2019

Pregnant African American Women Breastfeeding Intentions, Beliefs, Attitudes and Perspectives

Janelle S. McClain, PhD
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral dissertation by

Janelle S. McClain

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. JaMuir Robinson, Committee Chairperson, Health Services Faculty
Dr. Magdeline Aagard, Committee Member, Health Services Faculty
Dr. Raymond Panas, University Reviewer, Health Services Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2019

Abstract

Pregnant African American Women Breastfeeding Intentions, Beliefs, Attitudes and Perspectives.

by

Janelle S. McClain

MS, University of Cincinnati, 1998

BS, Tennessee State University, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of Doctor of Philosophy

Health Services

Walden University

February 2019

Abstract

Breastfeeding is the best infant feeding source of nutrition for infants in their early stages of development. However, there is a fundamental gap in the number of African American women that initiate breastfeeding compared to White, Asian, and Hispanic mothers. Social cognitive theory was used to explore the breastfeeding intentions, beliefs, perceived barriers, and perceptions on breastfeeding through a basic qualitative research method. To capture the essence of the lived experiences of African American pregnant women, a purposeful sample of 13 African American pregnant women were invited to participate in the study. Two focus groups discussions pertaining to breastfeeding intentions and perceptions were conducted. Data were collected using hand-written notes and audio-taped responses from participants. The data were analyzed using NVivo12 Plus qualitative software program to discover themes and patterns. The findings resulted in 3 themes and 2 subthemes. The themes that emerged from the responses were (a) breastfeeding is the best feeding option, (b) breastfeeding barriers, and (c) breastfeeding intentions and duration. There was identified support in terms of intentions to initiate breastfeeding immediate postpartum and continuing some breastfeeding through 6 months. Further results include subthemes of encouragement and outside influences and recommended future breastfeeding support. Breastfeeding barriers ranged from previous negative experiences, negative comments and advice from family and friends, perceived lack of milk, and pain. This study contributes to positive social change within the community by providing some insight into possible interventions or approaches to improve breastfeeding intentions and to ultimately improve the lives of infants.

Pregnant African American Women Breastfeeding Intentions, Beliefs Attitudes and Perspectives

by

Janelle S. McClain

MS, University of Cincinnati, 1998

BS, Tennessee State University, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Services

Walden University

February 2019

Dedication

I dedicate my dissertation to my sons (Brandon and Bryce also known as B & B Rich boys) who have been the reason for my personal tenacity and sacrifice throughout this whole process. They are my will and drive towards the highest education possible. I also dedicate this project to my late great grandmother who always encouraged me to "get your education". She would be extremely proud to know that I was able to go this far.

Acknowledgments

I must thank my Lord and savior Jesus Christ for this journey. This was a bumpy road for me but for God. He saw the best in me and gave me a second chance. I am forever thankful for His grace. I'm am thankful that He allowed me to make a bold move and step out on faith and trust and stand on His word. I'm thankful that He kept me in a way that only a loving God could. I'm thankful that He is faithful and that the future of my health and my family and my prosperity is in His hands. I'm thankful that no weapon formed against me would prosper.

I am also thankful for all my friends (too many to name, but I love all of you), mentor (Dr. Ardythe Morrow) and family who have been incredibly encouraging and supporting through this process.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

Breastfeeding is the best source of nutrition for babies (Eglash, Montgomery, & Wood, 2008). Former Surgeon General Dr. Satcher created a blueprint on breastfeeding in 2000, stating "Breastfeeding is one of the most important contributions to infant health. In addition, breastfeeding improves maternal health and contributes economic benefits to the family, health care system, and work place" (Department of Health and Human Services [DHHS], 2000, p. 3). Known breastfeeding benefits to the baby include protection against viral infections, nutrients for brain growth in the first year of life, immunologic protection (which includes lower risk of diabetes), reduced incidence of developing allergic symptoms such as eczema and asthma by 2 years of age, reduction of otitis media (ear infections) and lower respiratory tract diseases, Sudden Infant Death Syndrome (SIDS) reduction, obesity and nonspecific gastroenteritis, and childhood leukemias (Agency for Healthcare Research and Quality [AHRQ], 2007). Breastfeeding also has advantages to the mother including earlier return to prepregnancy weight, can aid in pregnancy spacing, and reduced risk for osteoporosis, postpartum depression, breast cancer, ovarian cancer, and maternal Type 2 diabetes (AHRQ, 2007).

Breastfed children do not share the same illnesses or sickness rates as formula fed children (Lawrence & Lawrence, 2016). Children who receive formula have higher rates of ear infections, stomach illnesses, increase lower respiratory tract infections, asthma and SIDS (American Academy of Pediatrics [AAP], 2003). Also, infants who are

breastfeed have fewer hospitalizations and have fewer infections than formula fed infants (Victoria et al., 2016).

Just as infants and mothers benefit from recommended breastfeeding practices the United States economy profits from this health behavior as well. Bartick (2011) examined how suboptimal breastfeeding rates in the United States have a direct impact on the United States economy. Bartick reported that if 90% of mothers would comply with recommendations around breastfeeding, the United States economy would save $3.7 billion in direct and indirect pediatric health care costs. Another benefit is the advantage to employers who support mothers who breastfeed their babies. A business case report published by the DHHS and Health Resources and Services Administration Maternal and Child Health Bureau (HRSA, 2008) indicated a high retention of experienced employees; reduction in sick time taken by both mothers and fathers for children's illnesses; and lower health care and insurance costs. The report indicated that mothers who formula feed are absent twice more (1 day absences) than mothers who breastfeed, and employees whose companies provide breastfeeding support consistently report improved morale, better satisfaction with their jobs and higher productivity (HRSA, 2008).

