristics (Table 4.1).

Table 4.1 Demographic and socio-economic characteristics of the participants

Demographic & socio-economic characteristics of the participants		**N= 10**	
Characteristic	**Category/Range**	**n**	**%**
Maternal age in complete years			
	20-25	1	10
	26-30	3	30
	31-35	2	20
	36-40	3	30
	41-45	1	10
Child's age in complete months			
	0-6	1	10
	7-12	2	20
	13-18	2	20
	19-24	5	50
Parity			
	Primiparous	7	70
	Multiparous	3	30
Relationship status			
	Married	9	90
	Single	1	10
Maternal occupation			
	Employed(white collar/healthcare)	7	70
	Student (part-time employed)	1	10
	No formal employment	1	10
	Self employed	1	10
Highest Education Completed			
	College diploma	1	10
	Undergraduate degree	6	60
	Graduate degree	3	30

Participants ranged in age from 20 to 45 years, with the majority (70%) being between ages 26 and 40 years. This reflected a population likely to have established life roles, including career responsibilities and family commitments, prior to migration.

The sample was highly educated, with 90% of participants having at least a university degree. Most participants (70%) were engaged in white-collar or healthcare-related employment, while others combined work with study, were self-employed, or were not formally employed. Employment has been shown to function as both a facilitator and a constraint for breastfeeding by providing financial stability and access to resources (Ogbuanu et al., 2011; Dinour & Szaro, 2017; Kim & Dee, 2009). However, it can introduce competing demands, including time constraints, early return to work, and reliance on expressed milk or formula supplementation (Rollins et al., 2016; Victora et al., 2016; Johnston & Esposito, 2020).

This socio-economic profile aligns with broader Canadian immigration trends, where newly arrived immigrants are often highly educated and selected through economic immigration pathways that prioritize professional qualifications and labour market readiness (Hou & Picot, 2016; Statistics Canada, 2021). National data indicate that a substantial proportion of working-age newcomers hold university degrees, with employment rates increasing alongside educational attainment (Statistics Canada, 2024). These structural factors help explain the high level of workforce participation observed among participants during the postpartum period.

Most participants (90%) were married, suggesting that breastfeeding experiences largely occurred within a shared caregiving context. However, the experience of the single participant highlighted the additional demands associated with independent parenting, particularly in the absence of immediate family support, which has implications for breastfeeding confidence and continuity.

In terms of parity, seven participants (70%) were primiparous, while three (30%) had previous childbirth experience. Mastery experience is a key determinant of breastfeeding self-efficacy (BFSE), as described in Dennis's Breastfeeding Self-Efficacy Theory (Dennis, 1999, 2003). With

respect to child age, a third were infants (less than 12 months of age), while half (50%) were between 19 and 24 months of age. This indicates that many participants were actively engaged in breastfeeding at the time of data collection or had recent breastfeeding experience.

Overall, the study participants can be characterized as socio-economically stable, highly educated, and actively engaged in both caregiving and, in many cases, professional roles. However, despite this relative stability, participants navigated complex and intersecting challenges related to migration, cultural adaptation, and healthcare access. These contextual factors provide an important backdrop for understanding how breastfeeding self-efficacy is developed, maintained, or challenged among NCMAD in HRM across individual, interpersonal, and structural levels.

4.2 Maternal Breastfeeding Self-Efficacy (BFSE) Experiences among NCMAD in HRM

This section explores the BFSE experiences among NCMAD in the Halifax Regional Municipality (HRM), post migration. The BFSE experiences are presented by breastfeeding practices (breastfeeding initiation, exclusive breastfeeding, and breastfeeding continuation, and [non]responsive breastfeeding), and breastfeeding techniques (positioning and latching).

Findings related to breastfeeding initiation, exclusive breastfeeding, and continuation are organized using pre-determined (deductive) themes corresponding to the Breastfeeding Self-Efficacy Theory (BSET) constructs of mastery experiences, vicarious experiences, social support, and emotional and physiological states. Emerging themes are also included to facilitate a broader understanding of the BFSE experiences beyond the 4 BFSE constructs. In contrast, findings relating to breastfeeding approaches, breastfeeding techniques, and factors influencing BFSE emerged inductively from the data and are presented as emerging themes that capture participants' experiences beyond the predefined BSET constructs.

To facilitate interpretation and integration of the findings, discussion of the results is incorporated at the end of each findings subsection. This approach allows participants' experiences to be interpreted alongside relevant literature and theoretical perspectives while maintaining a clear connection between the findings and their implications for breastfeeding self-efficacy among NCMAD in HRM.

4.2.1 BFSE experiences with Breastfeeding Initiation

Breastfeeding initiation was a highly intentional and meaningful process for the NCMAD in this study, with most mothers initiating within the first hour after delivery or shortly thereafter, as recommended by WHO and the Baby-Friendly Initiative (BFI) (World Health Organization & United Nations Children's Fund, 2018; World Health Organization, 2023).

80 percent of the mothers in the study reported that they initiated breastfeeding immediately after delivery, while two mothers reported a four and a three-hour delay in initiation because of caesarean deliveries, with one having her baby being admitted to the neonatal intensive care unit (NICU).

During initiation of breastfeeding, healthcare providers were reported to have provided support and guidance for immediate skin-to-skin contact, in line with BFI protocols.

Our findings indicate that Maternal BFSE experiences at initiation varied by mastery experiences, vicarious experiences, social support, and emotional and physiological states, as described in the coming sections.

4.2.1.1 Mastery experiences and breastfeeding initiation

In the Breastfeeding Self-Efficacy Theory (BSET), previous breastfeeding experiences, referred to as mastery experiences, including both successes and challenges, shape mothers' confidence, expectations, coping strategies, and perceived ability to breastfeed in subsequent occasions (Dennis, 1999; Dennis, 2003). In this study, mastery was experienced in different ways.

Multiparous mothers, who drew on prior breastfeeding experiences mostly reported that they approached breastfeeding initiation with greater assurance and confidence. For these mothers, previous successful breastfeeding experiences served as a strong foundation for this early confidence. One participant explained, *"he is my third child, and I have never had any issue with breastfeeding, that is a plus and gave me confidence to want to initiate and breastfeed again"* - **Mother$_3$, IDI$_3$**. Similarly, another mother noted, *"if this baby was to be my first and with the challenges I faced, I would have given up on breastfeeding, but because I was able to successfully do one back home and I saw the effect on my boy, it increased my determination, it increased my confidence"* - **Mother$_8$, IDI$_8$**.

These prior experiences were reported to reduce uncertainty and facilitated the uptake of health facility support for early initiation, enabling mothers to begin breastfeeding almost immediately after delivery. Several mothers described initiating breastfeeding within minutes of birth. For instance, one participant stated, *"I initiated immediately, I was still in the delivery room… they gave me my babies, and I put them on my chest"* - **Mother$_2$, IDI$_2$**. Another mother reported, *"immediately she came out, she latched on … we did skin to skin within one hour"* - **Mother$_1$, IDI$_1$**.

On the other hand, among primiparous (first time) mothers, the absence of prior mastery experiences contributed to relatively lower initial confidence, accompanied by uncertainty and difficulty in the early postpartum period. *One mother explained, "my breastfeeding experience was challenging at the initial stage, I was clueless, and was struggling, it was so painful because I didn't know how to make my baby latch on the breast"* - **Mother$_4$, IDI$_4$.** Similarly, another mother stated, *"I wasn't lactating, it was really difficult… at first, it was a bad experience"* - **Mother$_5$, IDI$_5$,** while another mother described **"***it was a little bit difficult for me as a first-time mom"* - **Mother$_{10}$, IDI$_{10}$.**

Some mothers described entering breastfeeding with a sense of preparedness that was later challenged by their lived experience. One participant noted, *"I thought I was confident with breastfeeding before I gave birth, but when I gave birth, the reality dawned on me… I really thought I had it all figured out but the reverse was the case"*- **Mother$_4$, IDI$_4$.** Similarly, another mother reflected, "*I felt it was going to be easy … just put him on the breast and he sucks… but it was more challenging than I thought"* **- Mother$_{10}$, IDI$_{10}$.**

These findings highlight a gap between anticipated and actual breastfeeding experiences, particularly among first-time mothers.

Despite these initial challenges, confidence among first-time mothers was not static but developed progressively over time through repeated practice and learning. Several participants described how their confidence improved as they gained hands-on experience and received guidance from others. For example, one mother stated, *"at the beginning I was a novice, but with time, I gained a lot of experience…"* - **Mother$_9$, IDI$_9$**. Another mother explained that although breastfeeding was

initially painful and discouraging, *"the moment I started getting a hang of it, I was feeling more comfortable and confident"* - **Mother$_4$, IDI$_4$**.

This progression illustrates the dynamic nature of BFSE, where confidence is built through ongoing interaction with the breastfeeding process rather than being fully established at initiation. It also reflects Dennis's (2003) assertion that mastery experiences are strengthened through repeated successful performance, even when initial attempts are challenging.

Notably, some contextual circumstances influenced the timing of breastfeeding initiation and mastery experiences. For instance, among the mothers who had hours' delay in breastfeeding initiation. Although these delays were influenced by clinical circumstances rather than confidence alone, they highlight how mastery experiences are shaped not only by prior knowledge and experience but also by the conditions surrounding childbirth. One mother explained the reason for delayed breastfeeding initiation, *"because I had a CS [Caesarian delivery], they will first take you to the recovery room … before they take you to the ward where the baby is"* - **Mother$_3$, IDI$_3$**. Another mother stated, "*it was about four hours… because of the caesarean section… and he was also taken to the NICU …I didn't have him immediately to myself"* - **Mother$_{10}$, IDI$_{10}$**. Although these delays were influenced by clinical factors rather than maternal confidence, they highlight how mastery experiences are shaped not only by prior knowledge and experience but also by the conditions surrounding childbirth.

The findings suggest that mastery experiences were a major source of confidence during breastfeeding initiation. Multiparous mothers often entered the postpartum period with greater familiarity, less uncertainty, and stronger confidence based on previous breastfeeding experiences, while first-time mothers generally developed confidence more gradually through practice, support,

and experiential learning. These findings are consistent with Dennis's Breastfeeding Self-Efficacy Theory, which identifies prior performance accomplishments as the most influential source of efficacy beliefs (Dennis, 1999, 2003). They also align with previous studies showing that mothers with prior breastfeeding experience tend to report higher breastfeeding self-efficacy and are more likely to initiate breastfeeding with greater confidence and ease than first-time mothers (Boateng et al., 2019; Tuthill et al., 2016; Brockway et al., 2017). However, the findings further suggest that BFSE was not solely determined by previous breastfeeding experience. Rather, confidence was continuously shaped through mothers' interpretation of both successful and challenging breastfeeding encounters within their social and contextual environments.

It is important to note that much of the existing literature examining mastery experiences and breastfeeding self-efficacy has been conducted among predominantly non-immigrant or general maternal populations within Western contexts. These studies often assume continuity in reproductive experiences, familiarity with healthcare systems, and stable access to support networks across pregnancies. In contrast, for newcomer mothers, previous breastfeeding experiences may have occurred within different healthcare, cultural, and social environments, which may not fully translate to the context of childbirth and breastfeeding in Canada. The findings of this study therefore highlight that mastery experiences are not simply transferred across contexts but are reinterpreted and reshaped within new and unfamiliar environments, reinforcing the importance of examining breastfeeding self-efficacy within migration contexts.

In the present study, prior mastery did not simply increase confidence in an abstract sense; it appeared to make mothers more ready to engage with immediate breastfeeding after delivery and more responsive to available support in the health facility.

By contrast, the experiences of primiparous mothers suggest that confidence at breastfeeding initiation was often less established and developed largely through direct engagement with the breastfeeding process. Unlike multiparous mothers who could draw on previous breastfeeding experiences, first-time mothers were learning new skills and interpreting infant feeding behaviours for the first time. This finding is supported by previous studies showing that first-time mothers often report lower breastfeeding self-efficacy during the early postpartum period and rely more heavily on experiential learning to build confidence (Blyth et al., 2002; McQueen et al., 2011; Otsuka et al., 2014; Kingston et al., 2020; Shorey et al., 2018). In the present study, confidence appeared to strengthen as mothers accumulated breastfeeding experience and became more familiar with infant feeding patterns, positioning, latching, and other practical aspects of breastfeeding. This finding reinforces Dennis's conceptualization of mastery experiences as confidence gained through successful performance and suggests that BFSE can begin to develop rapidly during the early postpartum period as mothers acquire new breastfeeding skills and experiences.

The progression of confidence over time among first-time mothers likely reflects the interaction between individual learning and the maternity care environment in which initiation occurred. Since all mothers delivered in Baby-Friendly Initiative-certified facilities, they were exposed to structured early breastfeeding support, skin-to-skin contact, and practical guidance immediately after birth. These conditions may have helped transform difficult first attempts into early success experiences, which are central to the development of BFSE. This interpretation is consistent with evidence that timely professional breastfeeding support improves initiation outcomes and strengthens maternal confidence, particularly among primiparous women (WHO & UNICEF, 2018; Pérez-Escamilla et al., 2016; McFadden et al., 2017; Johnston & Esposito, 2020; Brockway

et al., 2017). Thus, mastery in this context was not solely retrospective, based on past childbearing, but also actively constructed through early postpartum encounters within supportive clinical settings.

The migration context may also help explain why these findings took the form they did. For newcomer mothers of African descent, migration may have shaped initiation by placing breastfeeding within an unfamiliar institutional and cultural environment. Mothers who had migrated into Canada were not only giving birth; they were also navigating new hospital routines, clinical expectations, communication styles, and postpartum care pathways that may have differed from what they knew from their countries of origin. Even where breastfeeding was culturally valued and expected, the process of initiating it in a new healthcare system may have required adjustment and reinterpretation. This could partly explain why first-time mothers described a gap between what they expected and what they experienced. Their expectations may have been informed by culturally familiar understandings of breastfeeding, while their actual initiation occurred within a biomedical setting governed by different procedures, timelines, and care interactions. This is consistent with immigrant maternal health research showing that migration often changes how women encounter maternity services, health information, and postpartum practices, even when their underlying breastfeeding intentions remain strong (Groleau et al., 2016; Schmied et al., 2012; Dennis et al., 2019; Chowdhury et al., 2021; Odeniyi et al., 2020). In this sense, migration may have influenced not whether mothers wanted to breastfeed, but how confidently they were able to translate that intention into immediate practice within a new social and institutional context.

Clinical circumstances also shaped breastfeeding initiation in important ways. Mothers who experienced caesarean birth or neonatal admission described delayed initiation, not because they

lacked confidence, but because childbirth-related conditions interrupted immediate access to the infant. This is a critical distinction. The findings suggest that early mastery is not determined by maternal disposition alone, but also by whether circumstances permit timely contact and opportunity for first successful breastfeeding. This pattern is well documented in the literature. Caesarean delivery has been associated with delayed initiation, reduced early skin-to-skin contact, and more difficult establishment of breastfeeding, while neonatal complications can interrupt the first opportunities for successful latching and maternal confidence-building (Prior et al., 2012; Otsuka et al., 2015; Boateng et al., 2018; Alemayehu et al., 2020; Esteves et al., 2014). In the present study, such delays did not necessarily eliminate BFSE, but they disrupted the immediate conditions under which early mastery could be formed.

These findings have important implications for practice. First, they reinforce the need for targeted, hands-on breastfeeding support for primiparous mothers, especially in the first hours after birth when confidence is still emerging and early experiences may set the tone for subsequent breastfeeding. Second, they highlight the importance of tailored support for mothers whose initiation is affected by clinical circumstances such as caesarean birth or neonatal admission. For these mothers, proactive lactation support, facilitated skin-to-skin contact where possible, and explicit reassurance that delayed initiation does not equate to breastfeeding failure may help protect BFSE. Third, in the case of newcomer mothers, initiation support should recognize that breastfeeding confidence is being formed within a new healthcare and cultural environment. Clear, practical, and culturally responsive guidance may help mothers translate strong breastfeeding intentions into positive early mastery experiences. These implications are supported by literature emphasizing early lactation assistance, continuity of postnatal breastfeeding care, and context-sensitive maternity support for mothers at risk of delayed initiation or lower early confidence

(McFadden et al., 2017; WHO & UNICEF, 2018; Patterson et al., 2018; Kingston et al., 2020; Dennis et al., 2019).

Overall, the findings of this and other studies show that mastery experiences are not only a reflection of past breastfeeding success, but also a process of confidence formation shaped by childbirth circumstances, healthcare environments, and migration-related adaptation. For multiparous mothers, prior breastfeeding provided an important basis for confidence at initiation. For primiparous mothers, confidence developed more gradually through practice, support, and repetition. Taken together, these findings reinforce Dennis's argument that mastery is central to BFSE, while also demonstrating that the conditions under which mastery develops are contextual.

4.2.1.2 Vicarious experiences and breastfeeding initiation

In the Breastfeeding Self-Efficacy Theory (BSET), vicarious experiences refer to learning and developing confidence through observing others perform a behaviour (Dennis, 1999; Dennis, 2003; Brockway et al., 2017). Within the context of breastfeeding self-efficacy (BFSE), this involves exposure to other mothers' breastfeeding practices, outcomes, and challenges, which can shape expectations and influence confidence prior to or during breastfeeding initiation.

In this study, vicarious experiences were present among participants; however, their influence on BFSE varied depending on the nature and depth of observation, as well as how mothers interpreted these experiences. For some mothers, observing breastfeeding within family or social contexts positively influenced their confidence and strengthened their intention to breastfeed. Participants who had observed breastfeeding among siblings or close contacts described how witnessing healthy, breastfed infants reinforced their beliefs about the benefits of breastfeeding. One mother explained that seeing the physical health and strength of a breastfed child shaped her decision early

on: *"I saw the benefits, the baby was strong, I knew right from then that I was going to breastfeed my child"* - **Mother$_6$, IDI$_6$.** Similarly, another participant noted that observing healthy and thriving breastfed babies contributed to her confidence and expectations: *"most of those babies always look good, healthy and everybody wants that for their baby"* - **Mother$_3$, IDI$_3$.**

In addition to informal observation, professional exposure also served as a source of vicarious experience. One participant described how her previous role in a neonatal care setting, where she supported and educated mothers on breastfeeding, influenced her confidence and commitment: *"I am a nurse and I was one of those that would encourage mothers to breastfeed, that made me make up my mind"* - **Mother$_8$, IDI$_8$.** These findings suggest that repeated exposure to positive breastfeeding practices can strengthen mothers' beliefs in their ability to breastfeed successfully.

Another source of vicarious experiences was digital and online exposure. Some mothers described learning about breastfeeding through videos and online platforms, which provided opportunities to observe breastfeeding practices beyond their immediate social environment. One participant explained, *"...with time, I gained a lot of experience… I watched different videos, I asked people…"* - **Mother$_9$,IDI$_9$.**"

However, vicarious experiences did not uniformly translate into increased confidence. For some mothers, observational exposure was limited or lacked sufficient depth to influence their breastfeeding expectations. One participant explained that although she lived with someone who breastfed, she did not closely observe the process and therefore did not feel influenced: *"I gave her privacy, I wasn't observing what she was doing in detail, so I don't think it had that influence on me"* - **Mother$_9$, IDI$_9$.**

Additionally, some mothers reported exposure to mixed or negative breastfeeding experiences, which introduced uncertainty. For example, one participant described both positive and challenging observations: *"the way the baby was sucking captivated me, but I also saw children biting their mothers… so it's like two sides to it"* - **Mother$_5$, IDI$_5$**. Another participant noted that her observations initially made breastfeeding appear difficult and intimidating. These findings highlight that vicarious experiences can have both positive and negative influences on confidence, depending on what is observed and how it is interpreted.

An important observation in this study was that vicarious experiences often provided an incomplete representation of breastfeeding. Some participants indicated that the challenges associated with breastfeeding were not openly discussed or visible by observation, which limited the usefulness of these experiences in preparing them for actual practice. One mother noted that *"mothers tend to hide the struggle, until you experience it yourself"* - **Mother$_9$, IDI$_9$**. Similarly, another mother, who had lived with her sister during a five-month breastfeeding period, described how this exposure shaped her expectations: *"I stayed with my elder sister when she breastfed for like five months… it was not even like a stressful experience for her… so I just thought I could handle it right, until I kind of got into it."* - **Mother$_4$, IDI$_4$**.

This suggests that while vicarious learning may shape initial expectations, it may also contribute to unrealistic perceptions of breastfeeding when difficulties are not fully acknowledged.

Overall, the findings indicate that vicarious experiences played a variable role in shaping BFSE during breastfeeding initiation. While positive observations reinforced confidence and intentions for some mothers, others experienced limited or conflicting influence.

These findings are consistent with the Breastfeeding Self-Efficacy Theory, which identifies vicarious experience as an important but less influential source of self-efficacy compared to mastery experiences (Bandura, 1997; Dennis, 1999; Dennis, 2003). Several studies have shown that observing successful breastfeeding behaviours can enhance maternal confidence and strengthen breastfeeding intentions, particularly when the observed individuals are perceived as relatable (Blyth et al., 2002; Dennis et al., 2019; Ingram et al., 2015; Kingston et al., 2020; Shorey et al., 2018; Hannula et al., 2014).

However, the findings of this study suggest that the influence of vicarious experiences is not always straightforward. While some participants reported increased confidence following positive observations, others described limited or even negative effects. This contrasts with studies that report a more consistently positive relationship between observational learning and breastfeeding self-efficacy (Brockway et al., 2017; Ingram et al., 2015; McQueen et al., 2011; Tuthill et al., 2016).

It is important to note that much of the existing literature examining vicarious experiences and breastfeeding self-efficacy has been conducted among predominantly non-immigrant or general maternal populations within Western contexts. These studies often assume stable access to breastfeeding role models and opportunities for observational learning within familiar social environments. In contrast, newcomer mothers may experience disruptions in these informal learning pathways due to migration, changes in social networks, and differences in cultural norms surrounding breastfeeding visibility. The variability observed in this study therefore reflects the unique contextual realities of newcomer mothers of African descent and highlights the importance of examining vicarious experiences within migration contexts, where access to meaningful and realistic observational learning may be limited or transformed.

One possible explanation for this difference lies in the nature of the observational context. In many previous studies, vicarious experiences were reported to occur within structured settings such as antenatal education programs or peer support interventions, where breastfeeding is actively demonstrated and explained (WHO & UNICEF, 2018; McFadden et al., 2017; Pérez-Escamilla et al., 2016). In contrast, the experiences described in this study were largely informal and unstructured, often limited to partial observation within family or social environments.

In addition, the finding that vicarious experiences included digital and online platforms, (videos), which were outside mothers' immediate social networks, is not unique to this study. Emerging literature suggests that digital media and online resources are increasingly important sources of breastfeeding information and observational learning (Shorey et al., 2018; Kingston et al., 2020; Wong et al., 2021). However, similar to informal in-person observation, such exposure may present simplified or idealized representations of breastfeeding, often focusing on technique while omitting the complexities and challenges involved. As a result, while online videos may enhance familiarity and initial understanding, they may not fully prepare mothers for the embodied and often unpredictable realities of breastfeeding initiation.

This difference suggests that not all forms of observational exposure are equally effective in building confidence. In this study, mothers often observed breastfeeding outcomes, such as healthy infants, without fully understanding the processes, techniques, or challenges involved. This aligns with research indicating that incomplete or idealized exposure to breastfeeding can lead to unrealistic expectations and reduced confidence when difficulties are encountered (Brown, 2014; Fox et al., 2015; Otsuka et al., 2014; Thomson et al., 2015; Jackson et al., 2020).

The tendency for mothers to conceal breastfeeding challenges, as reported by participants, may further contribute to this gap between expectation and experience.

The influence of vicarious experiences can also be understood within the Socio-Ecological Model. At the interpersonal level, family members, peers, and close social networks serve as key sources of observational learning. However, the extent to which these experiences influence BFSE depends on the quality of interaction and the openness with which breastfeeding practices, including challenges, are shared. In this study, limited engagement and restricted visibility reduced the depth of learning and, consequently, the impact on confidence.

At the community and cultural levels, norms surrounding breastfeeding visibility and privacy further shaped these experiences. In many contexts, breastfeeding challenges are not openly discussed, which limits opportunities for realistic observational learning. This is consistent with studies showing that cultural norms influence how breastfeeding knowledge is shared and understood within communities (Groleau et al., 2016; Rollins et al., 2016; Schmied et al., 2012; Sriraman et al., 2018; Aubel, 2012).

For newcomer mothers of African descent, these dynamics may be further influenced by migration. While breastfeeding is often culturally normative in many African settings, relocation to Canada may alter the visibility and accessibility of breastfeeding experiences. Changes in social networks and reduced access to familiar role models may limit opportunities for meaningful observational learning. This is supported by research indicating that migration can disrupt traditional sources of knowledge and informal learning (Chowdhury et al., 2021; Dennis et al., 2019; Higginbottom et al., 2015; Odeniyi et al., 2020; Groleau et al., 2013).