National and international professional health organizations have developed policies, statements ,or recommendations on breastfeeding. Birth Gazette (1998) restated that the American College of Gynecology (ACOG), breastfeeding policy:

> ACOG strongly supports breastfeeding and calls on its Fellows, other health professionals caring for women and their infants, hospitals, and employers to support women in choosing to breastfeed their infants. All should work to

> facilitate the continuation of breastfeeding in the workplace and public facilities. Health professionals have a wide range of opportunities to serve as a primary resource to the public and their patients regarding the benefits of breastfeeding and the knowledge, skills, and support needed for successful breastfeeding(para. 1).

The World Health Organization (WHO), the United Nations Children's Fund (UNICEF) and the AAP all recommend initiating breastfeeding immediately postpartum and continuing exclusive breastfeeding through at least the first 6 months of life and through the first year (12 months) of life (Centers for Disease Control and Prevention [CDC], 2016).

There continues to be a racial disparity as it relates to breastfeeding in the United States. Healthy People 2020, a national health promotion and disease prevention initiative, includes an objective to increase breastfeeding rates in the United States (Healthy People, 2018). The goal is to increase the proportion of infants who are ever breasted to 81.9 % (Healthy People, 2018). Despite this objective, according to the CDC (2014) , African American women ever breastfed at a rate of only 68%, White mothers at 85%, and Asian mothers at 80 % . The national recommendation is to breastfeed for 6 months and up to 1 year. The latest information presented by the CDC recorded children born in 2014 receiving any breastmilk at 6months; African American mothers were at a rate of 41% compared to White mothers who were reported at 60% at 6 months and Asian mothers at 61%. The recorded current breastfeeding rates indicate the breastfeeding disparity among African American women.

Background

Understanding intentions to perform a behavior is influenced by an individual's attitude toward performing the behavior and their perception of the social pressures to perform the behavior (Ajzen, 1991). Research literature indicates that the psychosocial determinants of breastfeeding intention and behavior are complex and prenatal breastfeeding intentions and child feeding behavior is highly correlated (Chambers, McInnes, Hoddinott & Alder, 2007). African American and Hispanic women who participated in a prenatal education intervention-controlled study provided by lactation consultants aimed to increase intentions to breastfeed demonstrated significant positive increase in the health behavior or breastfeeding (Bonuck, 2005). Witnessing other women breastfeeding improved intention to breastfeed, and breastfeeding peers had a positive impact on breastfeeding intentions amongst pregnant women group in Melbourne, Australia (Cameron, Hesketh, Ball, Crawford, & Campbell, 2010; Hoddinott, Kroll, Raja, & Lee, 2010). It is not only important to have a full understanding of the correlation between intentions and actual behavior but to also understand what affect intentions. Factors that affect intentions to breastfeed are knowledge, beliefs, and support from family (Bai, Wunderlich, & Fly 2011). An intention study, where Jordanian mothers reported intentions, was altered due to limited social support and returning to work (Al-Sagarat, Yaghmour & Moxham, 2017). Similarly, perceived subjective norms, perceived breastfeeding success, and perceived behavior-control were drivers of breastfeeding intention among African American women who were enrolled in the military (Goldson & Edwards, 2004).

Attitudes, beliefs, barriers, and perceptions can contribute to rates of breastfeeding among African American women. Perceived benefits of breastfeeding include maternal bonding, lose weight quicker, protects baby from illnesses, easier than bottle feeding, and protects the baby from stomach illnesses (McCann, Baydar & Williams, 2007). Barriers to breastfeeding recorded among African American women include embarrassment when breastfeeding in public, pain, not enough milk supply, no support, racially biased health care, professional breastfeeding resources not provided or inaccessible, issues of trust and perceived mistreatment by providers, and returning to work (Barbosa, Masho, Carlyle, & Maqhboeba, 2016; Bentley, Dee, & Jensen, 2003; Brownell, Hutton, Hartman, & Dabrow, 2002; McCann et al., 2007). Investigating breastfeeding intentions and what social barriers attribute to those intentions addresses questions around this public health phenomenon and is important to researchers and policy makers to help make informed decisions around programs and services or to develop a system that aligns with goals and improves the health of the community.

Statement of the Problem

Human milk is a known protector against many viral infections (Lawerence & Lawerence, 2016). It protects against atopic diseases and is associated with lower risk of asthma during childhood and lower risk of acute leukemia and lymphoma (Lawrence & Lawrence, 2016). African American women are the least likely of all ethnic groups to initiate and maintain breastfeeding for the recommended amount of feeding time which is 6 months exclusively and continuous for 12 months as mutually agreed upon between mother and child (AAP, 2005). Equally important, within the current published peer-

reviewed literature, there is a lack of available data on prenatal breastfeeding intentions to breastfeed amongst this population. Currently, the overall national breastfeeding initiation rates are at 80% (CDC, 2015). However, approximately 22% of all mothers stop exclusively breastfeeding sooner than the recommended time frame of 6 months (CDC, 2015). African American women are reported to initiate breastfeeding, which can include any and exclusive breastfeeding by 6 months at a rate of 41%, White women at 60%, and 61% for Asian women (CDC, 2014).