In this study, such disruptions may help explain why vicarious experiences were sometimes insufficient to fully prepare mothers for breastfeeding initiation.

These findings have important implications for practice. First, they suggest that passive observation alone is insufficient to build strong breastfeeding confidence, particularly for first-time mothers. Structured opportunities for observational learning, such as antenatal education, peer support groups, and breastfeeding demonstrations, may provide more comprehensive and realistic preparation (McFadden et al., 2017; WHO & UNICEF, 2018; Ingram et al., 2015). Second, there is a need to normalize discussions around breastfeeding challenges, so that mothers are better prepared for the realities of initiation. Third, for newcomer mothers, culturally appropriate education that bridges prior knowledge with the realities of the Canadian healthcare system may enhance the effectiveness of vicarious learning. Finally, given the growing role of digital platforms, healthcare providers may also consider guiding mothers toward credible and evidence-based online breastfeeding resources to complement in-person support.

Overall, the findings demonstrate that vicarious experiences contributed to BFSE during breastfeeding initiation, but in a less consistent and more context-dependent manner than mastery experiences. While positive observations reinforced confidence and intention, incomplete or conflicting experiences limited their effectiveness. These findings highlight that vicarious learning alone is insufficient to sustain breastfeeding confidence and should be supported by direct experience and appropriate social and structural support.

4.2.1.3 Social Support and breastfeeding initiation

In the Breastfeeding Self-Efficacy Theory (BSET), social support contributes to breastfeeding self-efficacy (BFSE) through verbal persuasion, emotional reassurance, and practical assistance, all of

which shape mothers' confidence in their ability to initiate and sustain breastfeeding (Bandura, 1997; Dennis, 1999; Dennis, 2003; Kingston et al., 2020). In this study, social support emerged as a critical factor influencing BFSE during breastfeeding initiation among NCMAD.

Mothers described varying levels of support, ranging from strong and consistent support to limited or no support. This support was primarily from the participants' mothers, partners, friends, and healthcare providers, and this influenced how confidently and effectively mothers -initiated breastfeeding in the immediate postpartum period.

For mothers who had support, breastfeeding initiation was experienced as more manageable, even in the presence of pain, uncertainty, or technical difficulty.

Family (mainly participants' mothers and partners) and friends were a key source of support for mothers during breastfeeding initiation in the immediate postpartum period. Family support entailed emotional encouragement, assistance with household responsibilities, shared caregiving, which enabled mothers focus on breastfeeding.

One mother explained how her mother and husband created an enabling environment for breastfeeding: *"My mom was here, she was really a support system, my husband was there too* - **Mother$_2$, IDI$_2$**. Similarly, another participant described support in terms of reduced competing demands: *"Some other people being able to do other things [household chores] means support to me, I have time to breastfeed him when he needs to be breastfed"* - **Mother$_3$, IDI$_3$**. For some mothers, support was essential for persistence through early pain and difficulty. As one participant stated: *"If I did not have the support that the nurses, my mom gave me, the pain that I went through, the first few weeks of breastfeeding I don't think I would have continued… they were like no, just do it this way, do it that way, and that was how I just continued"* - **Mother$_4$, IDI$_4$**. These accounts

indicate that support strengthened BFSE by reducing stress, providing hands-on guidance, and reinforcing mothers' belief in their ability to breastfeed successfully during initiation.

In contrast, mothers who had limited family/friend support described breastfeeding initiation as more physically and emotionally demanding. The absence of experienced caregivers, particularly older female relatives was identified as a key challenge. One mother explained: *"My mom was not around, no elderly person was around me, it was only me and my husband and God"* - **Mother$_7$, IDI$_7$**. Similarly, another participant described the difficulty of navigating breastfeeding in the absence of support, stating, *"breastfeeding is challenging, especially as a new immigrant with no help, it was just me, my husband, a toddler, and a newborn. My husband had to go back to work as early as the second day that we were discharged from the hospital"* - **Mother$_8$, IDI$_8$**.

The other key source of support was those from healthcare providers, especially from nurses, was widely described as instrumental in shaping early breastfeeding confidence, mastery, and breastfeeding techniques. Mothers consistently reported that nurses provided practical demonstrations on positioning and latching, which helped mothers overcome initial challenges. One first-time mother reflected: *"I thought it was going to be easy, but it was more challenging than I thought… with the help of one of the nurses who came and showed me how to go about it, it became seamless over time"* - **Mother$_{10}$, IDI$_{10}$**. Mothers reported that once they indicated their intention to breastfeed, healthcare providers provided immediate support to initiate breastfeeding. One participant explained: *"They'll ask you in the hospital if you want to breastfeed or use formula, but once you say breastfeeding, they help you immediately"* - **Mother$_9$, FGD$_2$**. Another mother explained that immediately after delivery right there in the delivery room, they will ask if you want to breastfeed, "*they just asked me if I want to breastfeed my babies, I should start*

trying…I was still in the delivery room. They gave me my babies, and I put them on my chest" - **Mother$_2$, IDI$_2$**.

Health facility support was especially significant for mothers who had limited family/friend support. A mother without a lot of family in Canada described how she depended on hospital-based support to learn breastfeeding: *"most of the training I got was through the help of the nurses in the hospital… they trained me… for like 2–3 weeks I wasn't getting it right at all"* - **Mother$_7$, IDI$_7$**. These experiences suggest that where family-based support was absent, healthcare providers played a central role in facilitating breastfeeding initiation, particularly for first-time mothers.

However, healthcare support was not experienced uniformly. Some mothers reported gaps in follow-up or limited engagement from the health system, leading them to rely more on informal support networks. One participant noted: *"For health sector, no… I didn't really get much benefit from them… but from family, friends, and everything, I got enough support… if I was to settle for the health sector, probably… I would have been giving her formula"* - **Mother$_5$, IDI$_5$**. This variation indicates that the effectiveness of healthcare support depended on its consistency, responsiveness, and alignment with mothers' needs during the early postpartum period.

An important dimension of healthcare support relates to the timing of discharge following caesarean delivery, which in some cases could be as short as one day. One mother described being discharged shortly after surgery into a setting with significant caregiving demands and limited support: *"I had CS [caesarean section] done on Friday, discharged Saturday… by Sunday my husband started work… I got up myself, making my own food… it was hard"* - **Mother$_8$, IDI$_8$**. She later explained how stress affected her milk production: *"I think around the second week… the*

stress got to me, and I was not lactating well… my husband came in at that point, and this allowed me to rest" - **Mother$_8$, IDI$_8$**.

This finding suggests that discharge following caesarean delivery within a day or so may undermine optimal establishment of the breastfeeding initiation process when adequate post-discharge support is not available. While early discharge may be clinically appropriate for stable mothers, these accounts indicate that, in contexts where practical and emotional support are limited, it may increase physical strain and interfere with early breastfeeding experiences.

The importance of support from both family and healthcare providers also emerged. Both forms of support were necessary for her to continue: *"If I do not have the support that the nurses, my mom gave me… I don't think I would have continued"* - **Mother$_4$, IDI$_4$**. Another participant highlighted the combined role of professional and familial guidance, stating, *"the nurses did a good job by showing me other techniques of breastfeeding the babies, plus the ones that I know from my parents, with those skills I am confident"* - **Mother$_2$, IDI$_2$**.

Notably, some mothers also highlighted that support was most beneficial when it aligned with their preferences and preserved their autonomy. One participant emphasized: *"When you're getting support, sometimes people will want to impose their views on you… you have to be strong as a mom… I need the support that I want, not the one you want to give"* - **Mother$_1$, IDI$_1$**.

This suggests that support functioned most effectively when it was collaborative and responsive rather than directive.

Overall, the findings demonstrate that social support played a central role in shaping BFSE during breastfeeding initiation. Mothers who received practical assistance, emotional encouragement, and technical guidance described more confident and manageable initiation experiences, while those with limited or inconsistent support faced greater challenges. These patterns indicate that social support directly influenced not only mothers' overall breastfeeding experiences but also how confidently and effectively breastfeeding was initiated.

The findings suggest that social support was a key determinant of BFSE during breastfeeding initiation, primarily through emotional reassurance, practical assistance, and technical guidance. Within the Socio-Ecological Model (SEM), these forms of support operated across interacting levels. At the interpersonal level, mothers, partners, and friends provided hands-on assistance, encouragement, and relief from competing demands. At the organizational level, healthcare providers, particularly nurses, supported early breastfeeding through instruction and guidance. Together, these levels shaped the conditions under which breastfeeding initiation occurred, either reinforcing or constraining mothers' confidence.

Importantly, the findings show that social support influenced BFSE not only through its presence, but through its timing, quality, and responsiveness during the immediate postpartum period. For mothers who received timely, hands-on, and affirming support, early breastfeeding challenges such as pain, positioning difficulties, and uncertainty were more effectively managed, allowing confidence to develop quickly. This aligns with Dennis's Breastfeeding Self-Efficacy Theory, which identifies verbal persuasion and supportive feedback as key sources of efficacy beliefs, particularly when mothers are still forming early breastfeeding skills (Dennis, 1999, 2003).

The prominent role of healthcare providers in this study reflects the structured and responsive nature of breastfeeding support within Baby-Friendly Initiative (BFI)-aligned facilities (WHO & UNICEF, 2018). The findings indicate that once mothers expressed the intention to breastfeed, support for initiation was immediate and action-oriented, suggesting that breastfeeding was actively facilitated rather than left to maternal effort alone. This early responsiveness appears to have reduced hesitation and supported timely initiation, particularly for first-time mothers who required practical guidance.

This aligns with global evidence showing that BFI practices, including immediate assistance with breastfeeding initiation and hands-on support, significantly improve early breastfeeding outcomes and maternal confidence (WHO & UNICEF, 2018; Pérez-Escamilla et al., 2016; McFadden et al., 2017; Brockway et al., 2017; Victora et al., 2016).

However, the findings also reveal variation in the continuity of healthcare support beyond initial initiation. While some mothers described strong guidance during the immediate postpartum period, others reported limited follow-up or inconsistent engagement. This partial continuity helps explain why some mothers relied more heavily on informal networks such as family and friends. Similar gaps in postnatal breastfeeding support have been reported in Canadian and international literature, where early hospital-based success is not always sustained due to limited community follow-up (McFadden et al., 2017; Kingston et al., 2020; Dennis et al., 2019; Chowdhury et al., 2021; Brown & Davies, 2014).

The findings in this study therefore both align with and extend existing literature by showing that while institutional support may be strong at initiation, its uneven continuation can shift the burden of support back to mothers and their immediate networks. This finding underscores the importance of Step 10 of the Baby-Friendly Hospital Initiative, which emphasizes the need for coordinated,

community-based breastfeeding support and continuity of care after discharge, ensuring that mothers are referred to appropriate services and support networks to sustain breastfeeding beyond the hospital setting (WHO & UNICEF, 2018). Without this continuity, early gains achieved through hospital-based support may not be sustained, particularly among mothers who rely on informal networks in the absence of structured follow-up (WHO & UNICEF, 2018).

The contrast between mothers who had strong interpersonal support and those with limited support further explains differences in early breastfeeding experiences. Mothers with family and partner support described initiation as more manageable because caregiving responsibilities were shared and guidance was readily available. This is consistent with studies showing that emotional and practical support from close family members enhances BFSE and facilitates breastfeeding initiation (Emmott & Mace, 2015; Ogbo et al., 2018; Tadesse et al., 2021; Kingston et al., 2020; Brockway et al., 2017). In contrast, mothers with limited support experienced greater physical and emotional strain, particularly when they were also navigating first-time motherhood or recovery from childbirth.

However, a key distinction in this study is that even in the absence of strong family support, mothers did not necessarily abandon breastfeeding. Instead, they adapted by relying on healthcare providers, partners, and personal determination. This differs slightly from some studies in which limited support is more directly associated with early cessation (Dennis et al., 2019; Shorey et al., 2018). The findings here suggest that among NCMAD, strong cultural commitment to breastfeeding and personal determination may buffer the negative effects of limited support during initiation. This highlights the importance of considering cultural context when interpreting BFSE outcomes.

The findings also provide important insight into how structural conditions intersect with social support during initiation. The timing of discharge following caesarean delivery illustrates how support gaps can intensify breastfeeding challenges, when mothers leave hospital shortly after delivery. While early discharge may be clinically appropriate in well-supported contexts, the findings suggest that when mothers return to environments with limited assistance, physical recovery, infant care, and breastfeeding initiation become more difficult to manage simultaneously. This aligns with literature showing that caesarean birth is associated with delayed initiation and greater breastfeeding difficulty due to pain, fatigue, and reduced mobility (Prior et al., 2012; Otsuka et al., 2015; Boateng et al., 2018; Esteves et al., 2014; Hobbs et al., 2016). However, this study extends existing evidence by showing that the impact of caesarean delivery is not only physiological but also relational and contextual, depending on the level of support available after discharge.

Another important finding is that social support was not uniformly beneficial. Some mothers described the need to filter or negotiate the support they received, particularly when it conflicted with their preferences. This suggests that support must be understood not simply as provision, but as a relational process shaped by maternal agency. This nuance is less emphasized in existing literature, which often assumes that more support is inherently beneficial. The present findings instead indicate that the effectiveness of support depends on whether it is perceived as respectful, collaborative, and aligned with mothers' needs.

Taken together, these findings suggest that the observed patterns are shaped by the interaction of multiple contextual factors. The structured support available within Canadian healthcare settings supports early initiation, while variations in follow-up care create uneven experiences. At the same time, migration-related separation from extended family networks alters traditional support

systems, requiring mothers to reconstruct support through partners, friends, and institutional resources. Cultural commitment to breastfeeding further shapes how mothers respond to these conditions, often sustaining confidence even when support is limited.

These findings have important implications for practice. First, breastfeeding initiation support should extend beyond immediate hospital-based assistance to include consistent post-discharge follow-up, particularly for first-time mothers and those recovering from caesarean delivery. Second, healthcare providers should recognize the importance of hands-on, individualized guidance in building early confidence. Third, interventions should consider the broader support environment of mothers, including the absence of extended family among newcomer populations, and actively incorporate partners and community-based supports. Finally, support should be delivered in ways that respect maternal autonomy, ensuring that guidance strengthens rather than undermines confidence.

Overall, the findings demonstrate that BFSE during breastfeeding initiation is shaped by a dynamic interaction between interpersonal relationships and healthcare systems. Social support functioned as a multi-level mechanism through which confidence was reinforced, challenges were managed, and breastfeeding was successfully initiated among NCMAD in this study.

4.2.1.4 Emotional and Physiological states and breastfeeding initiation

Within the Breastfeeding Self-Efficacy Theory, emotional and physiological states represent key determinants of breastfeeding self-efficacy (BFSE), as they shape how mothers interpret early breastfeeding experiences and influence their confidence during initiation (Bandura, 1997; Dennis, 1999; Dennis, 2003; Kingston et al., 2020). In this study, emotional and physiological states were

evident in multiple ways during breastfeeding initiation, particularly through experiences of pain, emotional distress, and adaptive coping, which together shaped mothers' early confidence.

Physical discomfort was a prominent feature of early breastfeeding experiences, particularly among first-time mothers. Several participants described nipple pain, soreness, and difficulty with latching, which contributed to initial uncertainty and reduced confidence. One mother explained, *"it was very painful, sore and aching nipples… I was giving up on breastfeeding already before my mum reassured me that it will get better"* - **Mother$_4$,IDI$_4$**. Another mother similarly noted, *"there was a time I was having nipple pain, but I heard the more the baby sucks, the more the soreness goes away"* - **Mother$_5$, IDI$_5$**. These experiences suggest that pain at initiation may challenge mothers' expectations and create doubt, particularly when they are unprepared for the physical realities of breastfeeding. This was especially evident among primiparous mothers, who described early breastfeeding as a process of "trial and error" accompanied by confusion and discomfort. For instance, one participant stated, *"I was clueless, and was struggling… it was so painful because I didn't know how to make my baby properly latch"* - **Mother$_4$, IDI$_4$**.

Beyond physical discomfort, emotional strain was also a significant component of early breastfeeding experiences. Some mothers entered the postpartum period already dealing with major emotional stressors that shaped their initial engagement with breastfeeding. One participant described the loss of her mother during pregnancy, explaining, *"I was a mess… I had no idea what I was going to do with a baby"* - **Mother$_1$, IDI$_1$**, highlighting how emotional vulnerability may affect preparedness and confidence at initiation. Similarly, another mother described feeling overwhelmed and unsupported, stating, *"I was very down, I was fighting mental stress, and I had no help and that was my first baby"* - **Mother$_7$, IDI$_7$**. These findings indicate that emotional

distress, particularly in the absence of support, may undermine BFSE by increasing uncertainty and reducing mothers 'perceived ability to manage early breastfeeding challenges.

Despite these difficulties, emotional and physiological challenges did not uniformly influence confidence. Many mothers demonstrated resilience, actively managing both their physical discomfort and emotional responses in ways that supported breastfeeding. For example, one mother described consciously regulating her emotional state, stating, *"sometimes I feel very tired, sometimes I feel very down… so I just balance myself and put myself together"* - **Mother$_7$, IDI$_7$**. Another mother emphasized strong determination despite fatigue and limited support, noting that *"because it was something I made up my mind to do, I put in everything I could to do it"*- **Mother$_8$, IDI$_8$**. Even in cases where breastfeeding was physically difficult, mothers adapted their approaches. One participant explained that her baby was unable to latch directly from birth, stating, *"she was not sucking directly from the breast right from birth… I've been giving expressed breast milk while I continued to put her to the breast"* - **Mother$_8$, IDI$_8$**. These accounts illustrate that confidence at initiation was not solely dependent on the absence of challenges but was shaped by how mothers responded to them.

The findings also highlight the dynamic interaction between emotional and physiological states. Some mothers recognized the impact of stress on their physical breastfeeding experience, including milk production. One participant explained, *"the stress got to me, and I was not lactating well… I had to figure out how to manage that,"* - **Mother$_8$, IDI$_8$**, noting that rest and support from her partner improved her condition. This suggests that emotional well-being and physiological functioning are closely interconnected, with each influencing mothers' breastfeeding experiences and confidence.

Some mothers also described challenges related to delayed onset of milk production in the early postpartum period. For instance, one mother explained that although her baby was able to latch early, her milk did not flow immediately, stating, “my breast milk didn't flow until the following day, but I kept on trying to have him latch, I started having milk 24 hours after birth, but he latched within the first hours” - **Mother$_{9}$, IDI$_{9}$**. Similarly, another participant who had a caesarean delivery described early reliance on supplementation due to perceived insufficient milk, noting, from the hospital, he has been on formula and breast milk, “my breast milk wasn't enough, so he was already being given formula before I came down and put him on the breast” - **Mother$_{10}$, IDI$_{10}$**. These accounts suggest that for some mothers, breastfeeding initiation was complicated not only by technical challenges such as latching, but also by physiological delays in milk production and real or perceived insufficient milk, particularly in the first days after delivery.

These findings are consistent with existing literature showing that pain, physical discomfort, and emotional distress are common barriers to breastfeeding confidence, particularly during the early postpartum period (Dennis, 2003; Galipeau et al., 2018; Shorey et al., 2018; Stuebe et al., 2012).

Previous studies have identified nipple pain, soreness, latching difficulties, and fatigue as frequent challenges that can undermine mothers’ confidence in their ability to breastfeed successfully, especially among first-time mothers who are still learning breastfeeding techniques and adjusting to the demands of infant feeding (Galipeau et al., 2018; McQueen et al., 2011). Similarly, maternal stress and anxiety have been associated with lower breastfeeding self-efficacy and poorer early breastfeeding outcomes, as emotional distress may reduce mothers’ confidence, persistence, and perceived control during breastfeeding initiation (Dennis, 2003; Otsuka et al., 2014). The findings of the present study support this pattern, as mothers described pain, stress, and emotional strain as

factors that made breastfeeding initiation more difficult and, in some cases, weakened their confidence in the first days after birth.

In addition, the findings of this study highlight challenges related to delayed onset of milk production and perceived insufficient milk supply during the early postpartum period. Some mothers reported that breast milk did not flow immediately after birth, even when the baby was able to latch, while others described early supplementation with formula due to concerns about inadequate milk. This pattern is consistent with literature on delayed lactogenesis II, which refers to the onset of copious milk production occurring later than 72 hours postpartum (Chapman & Pérez-Escamilla, 1999; Nommsen-Rivers et al., 2010). Delayed lactogenesis has been associated with a range of factors, including caesarean delivery, maternal stress, fatigue, and limited early breastfeeding stimulation, all of which may disrupt the physiological processes underlying milk production (Brownell et al., 2012; Dewey et al., 2003; Hobbs et al., 2016).

Importantly, delayed milk production and perceived insufficient milk supply are among the most commonly reported reasons for early supplementation and breastfeeding discontinuation globally (Rollins et al., 2016; Victora et al., 2016), and in Canada (Gionet, 2013; Public Health Agency of Canada, 2022).

However, evidence also suggests that early perceptions of insufficient milk are not always indicative of true physiological insufficiency, but may instead reflect uncertainty, lack of information, or misinterpretation of normal breastfeeding patterns in the early postpartum period (Gatti, 2008; Otsuka et al., 2014). In the present study, mothers who experienced delayed milk production often continued breastfeeding through persistence, repeated attempts at latching, and

support from healthcare providers or family members, suggesting that these early physiological challenges did not inevitably undermine breastfeeding self-efficacy.

However, the present findings also extend existing literature by showing that emotional and physiological challenges did not always translate into persistently low BFSE. While most research has often emphasized the negative effects of pain and distress on breastfeeding outcomes (Dennis, 2003; McQueen et al., 2011; Stuebe et al., 2012; Shorey et al., 2018; Galipeau et al., 2018), the findings of this study suggest that these experiences may not be uniformly disabling. Instead, mothers' interpretations of these challenges, their determination to continue breastfeeding, and the support they received appeared to influence whether these early difficulties weakened or strengthened their confidence over time. In this study, some mothers experienced pain, stress, or latching problems but still maintained a sense of resolve and continued breastfeeding through active coping, problem-solving, and support-seeking. This suggests that emotional and physiological distress should not be understood only as risk factors for low BFSE, but also as experiences that may be negotiated and reinterpreted in ways that preserve or rebuild confidence. In this sense, the findings highlight the dynamic and context-dependent nature of BFSE during initiation.

The observation in this study may be explained by the interaction between individual resilience and the broader postpartum context. At the individual level, some mothers appeared able to regulate their emotional responses, manage discouragement, and remain focused on their breastfeeding goals despite pain or fatigue. Such responses may reflect personal resilience, determination, or a strong commitment to breastfeeding, all of which may have helped mothers interpret early difficulties as temporary and manageable rather than as signs of failure. This interpretation aligns with Dennis's Breastfeeding Self-Efficacy Theory, which proposes that

emotional and physiological states influence self-efficacy not merely through the presence of distress, but through how that distress is perceived and processed (Bandura, 1997; Dennis, 1999; Dennis, 2003). Thus, when mothers interpreted pain, stress, or delayed progress as challenges that could be overcome, rather than as confirmation of inability, their confidence appeared more likely to be preserved.

It is also important to note that mothers had diverse personal circumstances, and thus their experiences were shaped by the broader postpartum and social context. Support from mothers' own mothers, partners, and healthcare providers appeared to play an important role in helping them cope with distress and continue breastfeeding. Practical guidance on latching, reassurance that pain would improve, and opportunities for rest may have reduced the emotional burden of breastfeeding initiation and helped mothers persist through early difficulties. In addition, the structured support available in health facility settings may have created opportunities for mothers to receive timely help when problems arose. For newcomer mothers of African descent, however, the postpartum context may have been more complex. Initiating breastfeeding within a new healthcare system and a different sociocultural environment may have introduced additional uncertainty, particularly for first-time mothers who lacked prior experience. In such circumstances, emotional strain may not have stemmed only from breastfeeding itself, but also from social isolation, limited informal support, unfamiliarity with available services, and the demands of adapting to motherhood in a new setting. These contextual conditions may help explain why some mothers entered breastfeeding initiation feeling overwhelmed, emotionally vulnerable, or less prepared, even when they remained committed to breastfeeding.

The findings also suggest that emotional and physiological states were closely interconnected rather than separate influences. Physical pain and latching difficulties often triggered emotional

responses such as frustration, worry, and discouragement, while stress and emotional exhaustion could in turn affect mothers' perceptions of milk supply, coping capacity, and overall breastfeeding experience. This reciprocal relationship may be especially important during initiation, when mothers are still forming early judgments about their ability to breastfeed. As a result, breastfeeding confidence at this stage may be particularly sensitive to both embodied discomfort and emotional meaning-making. This helps explain why some mothers with significant physical challenges still maintained confidence, while others with similar challenges felt discouraged. In some cases, the difference may lie less in the challenge itself and more in the interpretive and support processes surrounding it.

These findings have important implications for practice. First, they highlight the need for early, hands-on breastfeeding support that addresses common physiological difficulties such as nipple pain, sore nipples, ineffective latch, and positioning problems in the immediate postpartum period. Since these early bodily experiences can quickly shape mothers' confidence, timely assistance may prevent avoidable pain from becoming a barrier to breastfeeding initiation. Second, the findings underscore the importance of emotional support alongside technical breastfeeding support. Mothers who are distressed, overwhelmed, grieving, or socially isolated may require reassurance, encouragement, and sensitive assessment of their emotional well-being in addition to feeding guidance. This is particularly important for first-time mothers, who may have limited experiential knowledge and may be more vulnerable to self-doubt when breastfeeding does not unfold as expected.

Third, the findings suggest that breastfeeding support should be responsive to the broader realities of newcomer mothers' lives. For newcomer mothers of African descent, confidence at initiation may be shaped not only by breastfeeding technique, but also by migration-related adjustment,

family separation, limited support networks, and unfamiliarity with the healthcare system. Practice approaches that are culturally responsive, relationship-based, and attentive to these broader experiences may therefore be especially valuable. This may include clear and respectful communication, recognition of mothers' prior beliefs and expectations about breastfeeding, and efforts to connect mothers with both formal and informal support systems. Finally, the findings indicate that healthcare providers should not assume that pain or distress will automatically lead to poor breastfeeding outcomes, nor that confidence is absent simply because difficulties are present. Rather, providers should assess how mothers are interpreting these experiences and support them in developing coping strategies that protect and strengthen BFSE.

Overall, the findings demonstrate that emotional and physiological states are central to the development of BFSE during breastfeeding initiation. While pain, stress, and physiological difficulties may initially challenge mothers' confidence, these experiences do not inevitably result in low self-efficacy. Instead, confidence is shaped by how mothers interpret these difficulties, the coping strategies they mobilize, and the support available to them within their immediate social and healthcare environments. These findings reinforce Dennis's argument that emotional and physiological states influence self-efficacy not simply through the presence of discomfort or distress, but through the meanings mothers attach to those experiences and their perceived ability to manage them. In this study, BFSE at initiation emerged not as a fixed response to difficulty, but as a dynamic process of emotional, physical, and contextual negotiation.

Globally, successful breastfeeding initiation is recognized as a critical foundation for subsequent breastfeeding outcomes. Early initiation, particularly within the first hour after birth, has been associated with higher rates of exclusive breastfeeding (EBF) and longer breastfeeding duration, as it facilitates early milk production, effective latch, and maternal confidence (Victora et al., 2016;

Rollins et al., 2016; WHO & UNICEF, 2018). However, it is important to distinguish between initiation and sustained breastfeeding success. While a positive start may enhance early breastfeeding self-efficacy (BFSE) and set the stage for continued breastfeeding, it does not guarantee maintenance over time, particularly in the absence of ongoing support. Evidence shows that many mothers who initiate breastfeeding successfully may still discontinue early due to challenges encountered in the postnatal period (McFadden et al., 2017; Dennis et al., 2019). Therefore, successful initiation should be understood as a necessary but not sufficient condition for sustained breastfeeding, highlighting the importance of continued support in reinforcing BFSE and promoting long-term breastfeeding success.

Taken together, these findings demonstrate that breastfeeding initiation is a critical period during which BFSE begins to form through the interaction of mastery experiences, vicarious learning, verbal persuasion, and emotional and physiological states. Understanding how these sources operate at initiation provides important insight into the early development of BFSE and sets the stage for examining how this confidence is sustained or challenged over time.

4.2.2 BFSE experiences with Exclusive Breastfeeding

Exclusive breastfeeding (EBF) for the first six months after delivery is widely recommended as the optimal infant feeding practice due to its established benefits for infant health, growth, and development (Victora et al., 2016; WHO & UNICEF, 2018). In this study, most mothers expressed a strong intention to exclusively breastfeed; however, their feeding experiences evolved over time in response to physiological, emotional, and contextual circumstances. While some mothers maintained exclusive breastfeeding for the recommended six months, others adopted mixed

feeding practices during the early postpartum period, often in response to perceived insufficient milk supply, delayed lactogenesis, breastfeeding challenges, or competing caregiving demands.

The pre-determined themes that informed data analysis when exploring maternal self-efficacy in exclusive breastfeeding were mastery experiences, vicarious experiences, verbal persuasion (social support), and emotional and physiological states (Dennis, 1999; Dennis, 2003). The following sections present how these four sources of BFSE influenced exclusive breastfeeding among newcomer mothers of African descent (NCMAD) in the Halifax Regional Municipality.

4.2.2.1 Mastery experiences and exclusive breastfeeding

In the Breastfeeding Self-Efficacy Theory (BSET), mastery experiences, defined as previous and ongoing performance accomplishments, are the most influential source of breastfeeding self-efficacy (BFSE), shaping mothers' confidence, expectations, coping strategies, and persistence in breastfeeding (Dennis, 1999; Dennis, 2003). Within the context of exclusive breastfeeding (EBF), mastery experiences were reflected not only in prior breastfeeding outcomes among multiparous mothers but also in the gradual development of confidence among first-time mothers through lived experience.

In this study, mastery experiences shaped EBF in varied ways. Among multiparous mothers, prior breastfeeding experience provided a strong foundation for confidence and influenced expectations regarding EBF. These mothers often drew on previous breastfeeding encounters to guide their current practices. For example, one mother reflected on how earlier challenges did not prevent later success, stating, *"For this my third child, he was breastfed exclusively for six months, even though I couldn't do exclusive for my first because he didn't latch well"* - **Mother$_3$, IDI$_3$**. Similarly, another multiparous mother described strong confidence rooted in prior experience and personal

determination, noting, *"I had no challenge with confidence in breastfeeding, I had my mind set up on breastfeeding, no water, no formulas"* - **Mother$_8$, IDI$_8$**.

However, prior experience did not guarantee exclusive breastfeeding in all situations. One mother who had previously exclusively breastfed described modifying her feeding practice when caring for twins: *"my first baby I gave her only breastmilk… but for my twins, I gave them formula and breastmilk from birth… because I can't feed both of them at the same time"* - **Mother$_2$, IDI$_2$**. This suggests that while prior mastery strengthened confidence, contextual demands influenced the ability to maintain exclusivity.

Among first-time mothers, mastery was not based on prior breastfeeding experience but developed progressively through engagement with breastfeeding over time. Some first-time mothers were able to exclusively breastfeed successfully. One participant stated, *"I exclusively breastfed for seven months"* - **Mother$_1$, IDI$_1$**, while another noted, *"yes, I was confident. I intended to do exclusive breastfeeding which I did"* - **Mother$_4$, IDI$_4$**. These experiences suggest that confidence for EBF can emerge even without prior breastfeeding experience.

For other first-time mothers, confidence was initially low and developed gradually. Early challenges, particularly delayed milk production and perceived insufficient milk supply, disrupted their intention to exclusively breastfeed. One mother explained that she was unable to exclusively breastfeed initially because she "was not lactating well," resulting in mixed feeding despite her intention, *"I notice that she's not getting enough milk when I put her to breast, then I started to give her formula, I did that for some couple of months"* - **Mother$_5$, IDI$_5$**. However, after approximately three months, she transitioned to exclusive breastfeeding as her milk supply improved. Similarly, another mother described early supplementation linked to hospital feeding

practices and perceived insufficient milk supply: *"From the hospital, he has been on formula and breast milk"* - **Mother$_{10}$, IDI$_{10}$**.

These findings indicate that mastery experiences during EBF were not static but evolved through repeated feeding experiences, adaptation, and persistence. For some mothers, early challenges did not prevent later success but formed part of the process through which confidence was built.

Notably, some mothers adopted flexible interpretations of exclusive breastfeeding, particularly when faced with contextual or physiological constraints. One participant described maintaining a predominantly breastfeeding-based approach while supplementing when necessary, stating, *"I was confident that my child was feeding on 70% breast milk, the formula is just an addition"* - **Mother$_{6}$, IDI$_{6}$**. This suggests that mothers' understanding of EBF was shaped not only by guidelines but also by lived realities.

Overall, the findings indicate that mastery experiences played a central but varied role in shaping EBF among NCMAD. While multiparous mothers drew on prior experience to support confidence, first-time mothers developed mastery through ongoing engagement with breastfeeding, with both groups adapting their practices in response to contextual conditions.

The finding that mastery experiences influenced BFSE in relation to exclusive breastfeeding, particularly among multiparous mothers with prior breastfeeding experience aligns with the Breastfeeding Self-Efficacy Theory (Dennis, 1999; Dennis, 2003). It is consistent with other studies' findings in which mothers with previous breastfeeding experience often report higher confidence and are more likely to initiate and sustain exclusive breastfeeding due to accumulated knowledge, practical skills, and familiarity with infant feeding patterns (Brockway et al., 2017; Huang et al., 2019; Shorey et al., 2018).

However, the findings demonstrate that prior breastfeeding experience did not guarantee exclusive breastfeeding. Although multiparous mothers expressed strong confidence, their ability to maintain EBF was shaped by contextual realities such as caring for twins or managing competing caregiving demands. This indicates that while mastery strengthens confidence, it does not eliminate structural or practical constraints. This nuance extends existing literature, which often presents prior experience as a direct predictor of EBF, by showing that confidence must be supported by enabling conditions to translate into sustained practice.

A key contribution of this study is the finding that mastery can be developed during the breastfeeding process itself. Among first-time mothers, confidence was not established at initiation but emerged through repeated feeding attempts, adaptation, and persistence. Some mothers transitioned from early mixed feeding to exclusive breastfeeding as milk supply improved, indicating that early challenges did not necessarily predict long-term outcomes. This supports evidence that breastfeeding self-efficacy is dynamic and evolves through ongoing experience (Dennis, 2003; McQueen et al., 2011; Shorey et al., 2018), while further highlighting that early supplementation may represent a transitional phase rather than a failure of EBF.

Delayed lactogenesis and perceived insufficient milk supply were central to these early experiences. Consistent with existing research, perceived low milk supply remains one of the most common reasons for supplementation and early deviation from exclusive breastfeeding (Gatti, 2008; Kent et al., 2015; Otsuka et al., 2014). However, the present findings show that these challenges did not uniformly result in discontinuation. Instead, mothers who interpreted low milk supply as temporary and manageable were more likely to persist and eventually achieve EBF. This reinforces the theoretical position that self-efficacy is shaped not only by experience itself, but by how that experience is interpreted.

The findings also highlight a critical distinction between breastfeeding intention and practice. While most mothers intended to exclusively breastfeed, their actual feeding practices were shaped by physiological capacity, infant demand, and caregiving realities. Sustaining EBF required continuous negotiation rather than a single decision at birth. These challenges simplified representations of EBF as a purely knowledge- or intention-driven behaviour and instead emphasizes the role of ongoing adaptation in shaping breastfeeding outcomes.

Importantly, much of the existing literature on mastery experiences and exclusive breastfeeding is based on predominantly non-immigrant populations, where continuity in social support systems, cultural norms, and healthcare access is often assumed. The present findings extend this body of work by situating mastery within the context of migration. For newcomer mothers of African descent, breastfeeding occurs within altered social and institutional environments, often characterized by reduced access to extended family support and the need to navigate unfamiliar healthcare systems. As a result, both prior and developing mastery must be reinterpreted within new contexts, highlighting the importance of considering migration as a key factor influencing BFSE.

Another important insight is the flexible interpretation of exclusive breastfeeding among some mothers. While biomedical definitions emphasize strict exclusivity, some participants described breastfeeding success in more pragmatic terms, particularly when faced with constraints such as twin caregiving or perceived insufficient milk supply. This finding contrasts with literature that treats EBF as a binary outcome and supports emerging calls for more context-sensitive understandings of breastfeeding practices, particularly among migrant populations (Gavin et al., 2022). It suggests that maintaining breastfeeding, even when exclusivity is not absolute, may still represent a meaningful and intentional practice for mothers.

These patterns can be understood through the Socio-Ecological Model, where breastfeeding behaviour is shaped by interactions across multiple levels. At the individual level, confidence, milk supply, and persistence influenced EBF. At the interpersonal level, support from partners and family affected mothers' capacity to sustain breastfeeding. At the organizational level, healthcare guidance shaped how early challenges were interpreted. At the structural level, migration influenced access to support systems and resources. This multi-level interaction explains why mastery was central but not sufficient on its own to determine EBF outcomes.

These findings have important implications for practice. First, breastfeeding support should recognize that mastery develops over time, particularly among first-time mothers, and should therefore include ongoing guidance beyond initial initiation. Second, support related to milk supply should be prioritized, with clear communication to help mothers distinguish between perceived and actual insufficiency. Third, healthcare providers should avoid negative framing of early supplementation and instead support mothers in continuing breastfeeding where possible. Finally, interventions for newcomer mothers should be culturally responsive and account for changes in support systems, ensuring that both prior experience and new learning are effectively supported within the current context.

Overall, the findings demonstrate that mastery experiences are central to BFSE during exclusive breastfeeding but are continuously constructed rather than fixed. While prior breastfeeding experience strengthened confidence among multiparous mothers, first-time mothers developed mastery progressively through practice, adaptation, and support. These findings reinforce the central role of mastery within BSET while highlighting the importance of contextual conditions in shaping how breastfeeding confidence is developed and sustained among newcomer mothers.

4.2.2.2 Vicarious experiences and exclusive breastfeeding

In the Breastfeeding Self-Efficacy Theory (BSET), vicarious experiences refer to learning through observing others perform a behaviour (Bandura, 1997; Dennis, 1999; Dennis, 2003). Within the context of exclusive breastfeeding (EBF), vicarious experiences were not strongly expressed as directly shaping mothers' ability to sustain exclusive breastfeeding. Instead, they primarily informed how mothers understood the *value* of breastfeeding rather than the *demands* of maintaining it over time.

In this study, mothers' observational experiences were largely centred on visible breastfeeding outcomes, particularly the perceived health and physical appearance of exclusively breastfed infants. One mother explained, "*The baby girl was so chubby, the skin was fresh… I saw the benefits of breast milk… I knew I was going to breastfeed my child*" - **Mother$_6$, IDI$_6$**. Similarly, another mother said, *"exclusively breastfed baby always grow very healthy, very strong"* - **Mother$_2$, IDI$_2$**. Such observations reinforced breastfeeding as beneficial and desirable.

However, these experiences did not extend to the practical realities of sustaining exclusive breastfeeding. The effort, persistence, and challenges that may be experienced in maintaining EBF were largely absent from what mothers observed. As one participant noted, *"mothers tend to hide the struggle… until you get into it"* - **Mother$_9$, IDI$_9$**. This indicates that observational exposure was incomplete, emphasizing outcomes while obscuring process.

This limitation was particularly evident among first-time mothers, whose expectations were shaped by what they had seen but were later revised through lived experience. In contrast, multiparous mothers relied less on observation and more on their own previous breastfeeding experiences to navigate EBF, drawing on prior knowledge of both benefits and challenges.

Overall, the findings indicate that vicarious experiences did not function as a direct guide for sustaining exclusive breastfeeding. Instead, they shaped initial perceptions of breastfeeding benefits, while practical understanding of EBF developed primarily through personal experience.

The findings suggest that vicarious experiences played a limited and indirect role in shaping BFSE during exclusive breastfeeding, functioning primarily as a source of outcome-based expectation rather than practical guidance. While observational learning is recognized within BSET as a contributor to self-efficacy (Bandura, 1997; Dennis, 1999; Dennis, 2003), its influence in this study was constrained by the nature of what was observed.

Consistent with existing literature, mothers' perceptions of breastfeeding benefits, particularly infant health and physical development, were reinforced through observation. Studies have shown that visible infant outcomes are strong motivators for breastfeeding behaviours, with mothers more likely to initiate and continue breastfeeding when they associate it with positive health outcomes (Rollins et al., 2016; Victora et al., 2016). Similarly, exposure to healthy breastfed infants has been linked to positive breastfeeding attitudes (Blyth et al., 2002; Huang et al., 2019). The present findings align with this evidence but show that such observations are primarily outcome focused.

However, unlike findings commonly reported in initiation-focused literature, vicarious experiences in this study did not translate into preparedness for sustaining exclusive breastfeeding. This highlights a critical shift between breastfeeding phases. During initiation, observational learning may support the decision to begin breastfeeding by reinforcing its perceived benefits. In contrast, exclusive breastfeeding requires sustained effort over time, and the findings indicate that vicarious experiences did not adequately capture this dimension.

This gap between observed outcomes and unobserved processes is consistent with research suggesting that breastfeeding is often socially represented in idealized ways, with limited visibility of associated challenges (Brown, 2014; Fox et al., 2015; Otsuka et al., 2014). In this study, the concealment of breastfeeding difficulties further restricted the depth of observational learning, leaving mothers, particularly first-time mothers, underprepared for the demands of EBF. As a result, their understanding of breastfeeding shifted from expectation to lived negotiation once they encountered these challenges.

The differential reliance on vicarious versus mastery experiences further explains these patterns. First-time mothers, lacking prior breastfeeding experience, initially depended on observation to form expectations. However, these expectations were subsequently re-evaluated through direct experience. In contrast, multiparous mothers relied on prior mastery experiences, which provided a more comprehensive understanding of both the benefits and demands of breastfeeding. This supports the hierarchical structure of BSET, where mastery experiences exert a stronger influence on self-efficacy than vicarious experiences (Dennis, 2003).

Importantly, much of the literature on vicarious experiences and breastfeeding is based on non-immigrant populations, where observational learning is often embedded within stable family and community networks. In such contexts, mothers may have more consistent and detailed exposure to breastfeeding practices over time. In contrast, for newcomer mothers of African descent, migration may disrupt access to these networks, limiting opportunities for meaningful observational learning. Reduced proximity to experienced caregivers, differences in breastfeeding visibility, and changing social norms may result in fragmented or outcome-focused vicarious experiences, as observed in this study.

These findings suggest that vicarious experiences functioned more as motivational cues than instructional resources. Mothers were influenced by what breastfeeding represented rather than how it was practiced. This distinction is critical in understanding why vicarious experiences were less influential in sustaining EBF compared to initiation.

From a socio-ecological perspective, this pattern reflects interactions across multiple levels. At the interpersonal level, mothers observed breastfeeding within family and social networks, but these observations were selective and incomplete. At the community level, cultural norms influenced how breastfeeding was presented, often emphasizing its benefits while minimizing challenges. At the structural level, migration altered access to traditional sources of learning, further limiting the depth of observational exposure.

These findings have important implications for practice. First, breastfeeding education should move beyond outcome-focused messaging to include realistic preparation for sustaining exclusive breastfeeding. Second, there is a need to normalize discussions of breastfeeding challenges, ensuring that mothers are not relying on incomplete or idealized observations. Third, for newcomer mothers, structured opportunities for shared learning, such as peer support and antenatal programs, may help compensate for reduced access to traditional vicarious experiences. Finally, healthcare providers should actively address gaps between expectations and lived realities, supporting mothers to transition from observational understanding to practical competence.

Overall, the findings demonstrate that vicarious experiences played a limited but important role in shaping BFSE during exclusive breastfeeding. While they reinforced the perceived value of breastfeeding, they did not provide sufficient guidance for sustaining it. This reinforces the position of vicarious experiences within BSET as a secondary source of self-efficacy and

highlights the importance of direct experience and contextual support in shaping EBF among newcomer mothers.

4.2.2.3 Social support and exclusive breastfeeding

In the Breastfeeding Self-Efficacy Theory (BSET), social support contributes to breastfeeding self-efficacy through verbal persuasion, emotional reassurance, and practical assistance, all of which influence mothers' confidence in their ability to sustain breastfeeding (Bandura, 1997; Dennis, 1999; Dennis, 2003). Within the context of exclusive breastfeeding (EBF), social support in this study shaped not only mothers' confidence but also their ability to maintain breastfeeding over time.

In this study, social support was experienced in varying forms and levels, ranging from strong, consistent support to limited or absent support. This variation influenced how mothers managed the ongoing demands of exclusive breastfeeding.

Family support, particularly from mothers and partners, played a central role in sustaining EBF. For mothers who had such support, exclusive breastfeeding was described as more manageable because caregiving responsibilities were shared, allowing them to focus on feeding and recovery. One mother explained, *"My mom and my husband were a great support system, they provide me food every time and I eat what I want, I don't stress about anything"* - **Mother$_2$, IDI$_2$**, Similarly, another mother described the role of spousal support, stating, *"my husband was so helpful, we shared roles and we both tend to the needs of our little one"* - **Mother$_1$,IDI$_1$**. Another participant described how support reduced competing demands: *"Some other people being able to do other things means support to me… I have time to breastfeed him when he needs to be breastfed"* - **Mother$_3$, IDI$_3$**.

For some first-time mothers, support from their own mothers provided reassurance, experience, and confidence. One participant explained that her mother's experience with childcare and postnatal care made her feel supported: *"my mom was with me… my mom has experience with 6 kids… So, I was pretty sure that I have everything that I need as far as breastfeeding concerns, so I got all the support from my mother"* – **Mother$_9$, IDI$_9$**. These accounts suggest that family support extended beyond encouragement to include practical assistance such as help with household tasks, childcare, emotional reassurance, and experiential guidance, which enabled mothers to sustain breastfeeding.

One of the first-time mothers explained how the presence of her mother helped her to sustain exclusive breastfeeding after facing challenges at initiation and early postpartum. She reflected that the reassurance and words of encouragement from her mother increased her confidence: *"my mother told me I was exclusively breastfed… and she encouraged me to do the same for my child"*- **Mother$_4$, IDI$_4$**.

In contrast, mothers with limited family support described greater difficulty maintaining exclusive breastfeeding. The absence of experienced caregivers, particularly older female relatives, increased the physical and emotional demands of breastfeeding. One mother explained, "*My mom was not around… it was only me and my husband and God*" - **Mother$_7$, IDI$_7$**. Another participant described the strain of managing breastfeeding alongside other responsibilities with minimal support: "*here, it was just me, my husband, a toddler, and a newborn…it was hard"* - **Mother$_8$, IDI$_8$**. These findings indicate that the absence of family support increased caregiving burden and made sustaining exclusive breastfeeding more challenging.

Healthcare providers were another important source of support, particularly in the early postpartum period. Some mothers described receiving helpful guidance from nurses, including advice on breastfeeding techniques and encouragement to continue breastfeeding. However, unlike the initiation phase, healthcare support during EBF was not consistently experienced as ongoing or sustained.

Some mothers reported gaps in follow-up care or limited engagement after discharge, which reduced their reliance on the healthcare system. One participant noted, *"They said they would visit… but I never saw her"* - **Mother$_5$, IDI$_5$**. Another mother described discontinuity in postpartum support, stating, "*my postpartum doula came for about 4 times and then she suddenly just gave up on me, so I had to manage the situation here and there, I was able to get help, I was able to call, speak to people back home and speak to people here*" - **Mother$_1$, IDI$_1$**. In such cases, mothers relied more heavily on informal support networks to manage breastfeeding. These experiences suggest that while healthcare support was present at initiation, its continuity during the EBF phase was uneven.

Migration further shaped the availability of support. Several mothers contrasted their experiences in Canada with those in their countries of origin, where extended family systems provided intensive postpartum care. One mother explained, *"Back home… all I was doing was to face my baby and feed… but here it was basically myself and my husband, it was hard"* - **Mother$_8$, IDI$_8$**. Another mother similarly stated that the experience would have been different in her country of origin because *"I will have a lot of people around me, people I can drop the baby with, I will sleep and relax"* - **Mother$_7$, IDI$_7$**. These differences highlight how reduced access to extended family support increased caregiving demands and influenced breastfeeding practices.

Overall, the findings indicate that social support influenced EBF through its presence, consistency, and responsiveness. Mothers with strong, practical, and emotionally supportive networks were better able to sustain exclusive breastfeeding, while those with limited or inconsistent support faced greater challenges.

The findings suggest that social support was a major determinant of BFSE during exclusive breastfeeding, primarily because it shaped mothers' ability to manage the sustained physical, emotional, and practical demands of feeding over time. This aligns with BSET, which identifies verbal persuasion, encouragement, and supportive feedback as important sources of efficacy beliefs (Bandura, 1997; Dennis, 1999; Dennis, 2003). However, in the context of EBF, support extended beyond verbal encouragement to include practical help, shared caregiving, household assistance, food provision, emotional reassurance, and access to experiential knowledge, all of which created conditions that enabled mothers to sustain breastfeeding.

Consistent with existing literature, family and partner support enhanced mothers' ability to sustain exclusive breastfeeding by reducing stress and sharing caregiving responsibilities (Brockway et al., 2017; Kingston et al., 2020; Ogbo et al., 2018; Tadesse et al., 2021). However, the findings extend this literature by showing that among NCMAD, support was not only emotionally beneficial but also practically necessary, functioning as a structural condition that enabled mothers to sustain EBF within demanding caregiving environments.