Earlier research concluded that increasing intention to perform a health behavior can lead to the actual initiation of that behavior (breastfeeding) (Manstead, Proffitt, & Smart, 1983). It is important to explore breastfeeding intentions among low income African American women because this population has the lowest reported breastfeeding rates (Collins, Soskolne, Rankin, & Bennett, 2013). Examining intentions to breastfeed among this population would help provide a better understanding of the health behaviors and the beliefs that undergird these behaviors. It can also help to address a myriad of public health issues such as lowering the infant mortality rate, creating healthier communities, and saving money to improve the economy.. There is a current gap in the literature on possible associations between intention to breastfeed and the participation in a prenatal breastfeeding outreach program. In addition, there is a gap in the literature as it relates to the perspectives of low income African American women on breastfeeding. This study was necessary to contribute to the body of academic literature because it focuses on intent to breastfeed and breastfeeding perceptions among African American pregnant women who are Head Start eligible in the U.S. Midwest. Past research (prior to

2012) and latest research conducted within the last 5 years (between 2012–2017) are aimed at African American college women, women in Africa, and women in other countries such as Indonesia, Jordan, UK and Hong Kong (Al-Sagarat et al., 2016; Donath, Amir,& ALSPAC Study Team, 2003; Jefferson, 2014; Lok, Bai, & Tarrant, 2017; Ross-Cowdery, Lewis, Papic, Corbelli, & Schwarz, 2017;). Understanding the drivers of intention and breastfeeding perceptions on breastfeeding is important, but key knowledge regarding these variables among African American pregnant women in the Midwest who are Head Start eligible is lacking. This study finding could lead to novel interventions or approaches to help develop methods that can be applied to improving intentions to breastfeed and ultimately save babies lives.

Purpose of the Study

Intention reflects an individual's preference to perform a behavior in the future (Bai et al., 2011). There are various drivers of breastfeeding intentions, such as social support, cultural and personal beliefs and experiences (Bai et al., 2011; Persad & Mensinger, 2008). Decisions relating to infant care are often made prenatally (Persad et al., 2008). Therefore, it's important to understand intentions, perceptions, and beliefs relating to breastfeeding prior to delivery.

The problem addressed in this study was the low breastfeeding rates among African American women. The purpose of this study was to explore prenatal intentions and to describe breastfeeding perceptions among pregnant African American women whose children are Head Start eligible. Because African American women are the least likely to initiate breastfeeding compared to other ethnic racial groups, there is a local, and

national interest to further understand what is the best evidence based model to be implemented in order to increase breastfeeding rates among this population but to also decrease the infant mortality rates among this high risk population as well (CDC, 2013). Exploration of breastfeeding intentions and breastfeeding attitudes and perceptions is expected to yield a deeper understanding of different motivations, barriers, and social pressures relating to this population.

Research Questions

In this qualitative study, the following research questions were addressed:

1. What are the prenatal breastfeeding intentions among African American women whose children are Head Start eligible?

2. What are the beliefs, attitudes, and perceived barriers, towards breastfeeding among African American pregnant women whose children are Head Start eligible?

Theoretical Framework

The theoretical framework for this study was based on the conceptual framework of the theory social cognitive theory (SCT). SCT is a process in which environmental factors, personal influences and other human behaviors work to affect health behavior (Glanz, Rimer & Vismanath, 2008). Within the SCT construct are the layers of self-efficacy. The lack of self-efficacy is viewed as a barrier to taking a recommended health action (Glanz et al., 2008). According to Bandura's (year) behavioral change theory, for health behaviors to change successfully people must feel threatened by their current behavior and people must feel change of a specific kind will result in a valued outcome.

Intention is a function of three constructs: attitude, subjective norms, and perceived behavioral control (Bai et al., 2011). Lastly, people must also feel empowered to overcome perceived barriers to act. Behavioral belief of a certain behavior leads to an attitude towards that behavior which follows behavioral intention and ultimately results in performing the actual behavior (DHHS, 2005). A measurement of attitude towards a specific health behavior is understanding if the behavior is viewed as good or bad. Moreover, a measurement of behavioral intention is understanding if the individual is likely or unlikely to perform the behavior (DHHS, 2005). This framework best fits this study because SCT allows a researcher to explore individual factors (environmental and human factors) that determine beliefs, attitudes (do mothers feel positive or negative about breastfeeding) and behavioral intention (do mothers intent on formula feeding or breastfeeding).

Nature of the Study

A basic qualitative approach was applied to explore prenatal breastfeeding intentions and how breastfeeding is perceived among pregnant African American women who are Head Start eligible. This study applied a traditional approach to qualitative research. This approach allowed more descriptive experiences from several participants who have experienced the phenomenon (Creswell, 2013). The rationale for a basic qualitative approach was to be able to capture data that quantitative data would not, which in this case would be to characterize participant perspectives and experiences in great depth on breastfeeding. The phenomenon being investigated was breastfeeding intentions and perceptions among pregnant African American women who are Head Start

eligible. A sample of 13 African American pregnant Head Start eligible women were recruited from the Head Start organization located in Hamilton county Ohio. Qualitative data was collected via two focus group discussion among pregnant African American Head Start eligible women. Their audio recorded responses were analyzed for thematic and content patterns to identify perceptions and barriers on breastfeeding.

Definitions of Terms

The following terms are used in this study:

Breastfeeding initiation: To place the baby at the breast following healthy or normal delivery (Lawrence & Lawrence, 2016).

Certified Lactation Counselor (CLC): An individual who has a completed 45 hours of training and has demonstrated competency in lactation skills, knowledge, and attitudes that are essential to helping women (CDC, 2013). CLCs can provide knowledge and counseling about optimal and suboptimal breastfeeding (CDC, 2013).