Importantly, limited or inconsistent support did not necessarily diminish mothers' confidence or intention to breastfeed. While mothers with less support described greater physical and emotional strain, most of them, including first-time mothers, continued to breastfeed. This suggests that confidence and commitment to breastfeeding remained relatively strong, even when conditions

required to sustain exclusive breastfeeding were challenging. This finding highlights an important distinction between breastfeeding confidence and the ability to sustain exclusivity. While existing literature often links limited support to lower breastfeeding self-efficacy and early cessation (Dennis et al., 2019; Shorey et al., 2018), the findings of this study suggest that among NCMAD, mothers may continue breastfeeding despite constraints but may be less able to maintain exclusivity due to contextual challenges.

A key distinction between breastfeeding initiation and EBF is that support during initiation often facilitates starting breastfeeding, whereas sustaining EBF requires ongoing, consistent support over time. The findings show that mothers who received continuous practical and emotional support were better able to manage the repeated and cumulative demands of breastfeeding. In contrast, those with limited support experienced greater strain due to competing responsibilities and reduced opportunities for rest and recovery.

The findings also highlight the important role of intergenerational support. Mothers' own mothers provided experiential knowledge, reassurance, and culturally grounded expectations about breastfeeding, which strengthened confidence, particularly among first-time mothers. This aligns with literature showing that grandmothers and older female relatives influence breastfeeding practices through knowledge transmission and practical postpartum care (Aubel, 2012; Negin et al., 2016).

At the same time, the findings demonstrate that support was uneven and shaped by migration. Much of the existing literature on breastfeeding support is based on non-immigrant populations, where extended family networks are more accessible. In contrast, for newcomer mothers of African descent, migration disrupted traditional support systems, reducing access to experienced

caregivers and increasing reliance on partners and formal services (Chowdhury et al., 2021; Dennis et al., 2019; Higginbottom et al., 2015; Odeniyi et al., 2020). This highlights the importance of understanding social support within migration contexts, where its availability and effectiveness may differ.

Healthcare support, while important, was less consistent during the EBF phase, particularly after discharge. This aligns with literature showing that hospital-based breastfeeding support is not always sustained in community settings (Brown & Davies, 2014; McFadden et al., 2017). This finding reinforces the importance of Step 10 of the Baby-Friendly Hospital Initiative, which emphasizes continuity of care and community-based breastfeeding support after discharge (WHO & UNICEF, 2018). When such continuity is lacking, the responsibility for sustaining breastfeeding shifts back to mothers and their informal networks.

Structural factors, particularly maternity leave, also played a critical role by enabling mothers to remain physically present, responsive to infant feeding needs, and less constrained by competing work demands. This is consistent with evidence linking maternity leave to improved exclusive breastfeeding outcomes (Chai et al., 2018; Mirkovic et al., 2016; Rollins et al., 2016).

These findings can be understood within the Socio-Ecological Model, where breastfeeding is shaped by interacting influences at multiple levels. At the interpersonal level, family and partners provided direct support. At the organizational level, healthcare providers offered guidance, although continuity was limited. At the structural level, maternity leave created enabling conditions. Migration intersected across these levels by altering access to traditional support systems.

These findings have important implications for practice. First, EBF support should extend beyond initiation and include sustained post-discharge follow-up, particularly for mothers with limited family support. Second, healthcare providers should assess mothers' support environments and identify those who may require additional practical and emotional support. Third, partners and family members should be actively included in breastfeeding education because they often provide the day-to-day support that enables EBF. Fourth, newcomer mothers should be connected to culturally responsive community-based supports, peer groups, and lactation services that can help replace or supplement disrupted extended family networks. Finally, policies and programs that protect maternity leave and support maternal rest, recovery, and infant proximity are important for sustaining EBF.

Overall, the findings demonstrate that social support was central to BFSE during exclusive breastfeeding. However, sustaining EBF was not solely determined by confidence but by the availability of practical, relational, and structural support. These findings highlight that exclusive breastfeeding is not only an individual behaviour but a socially and contextually supported practice.

4.2.2.4 Emotional and Physiological states and exclusive breastfeeding

Emotional and physiological states played a critical role in shaping exclusive breastfeeding (EBF) among newcomer mothers of African descent (NCMAD), particularly by influencing how mothers interpreted bodily responses, managed stress, and sustained breastfeeding over time. Within Dennis's Breastfeeding Self-Efficacy Theory (BSET), emotional and physiological states influence breastfeeding self-efficacy through mothers' interpretations of pain, fatigue, stress, milk production, and emotional well-being during breastfeeding (Bandura, 1997; Dennis, 1999; Dennis,

2003). In this study, emotional and physiological experiences were dynamic and evolving, shaping mothers' confidence throughout the EBF period rather than only during initiation.

For several mothers, delayed milk production and perceived insufficient milk supply created significant emotional distress and initially reduced confidence in their ability to exclusively breastfeed. One mother explained how low milk supply affected her emotionally in the early postpartum period: *"So at first my confidence was really low because I feel I was not providing enough for my child… it has always been my plan doing exclusive for six months and here we are, I have the baby and nothing's coming out to feed the baby, it was quite frustrating and all"* **- Mother$_5$, IDI$_5$.** Similarly, another mother described low milk flow *"I had low milk supply for about 4 to 5 days, I didn't put too much pressure on myself, I knew that was going to affect me mentally"* **- Mother$_1$, IDI$_1$.**

For some mothers, painful breastfeeding experiences further contributed to emotional strain and reduced confidence. One first-time mother reflected on how breastfeeding pain almost led her to discontinue EBF in the early weeks postpartum: "*the first few days to weeks of breastfeeding, I was not [confident], I was close to using the formula that we were given in the hospital at a point cos I was feeling pain at every point that I wanted to breastfeed her"* **- Mother$_4$, IDI$_4$.** The same participant also described breastfeeding as *"very painful… sore and aching nipples"* **-Mother$_4$, IDI$_4$.** These experiences suggest that pain, delayed lactogenesis, and concerns about milk sufficiency made EBF emotionally and physically demanding during the early postpartum period.

Several mothers also described a close relationship between emotional stress and physiological breastfeeding experiences, particularly milk production. One participant explained: *"I think around the second week of life, the stress got to me, and I was not lactating well. I had to figure*

out how to manage that" -**Mother$_8$, IDI$_8$.** Similarly, during the focus group discussion, another mother stated: *"when you're stressed… you don't produce enough milk… before I can produce enough that my child will get enough milk, I need to rest… so far I put myself under pressure and I'm stressed, I'll just be struggling to get enough breast milk"* -**Mother$_5$, FGD$_1$**. These accounts indicate that mothers perceived emotional stress and physiological breastfeeding outcomes as closely interconnected.

Despite these early challenges, emotional and physiological difficulties did not uniformly result in abandonment of breastfeeding or persistently low confidence. Several mothers described gradually rebuilding confidence as breastfeeding became more established and physiological challenges improved. For example, Mother 5, who initially reported very low confidence because of low milk supply, later explained: *"as time goes on, I think from three months and above, I was really confident"* -**Mother$_5$, IDI$_5$.** Similarly, Mother 1 described how emotional self-regulation and reducing pressure on herself helped her cope while breastfeeding became established.

Some mothers also demonstrated persistence and adaptation in response to physiological challenges. One participant explained how she modified her feeding approach because of breastfeeding difficulty while remaining committed to breastfeeding: *"I hand-expressed milk throughout and fed my baby without direct latching"* -**Mother$_8$, IDI$_8$.** Another mother described how determination helped her continue breastfeeding despite difficulties: *"I would say I exceeded my own expectation, I have the goal in my mind already, so I kept going"* -**Mother$_3$, IDI$_3$.** These findings suggest that mothers actively negotiated emotional and physiological challenges rather than interpreting them as immediate indicators of failure.

Emotional and physiological experiences were also shaped by mothers' beliefs about breastfeeding and infant health. One mother connected her confidence in EBF to her own childhood experience of being breastfed: *"My mum told me I was exclusively breastfed… I don't go in and out of the hospital… so I felt if my mum could do this, then I can do the same"* **-Mother$_4$, IDI$_4$.** This suggests that beliefs about the long-term health benefits of breastfeeding influenced how some mothers interpreted and persisted through breastfeeding difficulties.

Overall, the findings demonstrate that emotional and physiological states influenced EBF in complex and evolving ways. Pain, stress, delayed milk production, and emotional distress often weakened confidence initially, particularly during the early postpartum period. However, many mothers gradually rebuilt confidence through persistence, adaptation, emotional regulation, and continued breastfeeding experience. These findings suggest that emotional and physiological states were not fixed barriers to EBF but dynamic experiences that mothers continuously interpreted and managed over time.

The findings suggest that emotional and physiological states were central to BFSE during exclusive breastfeeding because mothers continuously interpreted bodily sensations, milk production, stress, fatigue, pain, and emotional well-being in relation to their perceived ability to sustain breastfeeding. This aligns with Dennis's Breastfeeding Self-Efficacy Theory, which proposes that emotional and physiological states influence self-efficacy not simply through the presence of discomfort or distress, but through how such experiences are interpreted by mothers (Bandura, 1997; Dennis, 1999; Dennis, 2003).

Consistent with existing literature, mothers in this study described pain, sore nipples, delayed lactogenesis, perceived insufficient milk supply, and emotional distress as experiences that initially

reduced confidence and made EBF more difficult. Previous studies similarly identify pain, breastfeeding discomfort, and concerns about milk sufficiency as common contributors to emotional distress, lower breastfeeding confidence, supplementation, and early discontinuation of EBF (Galipeau et al., 2018; Kent et al., 2015; McQueen et al., 2011; Odom et al., 2013). The findings therefore support broader evidence showing that emotional and physiological difficulties are common during the breastfeeding period, particularly among first-time mothers who may be unprepared for the realities of sustaining EBF.

However, the findings also extend existing literature by showing that emotional and physiological difficulties did not uniformly result in persistently low BFSE or discontinuation of breastfeeding. Although several mothers described frustration, stress, pain, and low confidence initially, many continued breastfeeding and gradually rebuilt confidence as breastfeeding became established. This suggests that emotional and physiological challenges were often interpreted as temporary and manageable rather than as confirmation of inability to breastfeed successfully. In this study, mothers' interpretations of these experiences appeared to influence BFSE as much as the experiences themselves.

This finding differs slightly from parts of the existing literature, much of which emphasizes the negative relationship between emotional distress and breastfeeding outcomes, particularly among non-immigrant populations (Dennis et al., 2019; Shorey et al., 2018). In contrast, the findings of this study suggest that among NCMAD, mothers frequently demonstrated persistence and emotional resilience despite experiencing stress, pain, and physiological breastfeeding difficulties. While these experiences sometimes interfered with exclusivity, they did not necessarily eliminate mothers' commitment to breastfeeding.

An important distinction also emerged between emotional and physiological experiences during breastfeeding initiation and during EBF. During initiation, these experiences were often linked to immediate postpartum pain, latch difficulties, and uncertainty surrounding the beginning of breastfeeding. In contrast, during EBF, emotional and physiological states became more prolonged and cumulative, involving ongoing fatigue, stress, concerns about milk production, and the emotional demands associated with sustaining breastfeeding over weeks and months. This suggests that sustaining EBF requires continued emotional adjustment and physiological adaptation beyond the initiation phase.

The relationship between emotional stress and milk production was particularly important in this study. Several mothers believed that stress negatively affected their milk supply, especially when they lacked opportunities for rest or experienced ongoing pressure. This perception aligns with evidence suggesting that maternal stress and anxiety may interfere with oxytocin release, milk ejection, and mothers' perceptions of milk sufficiency (Brown & Arnott, 2014; Stuebe et al., 2012). The findings therefore highlight the close interaction between emotional well-being and physiological breastfeeding experiences during EBF.

The findings also demonstrate that mothers actively adapted to physiological challenges in ways that protected breastfeeding continuity. Rather than discontinuing breastfeeding immediately when difficulties emerged, several mothers adjusted feeding practices, reduced pressure on themselves, used hand expression, or relied on emotional coping strategies while continuing breastfeeding. This supports literature suggesting that persistence, coping, and problem-solving are important mechanisms through which BFSE develops over time (Brockway et al., 2017; Dennis, 2003; Huang et al., 2019).

Much of the existing literature on emotional distress and breastfeeding is based on non-immigrant populations. In contrast, the findings of this study suggest that newcomer mothers of African descent may experience emotional and physiological breastfeeding challenges within broader contexts of migration-related adjustment, caregiving strain, and reduced access to familiar postpartum support systems (Chowdhury et al., 2021; Higginbottom et al., 2015; Odeniyi et al., 2020). These broader pressures may intensify emotional strain during EBF while simultaneously requiring mothers to develop adaptive coping strategies to sustain breastfeeding.

These findings have important implications for practice. First, breastfeeding support should address emotional well-being alongside technical breastfeeding guidance. Second, healthcare providers should recognize that mothers experiencing stress, pain, delayed milk production, or low confidence may still remain strongly committed to breastfeeding and may require reassurance, normalization of common breastfeeding difficulties, and ongoing follow-up rather than assumptions of low motivation. Third, breastfeeding interventions for newcomer mothers should incorporate culturally responsive emotional support and acknowledge the broader emotional pressures that may accompany migration and postpartum adjustment. Finally, breastfeeding education should prepare mothers more realistically for the emotional and physiological demands of sustaining EBF, including pain, fatigue, stress, and delayed milk production, while also emphasizing coping and adaptation strategies.

Overall, the findings demonstrate that emotional and physiological states were central to BFSE during exclusive breastfeeding. While pain, stress, delayed milk production, and emotional distress initially challenged confidence, many mothers rebuilt confidence over time through persistence, adaptation, emotional regulation, and continued breastfeeding experience. These findings reinforce Dennis's argument that emotional and physiological states influence breastfeeding self-

efficacy not only through the presence of discomfort or distress, but through how mothers interpret and respond to these experiences while sustaining breastfeeding over time.

4.2.3 BFSE experiences with Breastfeeding Continuation

Breastfeeding continuation among newcomer mothers of African descent (NCMAD) in Halifax Regional Municipality (HRM) was shaped by changing maternal, infant, and contextual circumstances over time. Although most mothers-initiated breastfeeding with strong intentions and confidence, sustaining breastfeeding beyond the early postpartum period often required ongoing adaptation to evolving caregiving responsibilities, infant needs, work or school commitments, and daily life demands. While global and Canadian recommendations encourage breastfeeding for up to two years and beyond (WHO & UNICEF, 2018), participants' experiences suggest that continuation depended not only on mothers' confidence and breastfeeding goals but also on the extent to which breastfeeding remained feasible within their changing circumstances.

Unlike earlier breastfeeding stages, continuation was often characterized by the challenge of integrating breastfeeding into everyday life rather than establishing breastfeeding itself. Many mothers maintained confidence in their ability to breastfeed even when continuation became increasingly difficult. Consequently, decisions to reduce or discontinue breastfeeding were not necessarily associated with low breastfeeding self-efficacy (BFSE) but were frequently influenced by practical realities such as return to work or school, physical fatigue, changing infant feeding patterns, and competing caregiving responsibilities. These experiences suggest that breastfeeding continuation involved ongoing negotiation between mothers' breastfeeding intentions and the realities of daily life.

The following sections explore how mastery experiences, vicarious experiences, social support, and emotional and physiological states influenced BFSE during breastfeeding continuation among NCMAD in HRM.

4.2.3.1 Mastery experiences and breastfeeding continuation

Within Dennis's Breastfeeding Self-Efficacy Theory (BSET), mastery experiences refer to previous breastfeeding experiences and successful performance accomplishments that shape mothers' confidence in their ability to continue breastfeeding (Dennis, 1999; Dennis, 2003). In the context of breastfeeding continuation, mastery experiences reflected both prior breastfeeding success and the confidence developed through sustained breastfeeding over time. Unlike breastfeeding initiation, where confidence was often influenced by immediate postpartum experiences, mastery during breastfeeding continuation was reinforced through ongoing breastfeeding practice and accumulated experience.

For the multiparous mothers in this study, previous breastfeeding experience strongly shaped confidence in continuing breastfeeding over longer periods. One mother explained that she had previously breastfed her older children for at least one year and had intentionally decided to continue breastfeeding her youngest child until two years. Reflecting on her breastfeeding journey, she stated: "It's been a journey that's bonded me and my baby because as of today… it's going to be two years next month and he still breastfeeds" -$Mother_3$, IDI_3. She further explained that despite the demands of prolonged breastfeeding, she remained committed because of the bond it created and the health benefits she perceived in her child: "It hasn't been easy but it's worth it… it brought about strong bond between both of us… we're not in and out of the hospital… I've had so many

people questioning me why he's still breastfeeding now. But because I know my why, I don't even care about what any other person is saying" -Mother$_3$, IDI$_3$.

Similarly, another multiparous mother described how her previous breastfeeding experience shaped her expectations for continuation. She explained: "I breastfed my first child for 12 months because I exclusively breastfed her, but with my twins, I will take my time with them because I supplemented with formula early" -Mother$_2$, IDI$_2$. Another mother, who breastfed for one year and two months, explained that: "I felt confident continuing breastfeeding because of my previous breastfeeding experience with my first child" -Mother$_8$, IDI$_8$. These accounts suggest that previous breastfeeding experiences provided mothers with confidence, realistic expectations, and a sense of capability regarding long-term breastfeeding continuation.

Although only a few mothers in this study were multiparous, confidence in breastfeeding continuation was not limited to mothers with previous childbearing experience. Several first-time mothers also described increasing confidence and intention to continue breastfeeding as their breastfeeding journey progressed. One first-time mother explained that although she had not fixed a strict stopping point, she intended to continue breastfeeding while responding to her child's readiness, stating: *"Whenever she's ready… however, I'm looking at 18 months. I will try to continue breastfeeding for 18 months but whenever she is ready"* -Mother$_1$, IDI$_1$. This suggests that continued breastfeeding experience itself contributed to the development of longer-term breastfeeding confidence and future breastfeeding goals, even among primiparous mothers.

Overall, the findings indicate that mastery experiences played an important role in BFSE during breastfeeding continuation. While previous breastfeeding experience strengthened confidence among multiparous mothers, confidence for continuation also developed through sustained

breastfeeding experience over time. Mastery during continuation therefore appeared cumulative, reflecting mothers' growing confidence as they successfully navigated breastfeeding across changing maternal and infant circumstances.

The findings suggest that mastery experiences were central to BFSE during breastfeeding continuation because mothers drew on accumulated breastfeeding successes to sustain breastfeeding over longer periods. This aligns with Dennis's Breastfeeding Self-Efficacy Theory, which identifies mastery experiences as the strongest source of efficacy beliefs because successful performance strengthens confidence and expectations of future success (Bandura, 1997; Dennis, 1999; Dennis, 2003). Similar findings have been reported in previous studies showing that mothers with prior breastfeeding experience are more likely to report higher BFSE and longer breastfeeding duration because they have accumulated practical knowledge, coping strategies, and confidence from previous breastfeeding experiences (Blyth et al., 2002; Brockway et al., 2017; Huang et al., 2019; Tuthill et al., 2016).

The findings of the present study are consistent with this literature. Multiparous mothers frequently drew on previous breastfeeding experiences when making decisions regarding breastfeeding continuation and duration. However, the findings also extend existing literature by demonstrating that mastery during continuation was not limited to prior breastfeeding experience. First-time mothers also developed confidence through repeated successful breastfeeding encounters, increasing familiarity with infant feeding patterns, and sustained breastfeeding over time. This suggests that mastery can be both retrospective, drawing on previous experiences, and prospective, developing through ongoing breastfeeding practice.

Unlike earlier breastfeeding stages where mastery was often associated with establishing breastfeeding or maintaining exclusive breastfeeding, mastery during continuation appeared rooted in mothers' accumulated experience of sustaining breastfeeding across months and changing developmental stages. Confidence became less dependent on overcoming early breastfeeding challenges and more closely linked to mothers' belief in their ability to maintain breastfeeding within their everyday lives.

These findings can also be understood at the individual level of the Socio-Ecological Model, where mothers' previous experiences, personal goals, and accumulated breastfeeding successes shaped their confidence to continue breastfeeding. For many mothers, continued breastfeeding was also associated with emotional bonding, child comfort, and perceived health benefits. These perceived outcomes appeared to reinforce mothers' confidence by affirming the value of continued breastfeeding. Existing literature similarly reports that mothers who breastfeed for longer durations often associate continuation with emotional closeness, attachment, and child well-being (Rollins et al., 2016; Victora et al., 2016; WHO & UNICEF, 2018).

The findings may have particular relevance for newcomer mothers of African descent because breastfeeding continuation occurred within changing caregiving, family, and migration-related circumstances. Rather than representing a fixed state of confidence, BFSE during continuation appeared to strengthen through sustained breastfeeding experience and mothers' ability to maintain breastfeeding despite evolving maternal and infant needs.

These findings have important implications for practice. First, breastfeeding support should recognize that BFSE continues to evolve beyond breastfeeding initiation and exclusive breastfeeding and may therefore require reinforcement throughout the breastfeeding journey.

Second, healthcare providers should acknowledge that continuation involves unique experiences related to sustaining breastfeeding across changing routines, developmental stages, and maternal responsibilities. Third, breastfeeding education should help first-time mothers understand that confidence can develop gradually through experience and does not need to be fully established at the beginning of breastfeeding. Finally, healthcare providers should recognize and support mothers' long-term breastfeeding goals, including breastfeeding beyond one year, while avoiding assumptions that prolonged breastfeeding is unnecessary or inappropriate.

Overall, the findings demonstrate that mastery experiences were central to BFSE during breastfeeding continuation. While previous breastfeeding experience strengthened confidence among multiparous mothers, mastery also developed through sustained breastfeeding practice, allowing mothers to build confidence in their ability to continue breastfeeding across changing maternal and infant circumstances.

4.2.3.2 Vicarious experiences and breastfeeding continuation

Within Dennis's Breastfeeding Self-Efficacy Theory (BSET), vicarious experiences refer to observational learning that occurs when mothers observe breastfeeding practices and outcomes in other women, which may influence their confidence and expectations regarding breastfeeding (Dennis, 1999; Dennis, 2003). However, in the context of breastfeeding continuation, vicarious experiences appeared less directly influential in shaping BFSE than during breastfeeding initiation and exclusive breastfeeding.

Some mothers described how cultural exposure to prolonged breastfeeding shaped their understanding of breastfeeding duration and normalized continuation beyond infancy. One mother explained: *"Well, I know back home too, people believe in breastfeeding their children, you'll see*

children of two to three years, still running back to be breastfed. So, I know from the grassroots, breastfeeding was embraced for my people" **-Mother$_8$, IDI$_8$.**

This account suggests that prolonged breastfeeding was culturally visible and socially accepted within her community of origin. Although exclusive breastfeeding practices were not always fully understood or consistently practiced, continued breastfeeding itself was widely normalized and culturally embedded. Such observations appeared to shape mothers' perceptions of breastfeeding continuation as both acceptable and achievable over longer periods.

At the same time, another mother described experiencing external questioning about prolonged breastfeeding but remained committed to her breastfeeding goals: *"There's been a lot of challenge, external challenge from people trying to convince you, trying to tell you why are you still doing this… but I never let that get to me because it's not a challenge in anyway… I don't know why it sounds odd to people"* **-Mother$_3$, IDI$_3$.**

These findings suggest that observational experiences functioned primarily as cultural reference points through which mothers interpreted breastfeeding duration and responded to differing social expectations. Confidence to continue breastfeeding appeared increasingly grounded in mothers' own breastfeeding experiences rather than observation alone.

Overall, the findings indicate that vicarious experiences contributed to the normalization of prolonged breastfeeding but played a less prominent role in shaping BFSE during continuation than in earlier breastfeeding stages.

The findings suggest that vicarious experiences influenced breastfeeding continuation primarily by shaping mothers' expectations regarding breastfeeding duration rather than providing direct

guidance on how to sustain breastfeeding over time. This partially aligns with Dennis's Breastfeeding Self-Efficacy Theory, which identifies observational learning as an important source of BFSE (Dennis, 1999; Dennis, 2003). Previous studies similarly report that observing breastfeeding within family and community settings can positively influence breastfeeding attitudes, expectations, and duration goals (Aubel, 2012; Blyth et al., 2002; Huang et al., 2019). The present findings support this pattern by demonstrating that cultural visibility of prolonged breastfeeding helped normalize continuation beyond infancy.

However, the findings also suggest that the influence of vicarious experiences became less central as breastfeeding continuation progressed. By this stage, mothers had accumulated substantial breastfeeding experience and were therefore more likely to rely on personal experience when making decisions regarding continuation. This finding suggests that the relative influence of BSET constructs may shift across the breastfeeding trajectory, with mastery experiences becoming increasingly important as mothers gain breastfeeding experience over time.

An important finding was the contrast between cultural acceptance of prolonged breastfeeding and the questioning mothers sometimes encountered in other social contexts. Existing literature similarly demonstrates that cultural norms influence perceptions of appropriate breastfeeding duration (Higginbottom et al., 2015; Odeniyi et al., 2020; Rollins et al., 2016). The findings of the present study suggest that prior exposure to prolonged breastfeeding may strengthen mothers' confidence in maintaining breastfeeding despite external criticism or differing social expectations.

This finding may be particularly relevant for newcomer mothers who navigate breastfeeding norms from both their countries of origin and the host-country environment. In such circumstances,

mothers may encounter differing expectations regarding breastfeeding duration and must determine which norms align most closely with their own breastfeeding goals and experiences.

At the individual level of the Socio-Ecological Model, mothers interpreted these cultural and observational experiences in ways that shaped their breastfeeding goals and perceptions of continuation. Cultural visibility of prolonged breastfeeding appeared to influence mothers' expectations regarding breastfeeding duration, while their own experiences ultimately guided continuation decisions.

These findings have important implications for practice. Healthcare providers should recognize that cultural understandings of breastfeeding duration may differ across populations and avoid framing prolonged breastfeeding as unusual or unnecessary. Breastfeeding support programs should provide culturally responsive care that respects mothers' continuation goals and creates supportive environments where breastfeeding beyond infancy can be discussed without judgment or stigma.

Overall, the findings demonstrate that vicarious experiences contributed to mothers' understanding and normalization of prolonged breastfeeding. However, as breastfeeding continuation progressed, confidence appeared to become increasingly grounded in mothers' own breastfeeding experiences and personal breastfeeding goals.

4.2.3.3 Social support and breastfeeding continuation

In the Breastfeeding Self-Efficacy Theory (BSET), social support contributes to breastfeeding self-efficacy (BFSE) through encouragement, reassurance, and practical assistance that strengthen mothers' ability to breastfeed (Bandura, 1997; Dennis, 1999; Dennis, 2003). However, in the

context of breastfeeding continuation, the findings of this study suggest that support functioned differently from earlier breastfeeding stages. During breastfeeding initiation and exclusive breastfeeding (EBF), support primarily helped mothers establish breastfeeding and sustain exclusivity. In contrast, during breastfeeding continuation, support became more closely related to whether mothers' environments continued to accommodate breastfeeding over time. Continuation therefore depended largely on environmental feasibility, maternal–infant proximity, caregiving arrangements, and the extent to which breastfeeding could be integrated into changing daily routines and responsibilities.

Return to work and school emerged as important factors influencing breastfeeding continuation. Some mothers explained that separation from their infants disrupted feeding routines and contributed to breastfeeding discontinuation. One mother stated: *"I breastfed for about a year, but when I went back to work it was hard to keep up, I had to stop."* -**Mother$_{10}$, IDI$_{10}$.** Similarly, another participant described how returning to school affected breastfeeding continuation because her infant became increasingly separated from direct breastfeeding interactions: *"She stopped accepting breastmilk around 8 months because I would usually drop her at my mom's place or with my husband when I am going to school… When I tried to breastfeed her directly, she refused, I tried several times, so that was how she stopped."*-**Mother$_{4}$, IDI$_{4}$.**

These experiences suggest that breastfeeding continuation depended not only on mothers' willingness to continue breastfeeding but also on sustained maternal–infant proximity and regular breastfeeding interaction. In the case of Mother4, repeated separation associated with school attendance appeared to gradually alter the infant's feeding pattern and contributed to refusal of direct breastfeeding over time.

In contrast, mothers who remained physically available to their infants described breastfeeding continuation as easier to sustain. One mother explained: *"I was off work, I was very comfortable, my only job was to breastfeed him, so I had no issue breastfeeding him for up to one year."* -**Mother$_{10}$, IDI$_{10}$.**

These experiences highlight the importance of Canada's maternity leave policy in supporting breastfeeding continuation. Most mothers in this study described being on maternity leave for up to one year, which allowed them to remain physically close to their infants and sustain breastfeeding over longer periods. At the structural and policy level of the Socio-Ecological Model (SEM), maternity leave functioned as an enabling condition that supported maternal–infant proximity, responsive feeding, and the integration of breastfeeding into everyday caregiving routines.

A contrasting experience was observed in a case of extended breastfeeding: *"As at now he is 22 months and still breastfeeding, I intend to continue until he is 24 months old."* -**Mother$_{3}$, IDI$_{3}$.** In this case, breastfeeding continuation appeared to be facilitated by flexible employment and sustained maternal–infant proximity. Mother3 had resigned from formal employment before childbirth and became self-employed, which provided greater flexibility and allowed her to remain consistently available to her child. These findings suggest that continuation was enabled not simply by breastfeeding confidence, but by conditions that allowed mothers to maintain regular breastfeeding interaction over time.

The findings also indicate that breastfeeding continuation was influenced by how mothers interpreted the ongoing role of breastfeeding as children grew older. For some mothers, breastfeeding continued because it remained important for soothing, bonding, or sleep routines.

One participant explained: *"I was supposed to stop earlier but that was the only way I could make him sleep."* -**Mother$_9$, IDI$_9$.**

In contrast, some mothers viewed breastfeeding beyond infancy as unnecessary once children became older and more independent. One participant stated: *"Six months is fine, but 24 months is too long. At that point the child is grown and already has teeth."* -**Mother$_6$, IDI$_6$.** Similarly, another mother explained: *"He is grown and eats everything, why will I still be breastfeeding?"* -**Mother$_{10}$, IDI$_{10}$.**

These findings suggest that breastfeeding continuation was shaped not only by practical conditions but also by mothers' perceptions of infant developmental needs and the continuing role of breastfeeding as children matured.

Overall, the findings indicate that social support during breastfeeding continuation functioned differently from earlier breastfeeding stages. Unlike initiation and EBF, where support often involved emotional encouragement, technical guidance, and breastfeeding assistance, continuation depended more heavily on whether mothers' environments remained compatible with breastfeeding over time. Most mothers described maternity leave, physical availability, flexible schedules, and sustained maternal–infant proximity as more important for continuation than direct encouragement from family members or healthcare providers.

The findings suggest that support during breastfeeding continuation was primarily related to environmental feasibility rather than confidence-building. This differs from breastfeeding initiation and EBF, where support often focused on helping mothers establish breastfeeding, overcome technical difficulties, and maintain exclusivity. During continuation, however, mothers had generally already developed confidence in their breastfeeding ability. As a result, continuation

became more dependent on whether their daily environments continued to support breastfeeding over time.

Consistent with previous literature, return to work and school emerged as important influences on breastfeeding duration and continuation. Studies have consistently shown that maternal employment, school attendance, workplace separation, and competing time demands contribute to earlier breastfeeding cessation by reducing opportunities for direct breastfeeding and disrupting feeding routines (Borra et al., 2015; Brown & Davies, 2014; Johnston & Esposito, 2020; Rollins et al., 2016). The findings of this study support this pattern, particularly among mothers whose return to work or school reduced maternal–infant proximity and contributed to breastfeeding discontinuation or infant refusal.

However, the findings also extend existing literature by showing that breastfeeding discontinuation among NCMAD was not necessarily associated with reduced BFSE or lack of breastfeeding intention. Most mothers in this study appeared to maintain confidence in their breastfeeding ability even when continuation became difficult to sustain. This is an important distinction because much of the breastfeeding literature often associates breastfeeding cessation with low confidence or breastfeeding difficulties (Dennis et al., 2019; Shorey et al., 2018). In the present study, continuation was more strongly shaped by environmental and caregiving realities than by mothers' belief in their breastfeeding capability.

These findings suggest that breastfeeding continuation may become progressively less dependent on mothers' confidence alone and increasingly dependent on whether breastfeeding remains practically sustainable within mothers' environments. While mothers generally maintained strong confidence and willingness to continue breastfeeding, continuation often became vulnerable when

work, school, separation from infants, or changing caregiving routines disrupted regular breastfeeding interaction. This indicates that high BFSE may support mothers' motivation to continue breastfeeding but may not be sufficient to overcome structural and environmental constraints that limit breastfeeding feasibility over time.

The findings further suggest that breastfeeding continuation relies heavily on repeated maternal–infant interaction over time. Unlike initiation or EBF, where mothers may overcome temporary breastfeeding challenges through support and persistence, continuation appeared more vulnerable to prolonged disruption of feeding routines and maternal–infant proximity. In the case of mothers returning to work or school, repeated separation from infants gradually altered breastfeeding patterns and, in some cases, contributed to infant refusal of direct breastfeeding. This suggests that breastfeeding continuation is not maintained solely through maternal intention, but through ongoing opportunities for responsive and sustained breastfeeding interaction.

The findings also highlight the importance of structural and policy-level support during breastfeeding continuation. Mothers who remained physically available to their infants through maternity leave, flexible work arrangements, or self-employment described continuation as easier and more manageable. Existing literature similarly shows that longer maternity leave and flexible employment arrangements are associated with longer breastfeeding duration because they support responsive feeding and sustained breastfeeding interaction (Chai et al., 2018; Mirkovic et al., 2016). In this study, maternity leave appeared particularly important because it created the time and physical availability needed for continued breastfeeding during the first year postpartum.

This may be especially important for newcomer mothers, whose traditional caregiving and family support systems may already be altered through migration. In such contexts, structural supports

such as maternity leave may partially compensate for reduced access to extended family caregiving and postpartum support networks. As a result, environmental and policy-level supports may become especially important for sustaining breastfeeding continuation among newcomer mothers navigating changing social and caregiving environments within the host country.

An important continuation-specific finding was that support shifted from being breastfeeding-focused to being environment-focused. During initiation and EBF, support often involved technical guidance, reassurance, and direct breastfeeding assistance. In contrast, continuation depended more on whether mothers' environments remained compatible with breastfeeding over time. This suggests that during breastfeeding continuation, support functioned less as confidence-building and more as continuation-enabling.

The findings can also be understood through the Socio-Ecological Model (SEM). At the interpersonal level, caregiving arrangements and maternal–infant proximity shaped breastfeeding continuation. At the organizational level, workplace and school demands influenced mothers' ability to maintain breastfeeding routines. At the structural and policy level, maternity leave and flexible employment policies either supported or constrained mothers' ability to continue breastfeeding over time. These findings demonstrate that breastfeeding continuation was shaped through interaction across multiple socio-ecological levels. While mothers maintained individual confidence and intention to continue breastfeeding, organizational demands and structural realities influenced whether breastfeeding could remain practically sustainable within everyday life.

Much of the existing literature on breastfeeding continuation is based on non-immigrant populations, where support systems, caregiving arrangements, and workplace familiarity may be more stable. In contrast, newcomer mothers may experience additional challenges related to

migration, employment adaptation, changing support systems, and caregiving responsibilities within the host-country environment (Chowdhury et al., 2021; Higginbottom et al., 2015; Odeniyi et al., 2020). The findings of this study therefore suggest that breastfeeding continuation among NCMAD must be understood not only as an individual maternal choice, but also as a process shaped by broader environmental and structural realities.

These findings have important implications for practice. First, breastfeeding support should extend beyond initiation and EBF to address the long-term realities of breastfeeding continuation. Second, healthcare providers and breastfeeding programs should recognize that continuation may depend heavily on maternity leave, flexible work arrangements, school schedules, caregiving arrangements, and maternal–infant proximity. Third, policies that support breastfeeding-friendly workplaces, educational flexibility, and continued maternal access to infants may help mothers sustain breastfeeding for as long as intended. The findings also suggest that breastfeeding interventions often place greater emphasis on breastfeeding initiation and EBF than on continuation beyond infancy. However, mothers in this study required ongoing environmental and structural support to sustain breastfeeding over longer durations. This highlights the need for breastfeeding policies and programs that extend beyond the early postpartum period and address the realities of continued breastfeeding alongside employment, education, caregiving responsibilities, and changing infant feeding patterns.

Overall, the findings demonstrate that social support during breastfeeding continuation differed from earlier breastfeeding stages. Rather than functioning primarily as emotional encouragement or technical breastfeeding support, continuation support was more closely related to environmental feasibility and maternal–infant availability over time. These findings reinforce the importance of social support within BSET while further demonstrating that breastfeeding continuation among

NCMAD depended not only on breastfeeding confidence, but also on whether mothers' environments continued to support breastfeeding across changing life circumstances.

4.2.3.4 Emotional and Physiological states and breastfeeding continuation

Within the Breastfeeding Self-Efficacy Theory (BSET), emotional and physiological states influence breastfeeding self-efficacy (BFSE) through mothers' interpretation of physical experiences, emotional responses, stress, and bodily capability during breastfeeding (Bandura, 1997; Dennis, 1999; Dennis, 2003). However, in the context of breastfeeding continuation, emotional and physiological states in this study appeared less related to uncertainty about breastfeeding ability and more connected to whether breastfeeding remained physically and emotionally sustainable over time. Unlike breastfeeding initiation and exclusive breastfeeding (EBF), where mothers navigated early breastfeeding challenges and developing confidence, continuation involved prolonged physical demands, cumulative fatigue, emotional endurance, and balancing breastfeeding with changing daily responsibilities.

Several mothers described how accumulated physical exhaustion and prolonged breastfeeding demands influenced continuation. One participant explained: *"I was very confident, but she sucks all through the night and I have to go to work the following day, the stress was just too much, so I had to start weaning her."* -**Mother$_5$, IDI$_5$.**

This account suggests that breastfeeding continuation became increasingly difficult when prolonged night feeding was combined with employment responsibilities and inadequate rest. Although the mother maintained confidence in her breastfeeding ability, continuation became physically and emotionally exhausting over time.

Similarly, another mother described the cumulative physical burden associated with prolonged expressing while balancing breastfeeding with work responsibilities:

"Throughout the one year, two months that I breastfed her, I was hand expressing the breastmilk; combining it with work, I was tired and couldn't continue." **-Mother$_8$, IDI$_8$.**

The participant further explained that prolonged manual expression resulted in persistent wrist pain. These findings suggest that breastfeeding continuation involved sustained bodily labour that became increasingly difficult to maintain over extended periods. In this case, breastfeeding discontinuation appeared to result not from reduced confidence, but from accumulated physical strain and exhaustion associated with prolonged breastfeeding and expressing.

Other mothers described emotional and bodily changes that influenced their decision to discontinue breastfeeding as children became older. One participant explained:

"First, I was already getting tired. Secondly, I wanted to start losing weight, and thirdly, I just felt that he was a little too big of a baby to be sucking breastmilk." **-Mother$_9$, IDI$_9$.** Similarly, another mother described physical discomfort associated with breastfeeding older children: *"At that point the child is grown and already has teeth. It hurts when breastfeeding a child with teeth."* **-Mother$_6$, IDI$_6$.**

These findings suggest that breastfeeding continuation was influenced not only by physical fatigue but also by mothers' changing emotional and bodily perceptions as children matured. For some mothers, prolonged breastfeeding gradually became physically uncomfortable or emotionally inconsistent with how they perceived their child's developmental stage.

In contrast, one mother who continued breastfeeding until almost 24 months described continuation as difficult but manageable because of her determination to continue breastfeeding for her intended duration. She explained: *"At this stage now, he's grown, he switches himself between breast to breast and it's painful because when I had breast engorgement this weekend, I tried to force him to stay in one place, but he will switch, and there's nothing I can do."* **-Mother$_3$, IDI$_3$.**

Despite describing pain and physical discomfort associated with breastfeeding an older child, the participant remained committed to continuing breastfeeding until 24 months. These findings suggest that emotional endurance and personal determination influenced mothers' ability to persist with breastfeeding despite prolonged physical demands and discomfort.

Overall, the findings indicate that emotional and physiological states during breastfeeding continuation differed from earlier breastfeeding stages. During initiation and EBF, emotional and physiological experiences were often related to breastfeeding establishment, milk supply, pain, and early adaptation to breastfeeding. In contrast, during continuation, emotional and physiological states became more closely associated with cumulative fatigue, sustained bodily demand, prolonged night feeding, physical discomfort, and emotional endurance over time.

The findings suggest that breastfeeding continuation became progressively influenced by whether breastfeeding remained physically and emotionally sustainable within mothers' everyday lives. Unlike initiation and EBF, where mothers often worked to overcome temporary breastfeeding challenges, continuation involved managing ongoing and cumulative physical demands over extended periods. This included prolonged night feeding, persistent tiredness, bodily discomfort, physical pain, and balancing breastfeeding with work and caregiving responsibilities.

Consistent with previous literature, mothers in this study described fatigue, sleep disruption, physical discomfort, and prolonged bodily demands as important influences on breastfeeding continuation. Existing studies similarly identify exhaustion, maternal fatigue, physical pain, and sleep deprivation as major contributors to breastfeeding cessation during later breastfeeding stages (Kent et al., 2015; Odom et al., 2013; Rollins et al., 2016). The findings of this study support this pattern, particularly among mothers who combined breastfeeding with employment or prolonged expressing over extended periods.

However, the findings also extend existing literature by showing that breastfeeding discontinuation among NCMAD was not necessarily associated with reduced BFSE. Most mothers appeared to maintain confidence in their breastfeeding ability even when continuation became physically difficult to sustain. This is an important distinction because breastfeeding self-efficacy literature often links negative emotional or physiological experiences with reduced breastfeeding confidence and earlier cessation (Dennis et al., 2019; Shorey et al., 2018). In the present study, however, mothers frequently described discontinuation as a response to cumulative bodily exhaustion, emotional fatigue, or changing physical realities rather than a lack of confidence in breastfeeding itself.

These findings suggest that during breastfeeding continuation, emotional and physiological states may influence whether breastfeeding remains sustainable over time rather than whether mothers believe they can breastfeed. High BFSE appeared to support mothers' persistence and willingness to continue breastfeeding, but it did not eliminate the effects of prolonged physical strain, fatigue, pain, or emotional exhaustion associated with long-term breastfeeding. This highlights an important distinction between breastfeeding confidence and bodily sustainability during continuation.

The findings further suggest that breastfeeding continuation involves sustained emotional and bodily labour. Mothers who continued breastfeeding for longer durations often described ongoing physical discomfort, emotional endurance, and repeated adjustment to changing infant feeding behaviours. In the case of Mother3, continuation persisted despite pain and engorgement because of strong personal determination and commitment to her breastfeeding goals. This suggests that emotional endurance and persistence may become increasingly important during prolonged breastfeeding continuation.

At the individual level of the Socio-Ecological Model (SEM), emotional and physiological experiences such as fatigue, pain, stress, and bodily discomfort shaped mothers' breastfeeding continuation experiences. However, these experiences were also influenced by organizational and structural realities, including work demands, prolonged caregiving responsibilities, inadequate rest, and the cumulative physical burden of sustaining breastfeeding over time. These interacting socio-ecological influences shaped whether breastfeeding continuation remained physically and emotionally manageable for mothers.

Much of the existing literature examining emotional and physiological influences on breastfeeding continuation is based on non-immigrant populations. In contrast, newcomer mothers may simultaneously navigate migration-related adjustment, employment demands, caregiving responsibilities, and changing support systems alongside prolonged breastfeeding (Chowdhury et al., 2021; Higginbottom et al., 2015; Odeniyi et al., 2020). These broader contextual realities may intensify emotional and physical demands associated with breastfeeding continuation among newcomer mothers.

These findings have important implications for practice. First, breastfeeding support should recognize that continuation beyond infancy may involve cumulative physical and emotional demands that differ from earlier breastfeeding stages. Second, healthcare providers should provide realistic guidance regarding prolonged breastfeeding, maternal fatigue, physical discomfort, and weaning transitions. Third, breastfeeding interventions should move beyond confidence-building alone and include strategies that support maternal rest, physical well-being, and sustainable breastfeeding practices over time. Finally, continued breastfeeding support should acknowledge that mothers may remain highly confident in breastfeeding while simultaneously experiencing emotional exhaustion or physical strain that affects continuation.

Overall, the findings demonstrate that emotional and physiological states remained important during breastfeeding continuation, but their influence shifted across the breastfeeding trajectory. Rather than primarily shaping mothers' confidence to breastfeed, emotional and physiological experiences during continuation influenced whether breastfeeding remained physically and emotionally sustainable over time. These findings reinforce the importance of emotional and physiological states within BSET while further demonstrating that breastfeeding continuation among NCMAD depended not only on confidence, but also on mothers' ability to sustain the prolonged bodily and emotional demands associated with continued breastfeeding.

4.2.4 BFSE Experiences with (Non)Responsive Breastfeeding

Responsive breastfeeding refers feeding according to infant signals rather than rigid schedules and reflects an ongoing interaction between mothers and infants during breastfeeding. In contrast, non-responsive breastfeeding may involve feeding based on predetermined schedules, external

expectations, or caregiver-directed feeding patterns rather than infant cues. These approaches influence how mothers interpret and respond to infant feeding needs and may shape breastfeeding experiences over time. Responsive BF emphasizes mothers' ability to recognize and appropriately respond to infant feeding cues, including signs of hunger, satiety, and comfort needs.

The findings of this study suggest that breastfeeding approaches among newcomer mothers of African descent (NCMAD) in Halifax Regional Municipality (HRM) were predominantly characterized by responsive breastfeeding practices, although variations in feeding approaches were observed. Most mothers described feeding their infants according to infant cues rather than predetermined schedules and expressed confidence in recognizing signs of hunger, fullness, and feeding satisfaction. However, some variations emerged where mothers relied on personal judgement and experience to guide feeding decisions. The findings suggest that breastfeeding approaches were not determined solely by breastfeeding knowledge but evolved through maternal experience, infant behaviour, confidence, and everyday caregiving realities.

4.2.4.1 Responsive Breastfeeding Practices

Most mothers in this study described confidence in feeding their infants according to infant cues and needs rather than predetermined schedules. Mothers frequently explained that feeding decisions were largely guided by infant demands and emphasized their willingness to breastfeed whenever infants wanted to feed, regardless of frequency or setting. One participant described her confidence in responding to her infant's feeding needs by stating: *"Oh yeah. The whole of Halifax has seen my breast; I whoop it out anywhere. What am I there for? That's my job."* **-Mother$_1$, IDI$_1$.** When further discussing her ability to respond to infant feeding demands, she explained: *"As much as, as frequent as she wants and as long as I'm there."* **-Mother$_1$, IDI$_1$.**

Similarly, another mother described responding to her infants' feeding demands despite managing twin feeding responsibilities: *"As they want it, I provide it."* **-Mother$_2$, IDI$_2$.** Another participant similarly stated: *"Yes, anytime, any day, outside, I still breastfeed him outside till now."* **-Mother$_3$, IDI$_3$.** These accounts suggest that mothers largely prioritized infant needs over environmental or situational circumstances and demonstrated confidence in responding to infant feeding demands whenever required.

Mothers also described using various infant behaviours and cues to guide feeding decisions and determine feeding adequacy. Participants commonly relied on crying, sucking behaviour, sleeping patterns, and body language to identify hunger and fullness. One participant explained: *"They release it by themselves, or I give them again and they don't want to take it, it shows they are full and sometimes they dose off, and you see the satisfaction on their faces, they will give you a smile."* **-Mother$_2$, IDI$_2$.** Similarly, another mother explained: *"Sometimes she just stops sucking, sometimes she pushes it out of her mouth… she sleeps off."* **-Mother$_4$, IDI$_4$.** Another participant described: *"When he's done, I notice that he pulls away from the breast no matter how much you try to get him back, he pulls away and he starts playing with his leg."* **-Mother$_{10}$,IDI$_{10}$.** Likewise, another mother stated: *"He will literally sleep off while breastfeeding and I know that at that point he's actually full and he will have milk dripping out of his mouth."* **-Mother$_9$, IDI$_9$.**

These findings suggest that mothers developed ways of recognizing and interpreting infant feeding cues through repeated interaction with their infants.

For many mothers, confidence in responsive feeding appeared to strengthen over time as breastfeeding experiences accumulated. While most mothers described high confidence during later stages of breastfeeding, some explained that confidence developed gradually as they became

more familiar with their infants' behaviours and feeding patterns. One participant explained: *"Initially no. But as time goes on, like from three months I was confident to give her anytime, anywhere."* **-Mother$_5$, IDI$_5$.**

These findings suggest that confidence in responsive feeding was not always immediate and often evolved through breastfeeding experience and ongoing maternal–infant interaction.

Breastfeeding was also described as extending beyond nutritional feeding and serving broader functions within mother–infant interactions. Several mothers explained that breastfeeding was commonly used to soothe infants, reduce crying, and provide comfort. One participant explained: *"Most times, whenever she's crying, once I put her on breast, she stops crying."* **-Mother$_5$, IDI$_5$.** Similarly, another mother stated: *"That's even the first thing that comes to a mother when a baby is crying… I'll just give him breast and he will keep quiet."* **-Mother$_3$, IDI$_3$.**

These accounts suggest that breastfeeding was not interpreted solely as a method of providing nutrition but also as an important strategy for comfort, emotional regulation, and maintaining closeness between mothers and infants.