Exclusive breastfeeding: Human breast milk only; infant ingests no other nutrients, supplements, or liquids (Lawrence & Lawrence, 2016).

Intention to breastfeed: Intent to breastfeed is defined as having a high level of personal expectation to perform breastfeeding (Bai, et al, 2011).

International Board-Certified Lactation Counselor (IBCLC): An individual who has completed 90 hours of both clinical and educational hours of training (CDC, 2013). IBCLCs have hands on clinical experience with working breastfeeding mothers (CDC, 2013).

Assumptions and Limitations

In this study, I assumed that African American pregnant women want to do what is best for their infants. I also assumed that African American pregnant women are open to the best infant feeding practices. I expected to learn more about surrounding support (e.g. infant's fathers and grandmothers) and their willingness to help them succeed at breastfeeding as well as their view on breastfeeding in general.

The limitations of this study include purposeful sampling, which can create a limitation in terms of bias among participants depending on their pre-exposure experience to breastfeeding. In addition, because this sample size is small (13 total focus group participants) the findings cannot be made as a generalization assumption to a larger population of African American pregnant women. Another limitation of this project was possible pre exposure bias experienced by 10 of the pregnant women who participated in the study. Three of pregnant women were first time mothers, therefore their comments were not directly influenced by negative personal experience. However, the other 10 participants may have had some negative experience which would have been included as a response bias in the results. The theory of SCT has a direct correlation with past experiences negative or positive and how it can affect the change in behavior.

Significance

Evidence based research supports the fact that human milk is the best early food nutrition for human babies (Lawrence & Lawrence, 2016). There are many components in breast milk that benefit infants in the beginning of life, as well as throughout their lives, which include, antibodies, immunologic benefits, nutritional and cognitive benefits

(Lawrence & Lawrence 2016). Compared to other ethnic groups, African American women have the lowest rates of initiating and continuing breastfeeding (CDC, 2015).

Moreover, infant mortality rates are highest amongst this population and the cost of infant deaths, pediatric health care, and days off from work are increasing the economic cost. Intention to breastfeed is clearly important, but knowledge regarding intention and breastfeeding perceptions among pregnant African American women who quality for Head Start for their preschool children is lacking. This study may provide insight that could lead to programs and help develop methods that can be applied to improve breastfeeding intentions. If successful, such understanding of breastfeeding perceptions and breastfeeding intentions would further allow a social change in breastfeeding to be accomplished, which would have a positive impact on the breastfeeding initiation and duration rates among African American women. Qualitative data will provide a rich cultural perspective from low income pregnant African American women whose preschool aged children are enrolled in the Head Start program which can lead to helping to identify if resources are needed to support programs that will increase intention to breastfeed among this population.

Summary

Despite the well-researched scientific, social, and economic benefits of breast milk, African American women have the lowest rates of breastfeeding initiation of any other ethnic group (CDC, 2017). There have been few recent examinations of breastfeeding intentions among African American women. Many of the available studies occurred outside of the United States and among those within the United States, few were

within the Midwest region. In this chapter I have discussed the gap in research literature on prenatal breastfeeding intentions and breastfeeding perceptions, beliefs and barriers among African American women who are Head Start eligible. I have presented the nature of the proposed study and identified the SCT as the theoretical framework for this study.

Chapter 2 will provide a review of the literature on breastfeeding, current breastfeeding perceptions among low income African American women, breastfeeding intentions among African American women and the ways in which SCT has been used to address this research area.

Chapter 2: Literature Review

Introduction

Breastfeeding for mothers and their infant babies has long-standing positive health benefits for both mother and baby. According to the DHHS, Office of Women's Health there are breastfeeding disparities between African American womenHispanic/Latino, and White women (DHHS, 2000). Postpartum breastfeeding rates remain the lowest amongst African American women (DHHS, 2000). Of those women, 45% of African American women breastfed at early postpartum, 66% of Hispanic/Latino women, and 68% of White women(DHHS, 2000). At 6 months postpartum, the disparity is even greater with 19% of African American women breastfeeding, 28% of Hispanic/Latino women, and 31% of White women (DHHS, 2000). The CDC (2014) reported 66% of African American women have ever breastfed compared to 84% of White women and 83% of Hispanic women. Within this literature review, key concepts will be included that underscore perceived barriers to breastfeeding within low-income African American communities. This review will cover applied intervention strategies implemented to help improve intention to breastfeed among low-income African American women. This review will also highlight the use of social cognitive theory to address the public health issue of low incidence of breastfeeding among low-income African American women.

I accessed peer-reviewed literature published between years of 2010 – 2017 using the University of Cincinnati Library's online database, EBSCO, Cincinnati Children's Hospital PRATT library online database, which includes a copious amount of medical

resources such asMedline, PubMed, OhioLink, Cinahl, JAMA, Scopus, and Walden University Library database SAGE. A keyword search was based on single terms or a combination of terms including *breastfeeding, low-income, women infants and children, health disparities, intention, duration, perceptions, focus groups, self-efficacy, self-efficacy scale, black mothers, African American,* and *overall breastfeeding barriers*.