Although responsive breastfeeding practices were predominant among participants, some variations in how mothers responded to infant needs were observed. While most mothers relied primarily on infant cues, some mothers combined infant behaviours with personal judgement and previous experiences when making feeding decisions. For example, one participant explained that she occasionally initiated feeding based on her perception of appropriate feeding intervals rather than waiting solely for infant requests: *"Even sometimes when I know that she was not requesting for breast and I look at the time, it's past an hour or two hours and she had not requested, I feed her because I know she needed it at least every two to three hours."* **-Mother$_8$, IDI$_8$.**

These experiences suggest that feeding approaches did not always fit into clearly distinct responsive and non-responsive categories but instead reflected individualized practices influenced by maternal judgement and caregiving experiences.

The findings suggest that responsive breastfeeding was the predominant feeding approach among NCMAD in this study, with mothers largely relying on infant cues rather than rigid schedules to guide feeding decisions. Mothers commonly described feeding whenever infants expressed hunger, recognizing signs of fullness and satisfaction, and responding flexibly to infant demands. Existing literature similarly reports that responsive breastfeeding promotes breastfeeding success, maternal–infant bonding, infant growth, and longer breastfeeding duration because it supports sensitive interactions between mothers and infants (DiSantis et al., 2011; Pérez-Escamilla et al., 2017; Ventura & Birch, 2008). Similar to previous studies, mothers in this study frequently described breastfeeding according to infant hunger and satiety cues and demonstrated confidence in responding to infant feeding demands.

While responsive feeding predominated, mothers occasionally integrated infant cues with personal judgement regarding feeding adequacy and timing. Similar findings have been reported in previous studies suggesting that feeding approaches often exist along a continuum rather than within strictly defined responsive and non-responsive categories (DiSantis et al., 2011; Ventura & Birch, 2008). In the present study, mothers' feeding decisions appeared to reflect attempts to balance infant behaviours with personal experiences and perceptions of feeding adequacy rather than deliberate disregard for infant cues.

However, the findings extend existing literature in several important ways. Much of the literature examining responsive feeding primarily conceptualizes responsiveness as recognising and

responding to nutritional cues such as hunger and fullness (DiSantis et al., 2011; Pérez-Escamilla et al., 2017). In contrast, mothers in this study frequently described breastfeeding as extending beyond nutrition alone. Breastfeeding was commonly used to soothe infants, calm crying, promote sleep, and maintain emotional closeness. Mothers frequently described breastfeeding as the first response to distress, even when crying may not necessarily have represented hunger. This suggests that among NCMAD, responsive breastfeeding may involve a broader interpretation of infant needs in which breastfeeding functions simultaneously as a feeding behaviour, a comfort strategy, and a relational practice.

This broader interpretation may partly reflect cultural and experiential understandings of breastfeeding among mothers. Within many African contexts, breastfeeding often extends beyond nutritional feeding and may represent caregiving, maternal presence, comfort, and emotional connectedness between mothers and children. Consequently, mothers may respond to infant cues more holistically rather than separating nutritional needs from emotional needs. While existing studies often distinguish feeding for hunger from feeding for comfort (Ventura & Birch, 2008), mothers in this study appeared to perceive these functions as interconnected rather than distinct. This may explain why breastfeeding was frequently used to calm infants even when hunger was uncertain.

Another important finding was that mothers appeared to develop confidence in responsive feeding through repeated interaction with their infants over time. Most mothers described high confidence in recognizing feeding cues and identifying signs of feeding completion. However, confidence was not always immediate and often strengthened through accumulated breastfeeding experiences. Mothers gradually developed individualized ways of interpreting infant behaviours including crying patterns, sucking behaviours, sleeping, body movements, and visible signs of satisfaction.

This finding is consistent with previous studies suggesting that maternal responsiveness improves as mothers become more familiar with infant behavioural patterns and gain experience interpreting feeding cues (Thullen et al., 2017; Ventura & Birch, 2008).

However, the findings also suggest an important distinction. Existing literature often assumes that responsiveness develops largely through breastfeeding knowledge and education. In the present study, mothers appeared to rely more heavily on lived experience and repeated interaction with their infants than on formal breastfeeding instruction. Confidence developed through observing how infants responded to feeding and learning through repeated caregiving experiences. This suggests that responsive feeding may be less of a purely learned technical skill and more of a dynamic process that evolves through maternal–infant interaction.

Within the Breastfeeding Self-Efficacy Theory (BSET), these repeated successful experiences may reflect mastery experiences that strengthen confidence over time (Dennis, 2003). Mothers' ability to recognise infant cues, respond appropriately, and observe positive outcomes such as infant satisfaction, reduced crying, or normal growth likely reinforced confidence in their breastfeeding practices. Through repeated successful interactions, mothers appeared to develop stronger beliefs in their ability to meet their infants' feeding needs.

The findings can also be interpreted through the Socio-Ecological Model. At the individual level, mothers' confidence, previous experiences, and interpretation of infant behaviours influenced feeding decisions. At the interpersonal level, breastfeeding represented an ongoing interaction between mother and infant where feeding practices evolved through continuous communication and responsiveness. Unlike earlier breastfeeding stages that emphasized external support,

responsive feeding appeared to emerge primarily through maternal–infant interactions and repeated caregiving experiences.

The findings also highlight some important differences that may exist between newcomer mothers and mothers within non-immigrant populations. Much of the literature on responsive feeding has been conducted among general maternal populations where breastfeeding education, feeding practices, and social expectations may differ (Pérez-Escamilla et al., 2017). In contrast, newcomer mothers may bring pre-existing cultural understandings of breastfeeding that shape how infant cues are interpreted and responded to. Additionally, migration experiences and adaptation to a new environment may influence caregiving practices and maternal decision-making. Therefore, breastfeeding responsiveness among NCMAD may reflect both breastfeeding knowledge and broader cultural understandings of motherhood and caregiving.

These findings have important implications for practice. First, breastfeeding support should extend beyond technical breastfeeding skills such as positioning and latching to include guidance on infant cue recognition and responsive feeding practices. Second, healthcare providers should recognize that mothers may use breastfeeding to address a range of infant needs beyond hunger and should provide education that acknowledges both nutritional and emotional dimensions of breastfeeding. Third, breastfeeding interventions for newcomer mothers should incorporate culturally responsive approaches that recognize how cultural beliefs and caregiving practices shape feeding behaviours. Finally, helping mothers understand infant feeding cues early may strengthen confidence and support positive maternal–infant interactions throughout the breastfeeding journey.

Overall, the findings demonstrate that responsive breastfeeding was the predominant feeding approach among NCMAD in this study. Mothers commonly described confidence in recognizing

and responding to infant cues and developed individualized approaches to understanding hunger, satiety, comfort, and emotional needs. These findings suggest that responsive breastfeeding involved both nutritional and relational dimensions and evolved through ongoing maternal–infant interaction and repeated caregiving experiences. Among NCMAD, responsiveness was therefore not simply a feeding strategy but represented a broader approach to caregiving and maternal–infant connection.

4.2.5 BFSE Experiences with Breastfeeding Techniques (Positioning and Latching)

Breastfeeding techniques refer to the practical skills mothers use during breastfeeding to facilitate and maintain effective breastfeeding over time. These techniques commonly include appropriate infant positioning and achieving an effective latch, both of which are important for milk transfer, maternal comfort, and successful breastfeeding (Riordan & Wambach, 2015; WHO, 2009). Difficulties with positioning and latching can contribute to pain, feeding difficulties, and reduced breastfeeding confidence, whereas successful technique development may enhance mothers' confidence and support continued breastfeeding (Dennis, 2003; Galipeau et al., 2018). In this study, mothers described varying experiences with positioning and latching. While many mothers reported high confidence in their breastfeeding skills, confidence often developed through experience, observation, healthcare guidance, and adaptation to individual breastfeeding situations.

4.2.5.1 Positioning Experiences

Mothers described different approaches to positioning during breastfeeding and generally expressed confidence in finding methods that worked for themselves and their infants. Positioning experiences were closely connected to comfort, infant access to the breast, breast-switching practices, and mothers' ability to sustain feeding without pain or difficulty. Some mothers

described positioning confidence as developing gradually through experience, while others attributed their confidence to healthcare guidance, previous knowledge, or practical tools that made breastfeeding easier.

One participant explained that a breastfeeding pillow played an important role in improving her breastfeeding experience and confidence: *"I built my confidence level over time and one thing that helped me a lot was having a breastfeeding pillow so that made breastfeeding easy and boosted my confidence."* **-Mother$_9$, IDI$_9$.** This suggests that practical breastfeeding aids contributed to positioning confidence by improving comfort and making breastfeeding easier to manage, particularly for a first-time mother who was still developing confidence in her technique.

Mothers also described different approaches to positioning and breast switching during feeding. Several mothers preferred allowing infants to complete feeding on one breast before moving to the other. One participant explained: *"I ensure they feed on one breast from the beginning to the end before switching."* **-Mother$_2$, IDI$_2$.** Similarly, another mother stated: *"I always make sure he sucks enough from one before switching to the other."* **-Mother$_{10}$, IDI$_{10}$.**

Another participant described relying on her own observation and experience when deciding how to feed: *"I do one breast per feed… when I was doing that initially I just noticed maybe after an hour she's hungry again, so I just tried to make sure she gets the hind milk from this one completely before I move."* **-Mother$_4$, IDI$_4$.** These accounts suggest that mothers used feeding-side decisions to manage infant satisfaction, perceived milk transfer, and breastfeeding comfort.

However, positioning and breast-switching practices were not uniform across participants. Some mothers described alternating breasts based on comfort, engorgement prevention, or techniques they had learned. One participant explained: *"I personally switch on my own after some minutes. I just want him to suck on the other one so that it doesn't get engorged."* **-Mother$_6$, IDI$_6$.**

Similarly, another mother stated: *"I didn't really do switching immediately. If I feed around 10am on my left, then by 12 noon I'll take him to the right."* -**Mother$_9$, IDI$_9$.** Another participant described a timed approach: *"I was using the techniques of 15 minutes on right breast and 15 minutes on left breast."* -**Mother$_7$, IDI$_7$.**

These variations indicate that mothers adopted different positioning and breast-switching approaches according to their comfort, feeding goals, and infant feeding patterns.

Overall, positioning experiences among NCMAD were characterized by comfort-seeking and individualized breastfeeding practices. While some mothers relied on healthcare guidance or previous knowledge, others drew on personal observation and experience to determine approaches that worked best for themselves and their infants.

The findings suggest that positioning was an important contributor to breastfeeding confidence because it influenced comfort, feeding effectiveness, and mothers' ability to sustain breastfeeding over time. Consistent with existing literature, mothers frequently associated positioning practices with breastfeeding comfort and confidence. Breastfeeding guidance suggests that comfortable positioning facilitates effective breastfeeding by improving infant access to the breast, reducing maternal strain, and promoting sustained feeding interactions (Breastfeeding Committee for Canada [BCC], 2017; McFadden et al., 2017; Toronto Public Health, 2019). Studies similarly indicate that appropriate positioning can reduce maternal discomfort and contribute to more positive breastfeeding experiences (Kent et al., 2015; Wang et al., 2021). Similar findings were observed in the present study, where mothers who reported comfort with their feeding approaches frequently described greater confidence in their breastfeeding techniques.

However, the findings extend existing literature by suggesting that positioning was experienced as a flexible process rather than a standardized technical skill. While breastfeeding guidelines often

emphasize correct positioning techniques (Kent et al., 2015; McFadden et al., 2017), mothers frequently modified feeding approaches according to infant responses, breast comfort, and perceived feeding effectiveness. Decisions regarding breast switching, use of breastfeeding aids, and feeding duration were often guided by maternal judgement and practical experience rather than strict adherence to prescribed techniques.

Consistent with Breastfeeding Self-Efficacy Theory (BSET), successful positioning experiences functioned as mastery experiences that strengthened confidence through repeated positive outcomes (Dennis, 1999, 2003). Mothers appeared to assess breastfeeding effectiveness through indicators such as infant satisfaction, breast comfort, and reduced hunger cues. Confidence therefore developed through successful feeding experiences and mothers' growing familiarity with approaches that worked for their individual circumstances.

The findings can also be understood through the Socio-Ecological Model. At the individual level, mothers' comfort, previous experiences, and perceptions of breastfeeding effectiveness influenced positioning practices. Organizational influences were evident through breastfeeding guidance and practical resources provided by healthcare professionals, which supported mothers' positioning confidence and technique development.

These findings may be particularly relevant for newcomer mothers of African descent, who may be learning breastfeeding techniques while navigating unfamiliar healthcare systems and reduced access to traditional postpartum support networks. Under these circumstances, mothers may rely on a combination of professional guidance and personal experience when developing breastfeeding practices.

These findings have important implications for practice. First, healthcare providers should present positioning as a flexible skill rather than a single correct method and recognize that

mothers may require different approaches depending on maternal comfort, infant behaviours, and breastfeeding circumstances. Second, positioning guidance should extend beyond immediate postpartum teaching because mothers' positioning needs and breastfeeding experiences may evolve throughout breastfeeding. Third, healthcare providers should regularly assess mothers' positioning experiences and provide individualized support when challenges arise rather than assuming that early breastfeeding instruction alone is sufficient. Finally, breastfeeding education for newcomer mothers should acknowledge that mothers may integrate healthcare guidance with personal experience and culturally informed caregiving practices when developing breastfeeding techniques.

4.2.5.2 Latching Experiences

Mothers generally described confidence in latching techniques and frequently linked this confidence to healthcare guidance, repeated breastfeeding experiences, and observation of successful feeding outcomes. While some mothers reported high confidence from the early postpartum period, others described confidence developing gradually as they became more familiar with breastfeeding and infant feeding behaviours. Latching experiences were also influenced by physiological factors and individual breastfeeding circumstances.

Several mothers explained that healthcare providers played an important role in teaching and strengthening confidence in latching techniques. One participant explained: *"The nurses did a good job by showing me other techniques of breastfeeding the babies… with those skills I am confident."* -**Mother$_2$, IDI$_2$.** Similarly, another mother stated: *"Nurses put me through my first time, so yeah, I'm confident."*-**Mother$_3$, IDI$_3$.** Another participant similarly explained: *"Yes, I was taught."* -**Mother$_6$, IDI$_6$.** These accounts suggest that healthcare guidance played an important

role in helping mothers acquire practical breastfeeding skills and develop confidence in their ability to latch infants successfully.

Successful latching was also frequently associated with positive breastfeeding experiences and reduced discomfort. One participant explained: *"I don't feel pain while breastfeeding… they are latching well."* -**Mother$_2$, IDI$_2$.** Similarly, another mother stated: *"That's why it's limited in terms of not having sore nipple always, because he latches well."*-**Mother$_3$, IDI$_3$.** These findings suggest that successful latching contributed not only to feeding effectiveness but also to maternal comfort and positive breastfeeding experiences.

However, confidence in latching was not always immediate. Some mothers described confidence developing gradually with repeated breastfeeding experiences. One participant explained: *"At the beginning, no, because I was a first-time mom, so I didn't know exactly how to take my nipple to have him open his mouth wide enough. With time, I had the experience."* -**Mother$_9$, IDI$_9$.** Similarly, another mother stated: *"At first I had low confidence but as time goes on, really my confidence was high."* -**Mother$_5$, IDI$_5$.** These accounts suggest that confidence in latching strengthened as mothers accumulated breastfeeding experience and became more familiar with infant feeding patterns.

Variations in latching experiences were also observed. One mother described concerns regarding her infant's non-traditional latching pattern: *"Everybody says the whole nipple was supposed to go into the baby's mouth, but I ended up not putting everything in her mouth and she fed that way throughout my whole breastfeeding journey."*-**Mother$_4$, IDI$_4$.** She further explained: *"I would say that's her own style of latching properly maybe not the common way but that was just her own style."*-**Mother$_4$, IDI$_4$.** Similarly, another participant described physiological factors that affected

breastfeeding despite maintaining confidence in her ability to breastfeed: *"I had confidence. It was not about confidence, but what I noticed was my nipples were not pointing… I had flat nipples."* **-Mother$_8$, IDI$_8$.** These findings suggest that latching experiences were not always determined by confidence or technique alone and could also be influenced by physiological characteristics and individual mother–infant circumstances. Overall, the findings indicate that latching experiences among NCMAD involved a combination of healthcare guidance, breastfeeding experience, physiological realities, and individual breastfeeding circumstances.

The findings suggest that latching was an important contributor to breastfeeding confidence because it influenced feeding effectiveness, maternal comfort, and mothers' perceptions of successful breastfeeding. Existing literature similarly identifies effective latching as a critical component of breastfeeding success because proper attachment promotes efficient milk transfer, reduces nipple pain, and supports positive breastfeeding experiences (Kent et al., 2015; McFadden et al., 2017; Victora et al., 2016). Similar findings were observed in this study, where mothers commonly associated successful latching with reduced discomfort and improved confidence in breastfeeding.

However, the findings extend existing literature by suggesting that successful latching was not always evaluated according to standardized indicators of correct attachment and positioning (Breastfeeding Committee for Canada [BCC], 2017; WHO & UNICEF, 2018). Mothers frequently assessed breastfeeding success using practical outcomes such as infant satisfaction, effective feeding, infant growth, and the absence of major breastfeeding difficulties. Mother4's account illustrates that successful breastfeeding could occur even when latching did not fully conform to commonly recommended practices.

Consistent with Breastfeeding Self-Efficacy Theory (BSET), repeated successful latching experiences functioned as mastery experiences that strengthened confidence through accumulated success (Dennis, 1999, 2003). Mothers who observed effective feeding outcomes and reduced breastfeeding difficulties appeared to develop greater confidence in their ability to breastfeed successfully.

An important distinction emerging from the findings relates to physiological influences on breastfeeding. Mother8's experience suggests that breastfeeding difficulties may not necessarily indicate reduced confidence or inadequate technique. Instead, physiological factors such as flat nipples may influence breastfeeding experiences independently of mothers' confidence. This finding highlight that breastfeeding challenges may occur even among highly motivated and confident mothers and that breastfeeding outcomes are shaped by biological as well as psychosocial factors.

The findings can also be interpreted through the Socio-Ecological Model. Individual factors such as confidence, physiological characteristics, and previous breastfeeding experiences shaped mothers' perceptions of successful latching, while healthcare professionals contributed to technique development through practical instruction and breastfeeding education. These influences may be particularly important for newcomer mothers who are learning breastfeeding skills while adapting to unfamiliar healthcare and support environments.

These findings have important implications for practice. First, healthcare providers should recognize that latching experiences may vary across mothers and infants and avoid presenting

breastfeeding techniques as rigid procedures with a single correct approach. Second, breastfeeding support should provide individualized assessment and practical guidance that considers physiological differences and breastfeeding circumstances. Third, healthcare providers should reassure mothers that early uncertainty regarding latching may be a normal part of the breastfeeding journey and that confidence often strengthens with repeated experience. Finally, breastfeeding interventions should acknowledge that breastfeeding challenges may not necessarily reflect low confidence or inadequate effort but may involve physiological and contextual realities requiring individualized support.

4.2.6 Adaptation and Resilience as Emerging Breastfeeding Self-Efficacy experiences

Unlike the preceding themes, adaptation and resilience did not align directly with the predefined constructs of the Breastfeeding Self-Efficacy Theory (BSET). Rather, this theme emerged inductively from participants' narratives and reflected how mothers responded to challenges, adjusted breastfeeding practices, and maintained breastfeeding despite changing circumstances. Across different stages of breastfeeding, mothers frequently described finding ways to overcome difficulties rather than discontinuing breastfeeding when challenges arose. Their experiences suggest that breastfeeding self-efficacy (BFSE) was not a fixed attribute, but an evolving process supported by persistence, flexibility, and practical problem-solving.

Participants frequently described maintaining a strong commitment to breastfeeding despite encountering physical, emotional, and contextual challenges. One mother reflected on her breastfeeding journey and explained: *"I would say I exceeded my own expectation, I have the goal in my mind already, so I kept going."* **-Mother$_3$, IDI$_3$.** Similarly, another participant described

adapting to the realities of motherhood and migration: *"We just have to adapt to the situation, when we are in Rome, we behave like Rome."* **-Mother$_7$, FGD$_1$.**

These accounts suggest that resilience was reflected not in the absence of challenges but in mothers' willingness to continue breastfeeding while adjusting to new circumstances and responsibilities.

Adaptation was also evident in the breastfeeding strategies mothers adopted when faced with difficulties. Rather than discontinuing breastfeeding, several participants modified feeding approaches according to their individual circumstances and infant needs. One mother described maintaining breastfeeding despite challenges with direct breastfeeding: *"I hand-expressed milk throughout and fed my baby without direct latching."* **-Mother$_8$, IDI$_8$.** Another participant described adapting to her infant's unique feeding pattern rather than relying strictly on conventional breastfeeding expectations: *"Everybody says the whole nipple was supposed to go into the mouth, but I ended up not putting everything in the mouth and she fed that way throughout my whole breastfeeding journey... I would say that's her own style of latching properly maybe not the common way but that was just her own style."* **-Mother$_4$, IDI$_4$.**

These experiences illustrate how mothers employed individualized approaches when standard breastfeeding practices did not fully align with their circumstances. Rather than viewing alternative approaches as failures, mothers evaluated breastfeeding success based on whether feeding remained effective and sustainable for themselves and their infants.

Overall, the findings indicate that adaptation and resilience were reflected in mothers' willingness to persist, modify approaches, and identify workable solutions when challenges occurred. These

experiences suggest that successful breastfeeding was not always characterized by the absence of difficulties but often involved ongoing efforts to manage and overcome them.

The findings suggest that adaptation and resilience were important components of mothers' breastfeeding experiences. Existing research indicates that mothers who engage in active problem-solving and adaptive coping strategies are more likely to sustain breastfeeding when challenges arise (Brockway et al., 2017; Liao et al., 2023; Shorey et al., 2018). Studies have also shown that breastfeeding confidence develops through mothers' ability to manage difficulties and maintain breastfeeding despite setbacks (Dennis, 1999, 2003; McGovern et al., 2024). The present findings support this perspective by demonstrating that mothers frequently identified practical ways of continuing breastfeeding when faced with physical, technical, or contextual challenges.

An important contribution of this study is the observation that breastfeeding resilience was expressed through flexibility rather than strict adherence to prescribed practices. Mothers frequently evaluated breastfeeding success according to feeding effectiveness, infant well-being, and the ability to continue breastfeeding over time. This finding extends previous literature, which often focuses on adherence to recommended breastfeeding practices, by demonstrating that mothers may achieve successful breastfeeding outcomes through diverse and individualized approaches.

Within the Breastfeeding Self-Efficacy Theory, these experiences can be understood primarily through mastery experiences. Dennis (1999, 2003) proposes that efficacy beliefs are strengthened when individuals successfully manage challenging situations and achieve desired outcomes. In this study, mothers demonstrated confidence through their ability to sustain breastfeeding despite obstacles, whether through hand expression, modified feeding techniques, or other practical

solutions. These successful experiences provided evidence of capability and reinforced mothers' beliefs in their ability to continue breastfeeding.

The findings can also be interpreted through the Socio-Ecological Model. Mothers' responses to breastfeeding challenges were shaped not only by individual determination but also by interactions with their infants and the broader contexts in which breastfeeding occurred. The need to identify alternative feeding strategies and adjust practices illustrates how breastfeeding experiences are influenced by the dynamic interaction between individuals and their environments (McLeroy et al., 1988).

The findings may have particular relevance for newcomer mothers of African descent. Previous research indicates that migrant mothers often navigate breastfeeding within unfamiliar social and healthcare contexts while adapting to changes in available support systems (Higginbottom et al., 2015; Izumi et al., 2023). Under such circumstances, flexibility and practical problem-solving may become especially important for sustaining breastfeeding and achieving personal breastfeeding goals.

These findings have important implications for practice. Healthcare providers should recognize that successful breastfeeding may occur through multiple pathways and that mothers may require individualized solutions when challenges arise. Breastfeeding support should therefore move beyond promoting correct techniques alone and also encourage problem-solving, flexibility, and strengths-based approaches that help mothers identify strategies that work within their own circumstances.

Overall, the findings demonstrate that adaptation and resilience were important emerging dimensions of BFSE among NCMAD. Mothers frequently responded to breastfeeding challenges through persistence, flexibility, and individualized problem-solving rather than discontinuing breastfeeding. These findings suggest that successful breastfeeding may involve multiple pathways and that confidence can be sustained through mothers' ability to identify workable solutions within their unique circumstances.

4.3 Structural Factors Influencing Breastfeeding Self-Efficacy among Newcomer Mothers of African Descent in HRM

Beyond individual experiences and interpersonal support, participants described several structural factors that shaped their breastfeeding self-efficacy and breastfeeding experiences. Structural factors refer to the broader policies, institutional practices, cultural systems, and socioeconomic conditions that influence mothers' opportunities, resources, and capacity to initiate, exclusively breastfeed, and continue breastfeeding. Unlike individual or interpersonal influences, these factors operate at a wider societal level and often determine the environments within which breastfeeding occurs. The findings suggest that breastfeeding confidence among newcomer mothers of African descent (NCMAD) was influenced not only by mothers' beliefs in their ability to breastfeed but also by the structural conditions surrounding them. While some structural factors created enabling environments that supported breastfeeding initiation, exclusivity, and continuation, others introduced constraints that complicated mothers' ability to sustain breastfeeding practices over time.

The structural factors identified in this study are presented under five interconnected themes: (1) Baby-Friendly Initiative (BFI) policy and institutional breastfeeding support, (2) parental leave

policies, including maternity and paternal leave, (3) cultural structures shaping breastfeeding expectations and practices, (4) maternity allowances and financial support, and (5) childcare and daycare arrangements.

4.3.1 Baby-Friendly Initiative (BFI) Policy and Institutional Breastfeeding Support

The Baby-Friendly Initiative (BFI) emerged as an important structural factor influencing breastfeeding experiences among newcomer mothers of African descent (NCMAD) in Halifax Regional Municipality (HRM). Developed by the World Health Organization (WHO) and UNICEF, the BFI promotes evidence-based maternity and newborn care practices that protect, promote, and support breastfeeding through institutional policies and practices (WHO & UNICEF, 2018). Key components of the initiative include immediate and uninterrupted skin-to-skin contact after birth, timely initiation of breastfeeding, breastfeeding education, and skilled support to help mothers establish and maintain breastfeeding. As BFI-designated healthcare facilities, maternity services in HRM provide a policy environment intended to support breastfeeding initiation, exclusive breastfeeding, and continued breastfeeding.

Participants' experiences reflected several BFI-aligned practices. Many mothers described initiating breastfeeding shortly after birth and engaging in skin-to-skin contact with their infants. *One participant explained: "Immediately, because immediately she came out, she latched on me immediately right, and we did skin to skin for one hour."* -**Mother$_1$, IDI$_1$.**

Other mothers described receiving practical breastfeeding education and hands-on support from healthcare professionals during the immediate postpartum period. One participant stated: *"The nurses did a good job by showing me other techniques of breastfeeding the babies… with those skills I am confident."*-**Mother$_2$, IDI$_2$.** Similarly, another mother explained: *"Nurses put me*

through my first time, so yeah, I'm confident." -**Mother$_3$, IDI$_3$.** Another participant simply stated: *"Yes, I was taught."*-**Mother$_6$, IDI$_6$.**

These experiences suggest that BFI-aligned institutional practices facilitated timely breastfeeding initiation and provided mothers with opportunities to acquire breastfeeding knowledge and skills during a critical period following birth. Immediate skin-to-skin contact, and early breastfeeding initiation are recognized as important strategies for promoting infant attachment to the breast, stimulating milk production, and increasing the likelihood of exclusive breastfeeding (Moore et al., 2016; WHO & UNICEF, 2018). The practical breastfeeding support described by participants further reflects BFI recommendations that emphasize skilled assistance to help mothers establish breastfeeding and manage common breastfeeding challenges.

The findings are consistent with evidence demonstrating that implementation of BFI practices is associated with improved breastfeeding outcomes, including higher rates of breastfeeding initiation, exclusive breastfeeding, and breastfeeding continuation (Pérez-Escamilla et al., 2016; Rollins et al., 2016). For newcomer mothers, these institutional supports may be particularly important because migration can disrupt traditional sources of postpartum support and breastfeeding guidance. In such circumstances, healthcare facilities may serve as an important source of breastfeeding information, practical instruction, and early support.

While participants generally reported positive experiences with breastfeeding support during the immediate postpartum period, the findings also highlight the importance of maintaining breastfeeding support beyond hospital discharge. The BFI emphasizes continuity of breastfeeding

support across healthcare and community settings, recognizing that breastfeeding challenges often emerge after mothers return home (Breastfeeding Committee for Canada, 2023; WHO & UNICEF, 2018). Continued access to culturally responsive lactation services, public health programs, and community-based breastfeeding support may therefore be particularly important for newcomer mothers navigating breastfeeding within a new social and healthcare environment.

Overall, the findings suggest that the BFI functioned as an enabling structural mechanism that supported timely breastfeeding initiation, early breastfeeding skill development, and the establishment of breastfeeding among NCMAD. Through institutional policies and practices designed to promote breastfeeding, healthcare facilities created supportive conditions that facilitated positive early breastfeeding experiences and laid the foundation for continued breastfeeding.

4.3.2 Parental Leave Policies: Maternity and Paternal Leave

Parental leave policies emerged as an important structural factor influencing breastfeeding experiences among newcomer mothers of African descent (NCMAD) in Halifax Regional Municipality (HRM). In Canada, eligible mothers may receive up to 15 weeks of maternity benefits through the Employment Insurance (EI) program, while parents may share up to 40 weeks of standard parental benefits or 69 weeks of extended parental benefits. An additional parental sharing benefit is available when both parents access parental leave, encouraging greater paternal involvement in infant care (Government of Canada, 2024). In Nova Scotia, these benefits are complemented by job-protected pregnancy and parental leave provisions under the Labour Standards Code. Together, these federal and provincial leave provisions create opportunities for parent-infant bonding and caregiving by allowing parents time away from employment following

childbirth. By facilitating prolonged parent-infant proximity during the postpartum period, these policies may also support breastfeeding initiation, exclusivity, and continuation (Rollins et al., 2016; Smith et al., 2013)

Most participants reported being on maternity or parental leave for approximately one year following childbirth. Mothers frequently described this period as providing the time, flexibility, and physical proximity necessary to establish and sustain breastfeeding. One participant explained: *"I was off work, I was very comfortable, my only job was to breastfeed him, so I had no issue breastfeeding him for up to one year."* **-Mother$_{10}$, IDI$_{10}$.** Similarly, another participant stated: *"I think part of the thing that supported, is being at home with my son, the maternity leave plan here is part of the thing."* **-Mother$_{3}$, IDI$_{3}$.**

These accounts suggest that maternity leave created favourable conditions for breastfeeding by reducing employment-related demands and enabling mothers to remain physically available to their infants during the first year postpartum. Prolonged mother-infant proximity facilitated responsive feeding, allowed mothers to establish breastfeeding routines, and supported continued breastfeeding without the immediate pressures associated with returning to work.

Participants also described how fathers' access to parental leave shaped their postpartum experiences. One mother reflected on the difference between her first and second childbirth experiences: *"With my first child, my husband was not qualified for parental leave, but now with my second child he has been home with me for like six months."* **-Mother$_{2}$, IDI$_{2}$.** In contrast, another participant described the challenges associated with her husband's early return to work:

"My husband had to go back to work as early as the second day that we were discharged from the hospital. So, it was really challenging." **-Mother$_8$, IDI$_8$.**

These contrasting experiences illustrate how access to paternal leave influenced the level of support available to mothers during the postpartum period. When fathers were able to remain at home, mothers benefited from shared caregiving responsibilities and additional assistance during recovery and infant care. Conversely, early return to work often increased mothers' caregiving burden at a time when they were simultaneously recovering from childbirth and establishing breastfeeding.

The findings align with evidence demonstrating that paid parental leave supports breastfeeding initiation, exclusivity, and duration by facilitating parent-infant proximity and reducing work-related barriers to infant feeding (Rollins et al., 2016; Huang & Yang, 2015; Smith et al., 2013). Research further suggests that fathers who utilize parental leave are more likely to participate in childcare and household responsibilities, thereby creating environments that support maternal well-being and breastfeeding continuation (Abbass-Dick et al., 2019; Petts & Knoester, 2020). For newcomer families, these supports may be particularly important because migration often limits access to extended family networks that traditionally provide postpartum assistance and practical support.

Despite the availability of parental leave benefits in Canada, access to these supports may not be experienced equally across families. Eligibility for EI maternity and parental benefits depends on meeting minimum insurable employment requirements, which may disadvantage some newcomer

families, particularly recent immigrants, students, or individuals engaged in precarious employment. Consequently, while maternity leave was consistently described as facilitating breastfeeding among participants, access to paternal leave and its associated benefits appeared to vary according to employment circumstances and eligibility requirements.

Overall, the findings indicate that parental leave policies functioned as an important structural support for breastfeeding among NCMAD. Maternity leave created conditions that facilitated breastfeeding continuation through sustained mother-infant contact, while paternal leave enhanced opportunities for shared caregiving and postpartum support. At the same time, variations in fathers' access to parental leave highlight how policy eligibility and employment circumstances can shape breastfeeding experiences. These findings underscore the importance of parental leave policies that support both maternal caregiving and paternal involvement during the critical early months following childbirth.

4.3.3 Cultural Structures

Cultural structures emerged as an important factor shaping breastfeeding experiences among newcomer mothers of African descent (NCMAD) in Halifax Regional Municipality (HRM). Beyond individual breastfeeding beliefs and practices, participants described broader cultural systems that influenced caregiving responsibilities, postpartum care arrangements, and social expectations surrounding breastfeeding. These cultural structures often created conditions that supported breastfeeding in their countries of origin but were frequently altered following migration. As a result, mothers navigated breastfeeding within social environments that differed substantially from those they had previously experienced.

4.3.3.1 Traditional Postpartum Support Structures

Participants frequently described postpartum care in their countries of origin as a collective responsibility, shared among family members, relatives, neighbours, and community members. Following childbirth, mothers commonly received assistance with meal preparation, household tasks, infant care, and maternal recovery. These arrangements reduced the demands placed on new mothers and enabled them to focus primarily on recovery and breastfeeding.

One participant explained: *"Back home my mom is there, I have enough people there to help and support… you get enough sleep and all… Back home, it's more convenient compared to here in Canada."* -**Mother$_5$, FGD$_1$.** Similarly, another participant stated: *"Nigeria, there will be a lot of help. I won't do anything… But here one man for himself… back home from one visitor to another, you will see people available."* -**Mother$_7$, FGD$_1$.**

These accounts suggest that postpartum support in participants' countries of origin operated as an organized social system rather than as occasional assistance from family members. Practical caregiving responsibilities were distributed across a wider support network, creating opportunities for maternal rest and infant care during the early postpartum period.

Following migration, however, many mothers described the absence of these traditional support structures. Although some participants received support from partners or friends, the broader network of postpartum assistance commonly available in their countries of origin was often unavailable. Consequently, mothers frequently assumed greater responsibility for childcare, household management, and breastfeeding simultaneously.

The findings align with studies demonstrating that collective postpartum care practices are common in many African communities, where maternal recovery and infant care are viewed as shared family and community responsibilities rather than solely maternal responsibilities (Aubel, 2012; Odeniyi et al., 2020). These arrangements have been associated with improved maternal well-being and greater opportunities for breastfeeding by reducing competing demands during the postpartum period. The findings of the present study suggest that migration may disrupt these traditional systems, altering the practical conditions within which breastfeeding occurs.

4.3.3.2 Gendered Caregiving Expectations

Participants' narratives also reflected gendered caregiving arrangements following childbirth. Although fathers contributed to infant care and family life, mothers frequently described themselves as assuming primary responsibility for breastfeeding and day-to-day caregiving. These responsibilities became more pronounced once fathers returned to work and traditional family support systems were unavailable.

One participant explained: *"My husband was doing his part of it, so he would still go to work. He was only home for like 2 weeks after the child's birth for his leave. But after two weeks I faced it myself. So, I was alone with my baby, with some family on call with me and everything."* **-Mother$_7$, FGD$_1$.** Similarly, another participant stated: *"My husband had to go back to work as early as the second day that we were discharged from the hospital. So, it was really challenging."* **-Mother$_8$, IDI$_8$.**

These accounts suggest that although fathers provided support where possible, breastfeeding and routine infant care remained primarily mothers' responsibility following childbirth. Once paternal

leave ended, mothers frequently assumed responsibility for feeding, childcare, and household management while navigating the physical and emotional demands of the postpartum period. Existing literature similarly demonstrates that gendered divisions of caregiving often position mothers as primary caregivers during infancy (Rempel et al., 2017; Tadesse et al., 2021). While such arrangements may facilitate breastfeeding by maintaining mother–infant proximity, they may also increase maternal workload, particularly when support resources are limited.

The findings further suggest that migration altered the balance between caregiving responsibilities and available support. In participants' countries of origin, primary caregiving roles were often accompanied by extensive assistance from family and community members. Following migration, however, mothers frequently retained these caregiving responsibilities while experiencing reduced access to traditional support systems. Consequently, breastfeeding occurred within a context of increased maternal responsibility and reduced practical assistance, requiring mothers to adapt to new caregiving realities while sustaining breastfeeding.

4.3.3.3 Breastfeeding in Public

Breastfeeding in public emerged as an important cultural and social consideration influencing breastfeeding experiences among newcomer mothers of African descent (NCMAD). Participants generally viewed breastfeeding as a normal and necessary aspect of infant care; however, they described varying levels of comfort with breastfeeding in public spaces and adopted different strategies to navigate visibility, privacy, and social expectations.

Some participants described using breastfeeding covers, layered clothing, or other practical adaptations to increase comfort when feeding outside the home. One mother explained: *"Oh, I*

feed her, when I want to feed her in public, that's when I always wear something like an overlap dress... then I have a breast cover jacket to cover her and myself so that I can be more confident to feed her outside... if she's hungry because I'm outside, that doesn't stop me from feeding her." -**Mother$_7$, FGD$_1$.** Similarly, another participant stated: "Yeah. I ensure I have certain things to cover myself to make sure I have that privacy without exposing myself outside." -**Mother$_{10}$, IDI$_{10}$.** For these mothers, breastfeeding in public was accepted as necessary when infants needed feeding, but privacy-enhancing strategies helped them feel more comfortable and confident in public settings.

Other participants described becoming more comfortable with public breastfeeding over time. One mother explained: *"Generally breastfeeding in public was not really something I loved to do but I knew that I had to do it and later on, on my journey I discovered that I could buy this cloth to cover up in public... I had gotten used to breastfeeding in public."* **-Mother$_9$, IDI$_9$.**

This account suggests that comfort with public breastfeeding developed gradually through experience and adaptation, allowing mothers to integrate breastfeeding more confidently into everyday activities outside the home.

Participants' experiences also reflected cultural norms that viewed breastfeeding in public as a normal and accepted aspect of child feeding. One mother explained: *"Well, I know back home too, people believe in breastfeeding their children, you'll see children of two to three years, still running back to be breastfed in public. So, I know from the grassroots, breastfeeding was embraced for my people."* **-Mother$_8$, IDI$_8$.**

This account suggests that public breastfeeding was culturally visible and socially accepted within participants' communities of origin. Exposure to breastfeeding as a routine and publicly accepted practice appeared to shape mothers' perceptions that feeding a child in public was both appropriate and expected when the child was hungry.

In contrast, one participant expressed complete comfort with breastfeeding openly in public:

"Oh, yeah. The whole of Halifax has seen my breast; I whoop it out. What am I there for? That's my job. We whoop it out." **-Mother$_1$, IDI$_1$.**

This perspective illustrates the diversity of mothers' experiences and suggests that while some preferred privacy, others viewed public breastfeeding as a natural extension of their caregiving role and felt little need to conceal breastfeeding.

Overall, the findings suggest that breastfeeding in public was generally accepted among participants, although mothers differed in how they negotiated privacy, visibility, and personal comfort. Rather than avoiding public breastfeeding, mothers adopted approaches that enabled them to continue meeting their infants' feeding needs while navigating social environments.

The findings align with existing literature demonstrating that social norms surrounding public breastfeeding can influence mothers' comfort, confidence, and breastfeeding practices (Boyer, 2018; Brown, 2016; Rollins et al., 2016). Concerns regarding privacy, exposure, and perceived public scrutiny have been identified as barriers to public breastfeeding among some women, whereas supportive social environments can facilitate breastfeeding continuation (Scott et al., 2015). Similar patterns were evident in the present study, where some mothers preferred greater privacy while others expressed confidence breastfeeding openly in public spaces.

The findings also highlight the influence of cultural norms on public breastfeeding experiences. For many participants, exposure to breastfeeding as a visible and accepted practice within their countries of origin appeared to normalize breastfeeding outside the home and reinforce its legitimacy as a routine aspect of infant care. Previous studies among African and immigrant populations similarly report that breastfeeding is often viewed as a visible and socially accepted aspect of infant care within many communities, contributing to positive attitudes toward breastfeeding in public settings (Aubel, 2012; Higginbottom et al., 2015; Odeniyi et al., 2020). This cultural normalization may have helped mothers maintain breastfeeding practices in public despite varying levels of personal comfort.

From a socio-ecological perspective, breastfeeding in public reflects the interaction between individual breastfeeding goals and broader social environments. Mothers' experiences were shaped not only by personal preferences but also by cultural expectations and social norms regarding breastfeeding visibility. The findings suggest that breastfeeding-friendly public environments may support mothers' ability to integrate breastfeeding into daily life and sustain breastfeeding beyond the home.

These findings have important implications for practice. Healthcare providers, community organizations, and policymakers should continue efforts to normalize breastfeeding in public and promote breastfeeding-friendly environments within healthcare facilities, community centres, shopping malls, workplaces, and other public settings. These recommendations align with international and national breastfeeding guidance that emphasizes the importance of creating supportive social environments that enable mothers to breastfeed wherever and whenever infants need feeding (Breastfeeding Committee for Canada, 2017; WHO & UNICEF, 2018). Such

initiatives may help reduce perceived stigma, support breastfeeding confidence, and facilitate breastfeeding continuation among newcomer mothers and other breastfeeding families.

Overall, the findings demonstrate that public breastfeeding was generally viewed as a normal and necessary aspect of infant feeding among NCMAD. While mothers differed in their preferences regarding privacy and visibility, cultural acceptance of breastfeeding and adaptive strategies enabled participants to continue breastfeeding in public settings when needed.

4.3.4 Childcare and Employment Structures

Childcare availability and employment arrangements emerged as important structural factors influencing BFSE among NCMAD in HRM. While parental leave policies provided mothers with protected time at home during the early postpartum period, participants described challenges that arose when leave periods ended and decisions regarding childcare and employment became necessary. Access to childcare services influenced mothers' caregiving arrangements, return-to-work decisions, and ability to sustain breastfeeding over time.

One participant explained that difficulty securing a daycare space influenced her decision to extend her maternity leave beyond the initial leave period: *"currently we are yet to get a daycare for her, so I had to extend my maternity leave for another six months."* -**Mother$_1$, IDI$_1$.** Although extending her leave allowed her to continue caring for and breastfeeding her infant, the additional six months were unpaid. Unlike parental leave policies, which provided temporary support following childbirth, childcare availability influenced her ability to transition back to employment once leave ended. This experience suggests that access to childcare can shape mothers' capacity to maintain breastfeeding while navigating employment responsibilities.

Similarly, another participant described how childcare responsibilities influenced her work arrangements following childbirth: *"I am now a stay-at-home mother, operating my fashion business from home so I can be with my daughter"* -**Mother$_7$, IDI$_7$.** While this arrangement enabled her to continue breastfeeding, it also required substantial adjustments to her daily routines and economic activities to accommodate caregiving responsibilities. Her experience illustrates how mothers may reorganize employment and caregiving responsibilities when childcare options are limited.

Together, these findings suggest that childcare availability functioned as an important structural determinant of breastfeeding feasibility. Decisions regarding workforce participation, leave extensions, and caregiving arrangements were often influenced by mothers' ability to secure childcare. Rather than being determined solely by maternal motivation or breastfeeding confidence, breastfeeding continuation was shaped by broader conditions that affected mothers' ability to integrate breastfeeding into everyday life.

These findings align with existing literature demonstrating that childcare and employment conditions influence breastfeeding continuation and duration (Bai et al., 2015; Dinour & Szaro, 2017; Rollins et al., 2016). Research suggests that employment-related separation from infants may reduce opportunities for direct breastfeeding and contribute to earlier breastfeeding cessation, particularly when supportive workplace and childcare arrangements are unavailable (Rollins et al., 2016; Victora et al., 2016). Conversely, greater flexibility in childcare and work arrangements has been associated with improved breastfeeding outcomes and increased likelihood of meeting breastfeeding goals (Bai et al., 2015; Dinour & Szaro, 2017).

The findings are particularly relevant within the Nova Scotian context, where access to licensed childcare spaces remains a challenge for many families. Despite recent investments aimed at expanding childcare access and affordability, families continue to experience delays in securing licensed childcare placements, particularly for infants and younger children (Government of Canada, 2024; Nova Scotia Department of Education and Early Childhood Development, 2024). The experiences of participants in this study suggest that these challenges may have implications beyond childcare itself, influencing employment decisions, caregiving arrangements, and breastfeeding practices following parental leave.

From a socio-ecological perspective, childcare and employment structures represent organizational and policy-level influences that shape breastfeeding environments. The findings demonstrate that BFSE was influenced not only by mothers' beliefs in their ability to breastfeed but also by the structural conditions within which breastfeeding occurred. When childcare services were unavailable or difficult to access, mothers frequently adjusted caregiving and employment arrangements to support breastfeeding and infant care. These findings reinforce the importance of considering breastfeeding within the broader context of family, employment, and childcare systems.

These findings have important implications for policy and practice. Efforts to improve access to affordable, high-quality, and timely childcare services may indirectly support breastfeeding continuation by reducing pressures associated with employment transitions following parental leave. Policymakers should continue to expand childcare capacity and reduce barriers to accessing licensed childcare spaces, while employers should consider flexible work arrangements that support parents during the transition back to work. Such measures may help create environments

that enable mothers to achieve their breastfeeding goals while balancing caregiving and employment responsibilities.

Overall, the findings suggest that childcare availability was an important structural factor shaping breastfeeding continuation among NCMAD. Difficulties accessing childcare frequently influenced mothers' employment decisions, caregiving arrangements, and breastfeeding plans following parental leave. These findings highlight the important role of childcare systems in supporting mothers' ability to achieve their breastfeeding goals and sustain breastfeeding over time.

4.4 Chapter Summary

This chapter presented the findings on breastfeeding self-efficacy among newcomer mothers of African descent in Halifax Regional Municipality. The findings demonstrated that breastfeeding self-efficacy evolved throughout the breastfeeding journey and was reflected in mothers' experiences of breastfeeding initiation, exclusive breastfeeding, breastfeeding continuation, breastfeeding techniques, and adaptation to breastfeeding challenges. While many mothers reported strong confidence and commitment to breastfeeding, their experiences varied according to individual circumstances and the realities of caring for infants within a post-migration context.

The findings further showed that breastfeeding self-efficacy was influenced by factors operating across multiple levels. Supportive healthcare practices, parental leave policies, cultural structures, family support systems, and childcare and employment realities all shaped mothers' breastfeeding experiences and their ability to achieve breastfeeding goals. Despite encountering various challenges, mothers frequently demonstrated adaptability and resilience by developing strategies that enabled them to continue breastfeeding within their unique circumstances.

Overall, the findings suggest that breastfeeding self-efficacy among newcomer mothers of African descent is a multifaceted and context-dependent experience shaped by the interaction of personal, social, cultural, and structural influences. The next chapter presents a summary of the study, key conclusions drawn from the findings, recommendations for policy and practice, study limitations, and directions for future research.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the study, synthesizes the major findings, presents the conclusions drawn from the findings, and discusses their implications for breastfeeding support among newcomer mothers of African descent. It also provides recommendations for healthcare practice, policy development, and future research aimed at strengthening breastfeeding self-efficacy and improving breastfeeding experiences and outcomes among newcomer mothers.

5.1 Summary

Breastfeeding self-efficacy plays an important role in influencing maternal breastfeeding behaviours and outcomes, including breastfeeding initiation, exclusivity, and continuation. Although breastfeeding self-efficacy has been widely studied across different populations, limited research has specifically explored breastfeeding self-efficacy experiences among newcomer mothers of African descent in Canada, particularly within Halifax Regional Municipality, Nova Scotia. Guided by Dennis' Breastfeeding Self-Efficacy Theory (Dennis, 1999; 2003) and the Socio-Ecological Model, this study explored breastfeeding self-efficacy experiences among newcomer mothers of African descent living in HRM and to identify the cultural, social, and structural factors influencing breastfeeding self-efficacy.

A qualitative descriptive design (in-depth individual interviews and focus group discussions) was used to obtain in-depth understanding of mothers' experiences.

The study generated findings relating to BFSE experiences across different stages of breastfeeding, including breastfeeding initiation, exclusive breastfeeding, and breastfeeding continuation. Additional findings emerged regarding breastfeeding approaches and techniques, as well as the

broader individual, interpersonal, organizational, community, and policy factors influencing BFSE among newcomer mothers of African descent. Together, these findings provide insight into how breastfeeding confidence is developed, experienced, and sustained within the context of post-migration life in HRM.