Breastfeeding Overview

A Healthy People 2020 goal is to have 81.9% of infants who are ever breastfed (Healthy People, 2018). Healthy People 2020's specific objective MICH- 21 is to increase the proportion of infants who are breastfed (Healthy People, 2018). The number of benefits associated with breastfeeding includes lower incidence of SIDS, infant diarrhea, and respiratory illness; higher performance on intelligent tests; and a decrease in prevalence of overweightness, obesity, and diabetes (Lawrence & Lawrence, 2016). Despite the evidence-based benefits of breastfeeding, African American women have the lowest rates of all ethnic groups to exclusively, initiate, and continue breastfeeding past 6 months as recommended by American Academy of Pediatrics (AAP) and the World Health Organization (WHO) (AAP, 2011). CDC (2014) data reported 66.3% of African American women have ever breastfed compared to the U.S. national data of 81.1%. This project aims to examine the impact on intention to breastfeed post educational and training intervention exposure provided by a local Ohio community outreach breastfeeding program. This is key because the CDC (2010) reported that Ohio breastfeeding data indicated that 74.7% of African American women to have ever breastfed compared to 76.2% of White mothers. Hamilton County in Ohio is one of the

largest populated county with over 44% African Americans but, in 2013, only 11.3% of Women Infant and Children (WIC) participants in the Ohio area (Hamilton County) have either fully or partially breastfed (U.S. Department of Agriculture [USDA], 2013).

Several studies have investigated reasons as to why low-income African American women who are eligible for WIC benefits are less likely to breastfeed. Published studies highlight issues such as inconsistency in WIC program services and how infrastructure can play a role in lack of access to breastfeeding interventions for African American women (Katsaras, 2015). Specifically, a study conducted by Evans, Labbok, and Abbrahams (2011) examined the relationship of breastfeeding intention and initiation, WIC support, and the racial makeup of the participants in North Carolina . The authors collected electronic surveys from their local WIC programs and from services that each program provided (Evans et al., 2011). The services were grouped into four themes: peer counseling, clinic-based, home visits, and other counseling (defined by lactation consultant or peer counselor (Evans et al., 2011). Data from the North Carolina Pregnancy Nutrition Surveillance System (PNSS) were used to gauge the county level race makeup of WIC clients (Evans et al., 2011). Collective information from the electronic survey and the PNSS data were analyzed for associations among race, breastfeeding practices, and support services provided by the WIC programs in different areas (Evans et al., 2011). The study results indicated that support varied by WIC programs, with 38% offering peer support, 50% offering clinic services, 46% home visits, and 76% other counseling (Evans et al., 2011). Moreover, 22% offered all four types of services while 14% offered none (Evans et al., 2011). Findings disclosed WIC

participants who were African American and who received WIC services from geographic WIC sites were less likely to ever breastfed in 2003 and 2004 due to the lack of availability of breastfeeding support services (e.g. peer counseling, lactation counselors and home visitation services; Evans et al., 2011). Of the WIC sites researched by Evans et al., only 50% offered clinical service support (clinical services described as in clinic counseling provided by peer counselor or lactation consultant). In population areas where the population was over 70% African American, only 33% of available clinical services were offered (Evans et al., 2011). In addition, of all the WIC sites examined, 46% of home visits support services were offered; however, in highly populated African American areas, 16% of home visit services were offered to support breastfeeding (Evans et al., 2011). Overall, African American WIC participants were not offered an equal amount of services (peer counseling, clinic-based services, and home visits) compared to the percentage of services provided to Hispanic clients and White clients.

Other studies have also examined why African American WIC participants are less likely to breastfeed. Spencer, Wambach, and Domain (2015) used a qualitative research study to explore the factors associated with intention and duration of breastfeeding among African American women. Interviews and focus groups via a three-stage sequential-consensual qualitative design method was administered during the research project to access cultural voice, intimate voice and political voice of African American women (Spencer et al., 2014). The women who were part of the research were lactation consultants and peer counselors of the WIC program (Spencer et al., 2014).

Findings from interviews and focus group were perceived low milk supply, lack of family support, and lack of breastfeeding information from health care professionals (including WIC and lactation consultants; Spencer et al., 2014). In similar findings, Fischer and Olson (2014) aimed to get a better understanding of the cultural role in infant feeding choices among different ethnic groups. Fischer and Olsen conducted focus group discussions with African American and White women WIC participants and non-WIC participants in the Michigan area. Findings indicated that overall participants' perceptions were that breastfeeding promoted bonding and was convenient and easy (Spencer et al., 2014). However, like interview findings of Spencer et al. (2014), the women enrolled in WIC in this study reported they lacked enough information to breastfeed (Fisher & Olsen, 2014). Some WIC participants reported lack of information from the WIC program and that there wasn't any assistance with latching (Fischer & Olsen, 2014).

Lutenbacher, Karp, and Moore (2016) were concerned about factors that challenge and influence Black women to breastfeed. Qualitative focus groups were conducted to gain perceptions and identify themes associated with challenges (Lutenbacher et al., 2016). A total of 16 respondents were recruited from various locations including WIC clinics, prenatal classes, and community centers (Lutenbacher et al., 2016). Data collected found that most of the women in the study (over 33%) reported self-motivation to breastfeed, 18.7% reported the father as being an influence in their breastfeeding decision, 12.5% reported the grandmother as being an influence in their decision, and 12.5% reported a friend (Lutenbacher et al., 2016). A small percentage mentioned a healthcare provider of those who influenced their decision to breastfeed

(Lutenbacher et al., 2016). An incidental finding of this study was that some of the women conducted their own research and developed a birthing plan for breastfeeding and the birth process (Lutenbacher et al., 2016). Most of the women reported that health care providers and health care centers were not excited about their birthing and breastfeeding plans (Lutenbacher et al., 2016). The study concluded that African American women obtained their knowledge on breastfeeding not from their health care center/providers but self-conducted internet research (Lutenbacher et al., 2016). Lautenbach et al.'s focus group findings further support studies such as Spencer et al. (2014) and Furman, Banks, and North (2013), and the lack of support African American WIC participants receive regarding breastfeeding education and improving self-efficacy towards breastfeeding. These authors demonstrate synergy of the lack of education and lack of building self-efficacy when it relates to how African American women are reporting receiving support, education, and awareness information on breastfeeding (Lutenbacher et al., 2016; Spencer et al., 2014; Furman et al., 2013). The running theme amongst the aforementioned focus group studies suggested that African American women are not provided with the necessary knowledge and education they need in order to make a health care behavior decision (Lutenbacher et al., 2016; Spencer et al., 2014; Furman et al., 2013).