The findings indicate that breastfeeding confidence was not static but evolved across different breastfeeding stages and experiences. Mothers generally described confidence as changing over time rather than remaining constant throughout the breastfeeding journey. Although many mothers reported strong intentions and confidence at breastfeeding initiation, early experiences were often influenced by challenges and uncertainties associated with establishing breastfeeding. As mothers accumulated breastfeeding experience and became more familiar with infant feeding patterns and behaviours, confidence frequently strengthened and became more established.

Exclusive breastfeeding experiences were similarly characterized by increasing confidence among many mothers. Successful breastfeeding experiences, previous experience, support systems, and positive infant responses reinforced confidence during this stage. However, exclusive breastfeeding confidence was also influenced by caregiving demands and changing breastfeeding circumstances that required mothers to continuously adjust and adapt.

The findings further showed that breastfeeding continuation involved experiences extending beyond confidence alone. While many mothers maintained strong beliefs in their ability to breastfeed, continuation was influenced by broader environmental and contextual realities. Structural conditions, caregiving responsibilities, and changing maternal and infant needs shaped mothers' ability to sustain breastfeeding over time. These findings suggest that breastfeeding continuation requires supportive conditions in addition to individual confidence.

The study also found that breastfeeding practices among NCMAD were largely characterized by responsive breastfeeding approaches. Mothers frequently described feeding according to infant cues and demonstrated confidence in recognizing and responding to infant feeding behaviours and needs. Breastfeeding was commonly viewed as extending beyond nutritional purposes and also served as a means of comfort, emotional regulation, and strengthening mother–infant relationships. Mothers additionally demonstrated flexibility in breastfeeding practices and techniques by modifying approaches according to individual circumstances and infant responses.

Regarding the second objective, the findings showed that breastfeeding self-efficacy was shaped by multiple interacting influences operating across different contexts. Factors that strengthened breastfeeding confidence included family support, positive cultural beliefs surrounding breastfeeding, healthcare guidance, and supportive structural conditions such as maternity leave. In contrast, factors that challenged confidence included disruptions in support systems following migration, competing responsibilities, emotional and physiological strain, and breastfeeding-related difficulties.

Despite these challenges, mothers demonstrated adaptation and resilience through determination, experiential learning, and individualized problem-solving strategies. They frequently adjusted breastfeeding practices and developed approaches that enabled them to respond to changing circumstances while maintaining confidence and continuing breastfeeding. Overall, the findings suggest that breastfeeding self-efficacy among newcomer mothers of African descent is a dynamic

and context-dependent experience shaped by the interaction of individual experiences, interpersonal relationships, cultural influences, and broader structural conditions.

5.3 Conclusions

The study draws the following conclusions:

1. Breastfeeding self-efficacy (BFSE) among newcomer mothers of African descent (NCMAD) is a dynamic and context-dependent process that evolves throughout the breastfeeding journey and is best strengthened through culturally responsive, contextually relevant, and multi-level breastfeeding support that addresses both individual and the broader environments in which breastfeeding occurs
2. Mothers' breastfeeding self-efficacy is shaped by the interaction of personal experiences, social relationships, cultural influences, and structural factors, including Baby-Friendly Initiative practices, parental leave policies, cultural structures, and childcare and employment arrangements.
3. Migration serves as an important contextual factor that influences breastfeeding self-efficacy by altering traditional support systems, social networks, caregiving arrangements, and mothers' adaptation to a new social and healthcare environment.
4. Despite experiencing a range of breastfeeding and post-migration challenges, NCMAD demonstrate adaptability and resilience by developing individualized strategies, modifying breastfeeding practices, and drawing on available resources to sustain breastfeeding.
5. Breastfeeding self-efficacy is strengthened through successful breastfeeding experiences, supportive interpersonal relationships, culturally meaningful breastfeeding beliefs, and enabling organizational and policy environments.

6. Breastfeeding self-efficacy is undermined by breastfeeding challenges, migration-related stressors, and structural barriers.

5.4 Recommendations

Based on the findings of this study, the following recommendations are proposed:

5.4.1 Recommendations for Practice

1. Integrate breastfeeding self-efficacy assessment into routine maternal healthcare to facilitate early identification of mothers requiring additional breastfeeding support.

2. Provide culturally responsive and individualized breastfeeding support that addresses migration-related challenges, mothers' cultural strengths, and breastfeeding self-efficacy throughout the breastfeeding journey.

3. Strengthen Baby-Friendly Initiative (BFI) practices and continuity of breastfeeding support from birth through the postpartum period to promote sustained breastfeeding confidence.

4. Promote family- and community-based breastfeeding support by involving partners, family members, and culturally responsive peer-support programmes in breastfeeding education and support.

5.4.2 Recommendation for Policies

1. Strengthen policies that improve access to culturally responsive breastfeeding services for newcomer families.

2. Promote breastfeeding-friendly workplaces, educational institutions, parental leave, and affordable childcare.

3. Strengthen collaboration between healthcare, public health, and newcomer settlement services.

5.4.3 Recommendations for Future Research

1. Conduct longitudinal studies on BFSE among newcomer mothers.

2. Evaluate culturally responsive BFSE interventions.

3. Include perspectives of partners, families, healthcare providers, and community organizations.

4. Compare BFSE experiences across newcomer populations and Canadian provinces.

5.5 Strengths and limitations of the study

This study has several strengths that contribute to the credibility and relevance of the findings. First, the study provides important insight into breastfeeding self-efficacy experiences among newcomer mothers of African descent (NCMAD), a population that has received limited attention within breastfeeding self-efficacy research in Canada, particularly within Halifax Regional Municipality (HRM). The study therefore contributes important context-specific knowledge on breastfeeding self-efficacy among a population that remains underrepresented in Canadian breastfeeding research, particularly within Atlantic Canada and Halifax Regional Municipality.

Second, the use of a qualitative descriptive approach allowed for an in-depth exploration of mothers' breastfeeding experiences and provided rich descriptions of breastfeeding self-efficacy experiences across different breastfeeding stages and facilitated a deeper understanding of the social, cultural, and structural contexts within which breastfeeding occurred. The inclusion of both in-depth individual interviews and focus group discussions enabled the collection of detailed narratives and facilitated a broader understanding of shared and individual breastfeeding experiences.

Third, the use of Breastfeeding Self-Efficacy Theory and the Socio-Ecological Model provided complementary perspectives for understanding breastfeeding confidence and the broader contexts influencing breastfeeding experiences. The integration of these theoretical perspectives strengthened interpretation of the findings and supported understanding of breastfeeding self-efficacy beyond individual-level influences.

Despite these strengths, several limitations should be considered when interpreting the findings. First, the findings reflect the experiences of newcomer mothers of African descent recruited within Halifax Regional Municipality (HRM) and may not represent the full range of experiences of newcomer mothers living in other regions of Canada. Although qualitative research does not seek statistical generalization, the context-specific nature of the study may limit the transferability of the findings to populations with different cultural backgrounds, migration experiences, healthcare systems, and support environments.

Second, the study relied on participants' self-reported accounts of their breastfeeding experiences. As participants were at different stages of their breastfeeding journeys at the time of data collection, their recollections may have been influenced by recall bias and personal interpretations of past experiences. To enhance the credibility and depth of the data, participants were encouraged to provide detailed descriptions through probing and follow-up questions during interviews and focus group discussions. Furthermore, the use of both individual interviews and focus groups facilitated methodological triangulation and contributed to a richer understanding of participants' breastfeeding experiences.

Finally, the study explored breastfeeding self-efficacy solely from mothers' perspectives. While this approach provided valuable insight into mothers' lived experiences, the inclusion of

perspectives from fathers, partners, family members, healthcare providers, and community support personnel may have offered a more comprehensive understanding of the interpersonal, organizational, and structural factors influencing breastfeeding self-efficacy.

Nevertheless, these limitations do not diminish the value of the study. Rather, they provide important context for interpreting the findings and highlight areas for future research aimed at further understanding breastfeeding self-efficacy among newcomer mothers of African descent.

5.6 Chapter summary

This chapter presented the conclusions, recommendations, strengths, and limitations of the study. The study contributes to a growing body of knowledge on breastfeeding self-efficacy by providing insight into the experiences of newcomer mothers of African descent, a population that remains underrepresented in breastfeeding research in Canada. Through the integration of the Breastfeeding Self-Efficacy Theory and the Socio-Ecological Model, the study demonstrates that breastfeeding self-efficacy is shaped not only by mothers' confidence and experiences but also by the social, cultural, organizational, and structural environments within which breastfeeding occurs.

The findings underscore the importance of viewing breastfeeding self-efficacy as a dynamic and context-dependent process that is influenced by migration, support systems, healthcare experiences, cultural structures, and broader policy environments. The recommendations proposed in this chapter highlight opportunities to strengthen breastfeeding support through culturally responsive practice, supportive policies, and continued research. Collectively, the study provides evidence that may inform efforts to improve breastfeeding support and create environments that

enable newcomer mothers of African descent to achieve their breastfeeding goals and optimize maternal and child well-being.

CHAPTER SIX: KNOWLEDGE MOBILIZATION

6.0 Introduction

Knowledge mobilization is essential for ensuring that research findings are translated into practice, policy, and future research. For this study, mobilizing the findings will support the dissemination of evidence on breastfeeding self-efficacy among newcomer mothers of African descent to relevant stakeholders, including healthcare providers, policymakers, community organizations, and researchers. Sharing the findings may facilitate the development of culturally responsive breastfeeding support and inform future maternal and child health initiatives.

6.1 Knowledge mobilization plan

An integrated knowledge mobilization (iKMb) approach will be used to disseminate the findings of this study to academic, healthcare, policy, and community audiences. Findings will be shared with healthcare providers, public health practitioners, breastfeeding organizations, newcomer-serving agencies, community organizations, and policymakers to support evidence-informed practice and culturally responsive breastfeeding services.

Knowledge translation activities will include presentations to healthcare institutions, public health organizations, and community groups involved in maternal and child health and newcomer settlement. Findings will also be disseminated through conference presentations and publication in peer-reviewed journals to contribute to the scientific literature on breastfeeding self-efficacy and immigrant maternal health.

To support evidence-informed decision-making, concise policy briefs and plain-language summaries highlighting the study's key findings and recommendations will be developed for policymakers and healthcare leaders. Infographics will also be created to communicate the findings to newcomer communities and organizations supporting newcomer families. Where opportunities arise, findings will be shared through community engagement events and collaborations with relevant stakeholders to promote dialogue and facilitate the translation of evidence into practice and policy.

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APPENDIX A: IN-DEPTH INTREVIEW GUIDE

PART 1: BREASTFEEDING HISTORY

1. **Can you tell me about your breastfeeding experience with your baby?**

- *PROBE: What did you consider when making your infant feeding decision?*
- *PROBE: How long after delivery did you initiate breastfeeding?*
- *PROBE: Have you started complementary feeding (semi-solid/solid foods)?*
- *At what baby's age did you introduce water, liquids, or semi-solid foods?*
- *PROBE: Are you still breastfeeding? If YES, have you considered how long you will continue to breastfeed? If NO, at what age did you stop?*

NB: IF MOTHER HAS STOPPED BREASTFEEDING, PLEASE USE PAST TENSE.

PART 2: BREASTFEEDING CONFIDENCE

1. How would you describe your CONFIDENCE on the following aspects of breastfeeding?
   PROBE FOR:
   - Confidence to breastfeed anytime the baby wants and keep up with baby's demands
   - Confident that they have enough breastmilk to satisfy baby's needs
   - Confidence to breastfeed when baby is crying
   - Confidence to feed baby breastmilk only for 6 months and then continue for 24 months and beyond.
   - Confidence to manage any challenges that might come up with breastfeeding

****** PROBE FOR REASONS INCASE MOTHER SAYS THEY ARE NOT CONFIDENT***

2. How would you describe your CONFIDENCE in your breastfeeding techniques/ skills?
   PROBE FOR:
   - Confidence to properly position your baby for effective breastfeeding
   - Confidence to properly latch baby to the breast for the whole feeding
   - Confidence to finish feeding your baby on one breast before switching to the other breast.
   - Confidence to tell when your baby is satisfied following breastfeeding.
   - Confidence to continue to breastfeed baby for every feeding.
   - Confidence to prevent and manage common breast issues such as sore and cracked nipples

****** PROBE FOR REASONS INCASE MOTHER SAYS THEY ARE NOT CONFIDENT***

3. How would you describe your CONFIDENCE to breastfeed anytime, anywhere?

   PROBE FOR:
   Confidence to breastfeed in public, with family members and other people present

4. How confident are/were you that you can/could always meet your goals around breastfeeding?

****** PROBE FOR REASONS IN CASE MOTHER SAYS THEY ARE NOT CONFIDENT***

PART 3: FACTORS INFLUENCING BFSE

5. What are the reasons for your confidence to breastfeed? *** HIGHLIGHT TO THE MOTHER THEIR RESPONSES IN PART 2 ABOVE
   PROBE FOR:
   - **Social support, socio-economic reasons (*employment, food security*), cultural reasons, health services, demographic factors (race, gender), emotional/psychological reasons (stress, anxiety, postpartum depression), other reasons.**
   - **Did you experience any personal challenges during pregnancy, during childbirth that you feel influenced your confidence with breastfeeding?**
   - **How does/has your family situation affect/affected your breastfeeding practices**
   - **Do/did you have access to culturally meaningful foods during breastfeeding**
   - **How does/has your employment affect/affected your breastfeeding practices**
   - **Have you been treated differently because you are/were breastfeeding.**
6. What are the reasons for less confidence in breastfeeding? *** HIGHLIGHT TO THE MOTHER THEIR RESPONSES IN PART 2 ABOVE

   - ***PROBE FOR:*** **Social support, socio-economic reasons, cultural reasons, health services, demographic factors (race, gender), emotional/psychological reasons (stress, anxiety), other reasons.**

7. Have/would these factors be similar or different if you were in your country of origin? Tell me more…

8. Can you describe any cultural beliefs or traditions about breastfeeding that influenced your experience?
   - ***PROBE:*** How did you navigate these beliefs or traditions while living in Canada?

9. Generally, was/ would your confidence to breastfeed be different in your country of origin? Tell me more…

10. Can you share your experiences with being treated differently (in health care, workplace, public) due to your identity, and how that influenced your confidence in breastfeeding?

    PROBE FOR: Cultural adaptations by care providers, or Racism related reasons (+VE. -VE, Neutral)

11. Have you breastfed prior to this baby?
    - How was that experience? Was it successful? Did you face any challenges?
    - How did that experience influence your confidence with breastfeeding this time?

12. Have you ever interacted (e.g., lived with, been friends with) or observed someone breastfeeding their baby?
    - If YES, did that observation/experience influence your confidence with breastfeeding your own baby? Tell me more.

13. Have you ever interacted with someone who viewed breastfeeding negatively?
    - If YES, did that influence your confidence with breastfeeding your own baby? Tell me more.

    Is there anything else you would like to share about your breastfeeding experience that I haven't asked about?

PART 4: DEMOGRAPHIC INFORMATION

1. How old are you today?
2. What is your relationship status?
3. What is your country of origin?
4. How many children do you have?
5. How old is your youngest baby?
6. What is your highest level of education?
7. What do you do as a job, if you are employed/run your own business? Are you a casual, part-time or full-time worker?
8. For how long have you been a resident of Halifax (and in Canada)?

Thank you for your time and willingness to share your story with me.

APPENDIX B: FOCUS GROUP DISCUSSION GUIDE

PART 1: BREASTFEEDING

1. What were your expectations about breastfeeding before delivering your baby in Canada?
2. How did those expectations compare to your actual experience?

3. **Confidence & Emotional Aspects:**

    - Can you describe a moment when you felt confident about breastfeeding?
    - On the other hand, was there a time when you felt unsure or discouraged? What happened?
    - Was there a time when you felt stressed or anxious in a way that it influenced your confidence to breastfeed? Tell me what happened?

4. **Social Support & Influence:**
    - Who has/have been the most supportive person(s) in your breastfeeding journey, and why?
    - Have you received any discouragement or pressure related to breastfeeding? If so, from whom and how did you handle it?

5. **Cultural Perceptions & Breastfeeding Norms:**
    - How does your cultural background shape your views on breastfeeding?
    - Have you noticed differences in how breastfeeding is perceived in Canada versus your home country?

6. **Challenges as a Newcomer Mother:**

    - What has been the biggest challenge in breastfeeding since moving to Canada?
    - How have you adapted to overcome those challenges?

7. **Work, Lifestyle & Breastfeeding:**

    - For those of you who are working or studying, how do you balance breastfeeding with your other responsibilities?
    - Do you have access to support/resources at your workplace/school/ community that make breastfeeding easier for you?
    - What workplace or community support would make breastfeeding easier for you?

8. **Public Breastfeeding & Comfort Levels:**

    - How do you feel about breastfeeding in public in Canada?
    - Have you ever experienced discomfort or support while breastfeeding outside your home?

9. **Interactions with Healthcare Professionals:**

    - What kind of breastfeeding advice or support have you received from healthcare providers in Canada?
    - Was the advice helpful, and did it align with your cultural understanding of breastfeeding? Tell me more

10. **Access to Lactation Support & Information:**

- Have you ever attended a breastfeeding support group or consulted a lactation specialist in Canada? Why or why not? If YES, how did this influence your confidence in breastfeeding?
- Do you have access to information or resources about breastfeeding?
- If YES, please tell me more about this information or resources that you have access to.
- If YES, have these information or resources helped you feel more confident about breastfeeding?
- Have they made you feel less confident about any aspect of breastfeeding?
- If YES, what do you think is positive in these information or resources about breastfeeding?
- If YES, what do you think is missing in these information or resources about breastfeeding?
- If, NO, what kind of information or resources would have helped you feel more confident about breastfeeding?

Appendix C: INFORMATION AND INFORMED CONSENT

Study Title: Breastfeeding Self-efficacy among Newcomer Mothers of African Descent in Halifax Regional Municipality, Nova Scotia

Introduction:
Thank you for accepting the invitation to participate in this research project being conducted by researchers at Mount Saint Vincent University (MSVU). This project is being conducted under the leadership of Professor Irene Ogada in the Department of Applied Human Nutrition. This form provides you with information about the study procedures and your rights as a participant.

The details of the study are described below.

Study Objective: The purpose of the study is to understand the breastfeeding experiences of newcomer mothers of African descent in Halifax.

Study schedule:
You will be involved in one interview lasting 45-60 minutes, and if you choose to, a focus group discussion that will last about 60-90 minutes. Your participation will involve sharing stories, thoughts, and experiences. We are interested in hearing about your experiences with food and nutrition during your pregnancy, while breastfeeding and solid feeding your young child. We would also like to hear your thoughts on existing health services, social policies, and programs that serve mothers and children.

Use, storage and protection of information collected:
With your consent, we will be audio recording the interviews and discussions. We will take several measures to protect all information collected during the study. First, only members of the research team will have access to any identifying information that the study will be having. We will use pseudonyms and codes as identification for you. Secondly, all audio files and transcripts of the recordings will be stored in password-protected and/or encrypted files and computers. We will destroy the files of the audio recordings after transcription of these are completed. In all publications, reports, and presentations made from the collected data, no identifying information will be used – we will instead use pseudonyms and codes to represent you. All data files will be destroyed 5 years after publication of the results of the study.

The information collected during the study will be used to develop reports, presentations, scientific publications, and proposals for further funding. Additionally, students may analyze data from the study for purposes of learning and research projects – they will only access data that does not have any identifying information.

Voluntarism:
Participation is voluntary. Should you want to discontinue or decline to answer any questions, feel free to do so. ***You may discontinue/withdraw from the study at any time, until the data is analyzed. Your withdrawal from the study or declining to participate does not interfere in any way with your rights, treatment or future relations with the researcher(s) or university.*** We however

encourage you to participate in the study as the findings may be important for designing interventions and programs in future.

Potential Risks and benefits:
No research-related physical risks, injuries or discomforts are anticipated in this study. This is because nothing (medications, chemicals, or supplements) will be administered to the participants. However, you may become upset when discussing your experiences with us. Should this occur, you can take a break. We will also provide a list of counselling services and other resources that can be of help. Should you wish to discontinue the interview or decline to answer any questions that make you uncomfortable, feel free to do so – there will be no consequence attached to this.

There are no direct benefits to you for participating in this study. Although we cannot guarantee any direct benefits from your own participation, the information you provide will be useful in understanding the experiences of individuals in our community, as well as the gaps in the policy and programs related to the nutrition of women and children in our community. This may provide insight that may help other mothers in the future and help increase attention among fellow community members, policy makers and service providers, to problems and solutions identified.

Compensation:
To appreciate your time and help with expenses you may incur due to participating in this study (such as childcare, transport), you will receive $30 for each interview or discussion you participate in.
Should you withdraw from the study after you have started the interview process, you will still receive the $30 compensation.

Confidentiality and Anonymity:
The research team will take all measures to protect your personal information. Only members of the research team will have access to any identifying information that you provide to the study. We will use pseudonyms and codes as identification to protect your confidentiality in all publications, reports or presentations developed from the project. We will destroy the files of the audio recordings after transcription of these are completed. All data files will be destroyed 5 years after publication of the results of the study.

During the group discussions, other participants at the session will likely know your identity. Should you have contributions that you are uncomfortable sharing with the larger group, we encourage you to write it on the provided pad. This will enable all your reflections and feedback to reach us.

Only the research team will have access to original data in the study. All hard copies of research materials, including the informed consent forms, written notes, transcripts, among others, will be kept in a locked cabinet at MSVU. They will then be converted to soft copies and kept in a password-protected and/or encrypted file and computer on a secure server at MSVU, like other soft copy files in the study. All transcripts or hard copies converted into soft copies will be destroyed. Data files will be kept for five years after publication.

This study has been cleared by the Mount Saint Vincent University (MSVU), University Research Ethics Board.

Questions & Concerns:
Should you have any concerns or questions about this study, please feel free to contact the Researcher(s) using the following information:

Olayemi Oladipupo
Department of Applied Human Nutrition
Mount Saint Vincent University
olayemi.oladipupo@msvu.ca

Irene Ogada, RD, PhD.
Department of Applied Human Nutrition
Mount Saint Vincent University
Irene.ogada1@msvu.ca

If you have questions about how this study is being conducted and wish to speak with someone not involved in the study, you may contact the Research Ethics Coordinator of the University Research Ethics Board (UREB) c/o MSVU Research Office, at (902) 457-6350 or via e-mail at ethics@msvu.ca

If you have questions about your rights as a research participant, you may contact:
Manager, Research Ethics Board Secretariat,
Holland Cross Building, Tower A
11 Holland Avenue, Suite 511,
Address Locator #3005B Ottawa,
Ontario, K1A 0K9
Phone number (613) 941-5199 Fax (613) 941-9093
Email: REB-CER@hc-sc.gc.ca

CONSENT FORM.
I confirm that I am **19 years of age or older**.

I, **_____(please print your name)**, have read and been .provided with information about this research project. I understand that I am being asked to participate in a research study titled *Breastfeeding Self-Efficacy among Newcomer Mothers of African Descent in Halifax Regional Municipality, Nova Scotia.*

I have had the opportunity to ask questions, and all my questions have been answered to my satisfaction. I understand that my participation involves taking part in a **one-on-one interview** and voluntary Focus Group Discussion. I acknowledge that my participation is **voluntary** and that I am **free to withdraw** from the study at any time without consequences. I also understand that I may **decline to answer any questions** that I am uncomfortable with, without any repercussions.

I **consent** to being **audio recorded** during the interview for research purposes.

YES NO

I **voluntarily consent** to the use of my anonymized information in research reports, publications, and other forms of dissemination.

YES NO

Would you be willing to participate in a FOCUS GROUP DISCUSSION SESSION?

YES NO

Participant Signature: _____ Date: _____

Researcher Signature: _____ Date: _____

FOR FOCUS GROUP DISCUSSION

I, _____ (please print name), agree to maintain the privacy and confidentiality of participants and the information discussed during the group discussion sessions.

Participant's Signature: _____ Date: _____

Researcher Signature: _____ Date: _____

Researcher Obtaining Informed Consent:
I, _____ (please print name), confirm that I have thoroughly explained the contents of this consent package to the potential participant. I have provided the participant with the opportunity to ask questions about the study and have answered all questions to the best of my ability. I confirm that the participant has given free and voluntary consent without any coercion.

Signature of Researcher Obtaining Consent: _____ Date: _____

Appendix D: Recruitment Poster

Appendix E: TCPS 2 Certificate

PANEL ON RESEARCH ETHICS

Navigating the ethics of human research

TCPS 2: CORE 2022

Certificate of Completion

This document certifies that

OLAYEMI OLADIPUPO

successfully completed the Course on Research Ethics based on the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2: CORE 2022)

Certificate # 0000974959

29 September, 2023