Furman et al.'s (2013) research is another case where African American women were included in a focus group that identified barriers to breastfeeding among high-risk inner-city mothers. Furman et al.'s study approach included the *broad involvement design*. This design used mothers and family members, and community health workers

(Furman et al., 2013). Like the studies conducted by Lutenbacher et al. (2016), Fischer and Olson (2014), and Spencer et al. (2014), most of the women recruited and who participated were enrolled in the WIC program (Furman et al., 2013). The three focus groups included groups of six to 10 African Americans and were audiotaped and transcribed (Furman et al., 2013). Like Spencer et al.'s study, mothers reported not having sufficient breastfeeding knowledge or education as a barrier (Furman et al., 2013). Furman et al.'s study differed in focus group findings as mothers described lack of self-efficacy as a barrier to breastfeeding initiation and duration. Furman et al.'s findings indicated that lack of self-efficacy due to ambivalence can affect breastfeeding decision. Ambivalence in this instance refers to mothers who may have the education on breastfeeding but may not choose to breastfeed because the change may seem too difficult (Furman et al., 2013). In contrast, lack of self-efficacy due to ambivalence was not a finding reported from any of the mothers interviewed by Spencer et al. (2014). Spencer et al. (2014) researched self-determination, empowerment, and spirituality in regard to breastfeeding, three themes from the data collected from Stage 2 of the study (Spencer et al., 2014). It is critical to explore intention to breastfeed among African American WIC participants as existing research focuses on initiation rather than intention. Available research underscores reasons why African American women are less likely to initiate and sustain breastfeeding due to lack of health care provider support, lack of social or family support and lack of overall knowledge being offered by health care providers that include WIC clinics and other health professionals. Continuing to explore research around intentions to breastfeeding by looking at current WIC

intervention education and knowledge programs can assist local and national health professionals and other interested community members alike with gaining further understanding of local barriers associated with moving intentions into performed health behavior or action.

Theoretical Framework

The applied theoretical framework for this study is SCT. SCT is described as an interpersonal continuous process by which personal factors, environmental factors, and human behavior influence each other (DHHS, 2005) (see Figure 1.) Bandura (1977) developed SCT theory and the constructs that make up the theory. Glanz (1997) examined Bandura and determined how Bandura promotes self-efficacy as the foundation of social change. SCT is cited as one of the more popular health behavior theories (DHHS, 2005). SCT investigates reciprocal interactions of people and their environments, and psychosocial determinants of health behavior (DHHS, 2005).

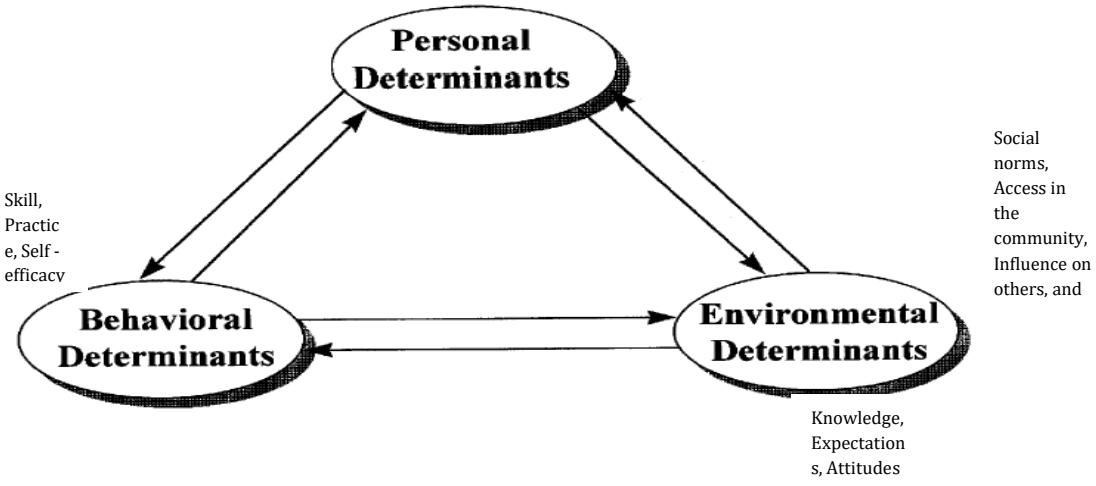

Figure 1. Social cognitive theory. From Raczynski, J., DiClemente, R. (1999). *Handbook of health promotion and disease prevention*. New York, NY: Kluwer Academic/Plenum Publishers

In this regard, factors that change a health behavior are (a) self-efficacy, (b) goals and (c) outcome expectancies. Under this theology, a person can change their health behavior even when they are faced with adversities (DHHS, 2005). SCT historically has been used to design community-level intervention programs. Specifically, the study conducted by Vari et al. (2013) referenced SCT as highlighting a person's learning is influenced by his or her environment. In Vari et al., (2013) study, community members responded to a survey via online invitation. The survey contained questions regarding attitudes, beliefs, and experiences. Bandura theorized that cognitive processes (attitude, knowledge, beliefs and prior experience) significantly influence a person's decision making. Vari et al. (2013) hypothesized community member's behaviors towards breastfeeding and responses to breastfeeding have an influence towards others in the same social space and indirectly impacts those members. Also, persons who are knowledgeable of and support breastfeeding can positively influence others (Vari et al., 2013).

Kessler, Gielen, West, and Page (1995) focused on the influence of a mother's significant others on her decision to breastfeed. Kessler et al. (1995) examined factors associated with breastfeeding duration by applying Bandura's cognitive process (understanding attitudes, increasing knowledge and beliefs, and previous experience) based on building a woman's confidence to breastfeed or self-efficacy and knowledge of

the significant others influence on and beliefs about infant breastfeeding. As reported in the study, intention to breastfeed and self-efficacy were strong findings and resulted in strong correlation in influencing continuing breastfeeding (Kessler et al., 1995).

A pilot study was conducted by Lathrop and Pritham (2014) on prenatal care educational visits and the impact of learning about prenatal care and the improvement in prenatal and postnatal care. Prenatal improvements were aimed at developing positive pregnancy outcome expectations and self-manage common pregnancy discomforts (Lathrop & Pritham, 2014). Postnatal care improvements were centered on healthy parenting, infant care, breastfeeding, and post partum recovery (Lathrop & Pritham 2014). Lathrop and Pritham sought to improve knowledge of self-care during pregnancy and childbirth . Their research directly applied Bandura's theory of SCT to each trimester of pregnancy providing education on how to encourage breastfeeding behavior after pregnancy, providing motivation and encouragement that breastfeeding can be performed and hearing and learning from others in the group which aligns with vicarious learning construct of SCT (Lathrop & Pritham, 2015).

SCT was applied to the current study as the proposed study provides additional knowledge from low-income African American women within Hamilton County Cincinnati Ohio on their perceptions, beliefs, and attitudes towards breastfeeding. This research takes an in-depth approach to understanding underlining barriers to initiating breastfeeding among this population. Having a better understanding of the reasons why breastfeeding is initiated or not help provide guidance in an intervention plan.

Breastfeeding Initiation and Intention

Documented success in breastfeeding is often measured by *initiation* and *duration* rates (Pattison, Kraschnewski, Lehman, Savage, Downs, Leonard & Kjerulff, 2019). Both qualitative and quantitative studies examine initiation and duration rates of breastfeeding among various populations (Dennis, 2002). Initiation of breastfeeding is defined within current research as taking place immediately post-partum or within one hour when the baby is delivered in the hospital Lawrence & Lawrence,2016). Initiation can also occur at home with the mother. The importance of breastfeeding initiation early on is that from a hormonal standpoint; oxytocin and prolactin which are produced immediately after birth are key hormones needed in order to maintain a good milk supply for the baby to feed (Lawrence & Lawrence, 2016). Initiation occurs when the mothers have put the baby to breast and any point post-delivery. On the other hand, intent to breastfeeding aims to measure a mother's choice to engage in breastfeeding prior to delivery

Breastfeeding Initiation

Lewallen and Street (2010) and Cottrell and Detman (2013) have conducted focus groups among African American women to assess reasons why they decide to breastfeed, what their breastfeeding experiences were, and reasons why they stopped breastfeeding. Both of these research studies included African American women who were post-partum and who had initiated breastfeeding and concluded breastfeeding earlier than the recommended standard of 6 months post-partum. Each study had the women answer a series of open-ended questions. Focus group guided questions for both studies consisted of reasons for choosing to breastfeed, reasons for starting formula feeding and reasons to

stop breastfeeding. Unique to the study conducted by Lewallen and Street (2010) was the question centered around African American women's perceptions specifically and them wanting to breastfeed or not (Lewallen & Street, 2010).

Cottrell and Detman (2013) interviewed 253 women who were mainly African American, single parents, and who had at least high school education or beyond that were in the Florida area. The mothers were interviewed face to face one month after giving birth. The authors examined reasons why mothers initiated breastfeeding but began supplementing with formula. Participants reported reasons such as anticipated returning to work or school, so they would bottle-feed in preparation of leaving the baby at the daycare center. One mother reported also having problems with latching assistance in the beginning however when she had to perform breastfeeding on her own; it was more difficult, so she didn't continue (Cottrell & Detman, 2013). Another case of early breastfeeding cessation was due to reported nipple pain (Cottrell & Detman, 2013). A unique testimony from Cottrell and Detman's (2013) study is a participant that reported that she received gift packs of formula at discharge even though she delivered at a baby-friendly designated hospital whose policy is no formula gift packs. The findings indicated some participants reported supplementing with formula the first few days after birth and keeping bottles of formula in the post partum room (Cottrell & Detman, 2013). One participant indicated she had been told that it would be nice if she could breastfeed but if she couldn't, she could use the formula that was made available in her post partum room (Cottrell & Detman, 2013). Barriers to breastfeeding identified in this study included fear, pain, time demands returning to work, not well supported at home, and easy

availability of formula (Cottrell & Detman, 2013). Study findings indicated that some women gave up on breast-feeding within 2 to 3 weeks. As a result of this finding, the authors suggest that women receive follow-up in-home breastfeeding support soon after discharge such as telephone contact within 24 hours of hospital discharge along with a home visit by a nurse lactation consultant (Cotrell & Detman, 2013). In addition, doula or peer breastfeeding ongoing counselor support are suggestions to help mothers continue breastfeeding duration post-partum. Cottrell and Detman (2013) study found that mothers who initiated breastfeeding were aware of the benefits and received some information prenatally (Cotrell & Detman, 2013).

Lewallen and Street (2010) held three focus group discussions with African American women who had recently had babies and who breastfed at some point, initiated post-partum feedings or who were still breastfeeding. Lewallen and Street (2010) focus group research results mirrored findings from Cottrell and Detman's (2013) research. During focus group discussions mothers talked about reasons why they started breastfeeding. One mother expressed that she knew it was the best and healthiest for her baby, another mother stated that she wanted to continue to breastfeed after she tried it in the hospital. She went on to express how it made her feel, and she continued because her baby was living on her milk alone and she felt proud about that (Lewallen & Street, 2010). Looking at both Lewallen and Street (2010) and Cottrell and Detman (2013) qualitative research on both initiation and duration of breastfeeding with African-American women both studies point to the importance of support needed prenatally in the area of education and building self-efficacy.

As previously mentioned, Spencer et al. (2014) utilized a sequential-consensual qualitative design with research focus groups that addressed experiences of African American women and breastfeeding, and that identified new ideas or concepts for breastfeeding promotion and support within the culture. Face to face interviews was conducted and was audio recorded. Findings in this study were similar to the other studies aforementioned in that lack of support from family member's health care provider, pain, and returning to work were determined to be barriers to breastfeeding (Spencer et al., 2014). Unlike any of the other focus group studies cited above, Spencer research offered an African American "political voice" from the respondents in the group. The women talked specifically about being African American and how their bodies are viewed differently and therefore making breastfeeding more culturally challenging. Another perceived barrier to breastfeeding initiation is that African American women have a negative historical experience with breastfeeding relating to slavery (Collins, 2002). Slaves were forced to "wet nurse" or feed their slave owners infants and children when the slaves were lactating themselves (Collins, 2002). Collins (2000) describes one stereotype of African American women as "animalistic Black Jezebel" (Collins, 2000). Participants in Spencer's study identified with struggling to resist negative African American women body image stereotypes and how that perception creates a barrier to breastfeed in public (Spencer et al., 2014).

Availability of Breastfeeding Resources- Clinical, Home Visits and or Counseling

Breastfeeding *initiation* was investigated using electronic surveys distributed to WIC directors in North Carolina and the North Carolina Pregnancy and Nutrition

Surveillance System data which supplied breastfeeding initiation rates by racial/ethnic group (Evans et al., 2011). Evans et al. explored the variance among breastfeeding initiation, the availability of WIC breastfeeding support, and race disparities of WIC clients in North Carolina (Evans et al., 2011). The four programs that are offered by WIC (peer counseling, clinic-based, home visits and other counseling) have been shown effective in increasing breastfeeding initiation and duration (Evans et al., 2011). Breastfeeding initiation by site was negatively associated with percentage of African American clients and positively associated with the percentage of white or Hispanic clients ($p<0.05$). The WIC sites with larger Hispanic populations were more likely to provide broader services (clinic based, peer counseling, and home visits) ($p<0.05$); those with higher concentration of African Americans were significantly less likely to offer clinic based breastfeeding support ($p<0.05$) and trended toward fewer services in general (Evans et al., 2011). This study findings echo previous research regarding showing disparities in the breastfeeding information and services being made available to African American women. In addition, their study highlights the disparities that exist in the breastfeeding information and services being made available to African American women. It also stands out in its findings as it brings forth a new perspective on how delivery and access to care can contribute to information health disparities. Disproportionate access to resources directly impacts breastfeeding initiation; the study doesn't clarify if initiation takes place during the hospital stay or at home.

Leruth, Goodman, Bragg and Gray (2017) research provided information on how access to system-level and individual breastfeeding support can improve breastfeeding

rates particularly among low income African American women. Their program offered individual education, counseling from the point of prenatal through 6 months post-partum and partnered with the local hospital Baby-Friendly Hospital Initiative (BFHI) to provide lactation support to delivering (Leruth et al., 2017). The program (Westside Healthy Start or WHS) offered program access to low income African American women in Chicago, Illinois. As a result of access to individual education, prenatal counseling and BFHI partnerships 67% of delivered participants initiated breastfeeding. A report of 10% of mothers who participated in the program were breastfeeding at 6 months. In addition, of mothers that WHS encountered post delivering at the partnering hospital, 65.1% of the contacts initiated breastfeeding (Leruth et al., 2017).

Breastfeeding Intervention Timing and its Impact on Initiation

Katsaras, Brown, and Colchamiro (2015) study looked at mothers who participated in the WIC program and their initiation and duration of breastfeeding. The study looked at mothers who were enrolled in the WIC program prenatally and the association between trimester of entry and breastfeeding outcomes and compared to mothers who only received WIC services during post-partum (Katsaras et al., 2015). This study is the first of its kind to explore breastfeeding outcomes and the relationship of trimester and initiation and how exposure to WIC services may have a positive impact. Katsaras study investigated prenatal intentions among WIC participants. Katsaras et al. take their research a little further and measure post-partum duration as well. Included in their findings 10-32% of first-trimester entry into WIC is associated with positive likelihood of initiating breastfeeding compared to those entering the WIC program during

their third trimester (Katsaras et al., 2015). In relation to duration, their study found that compared to first-time mothers entering the WIC program during post partum, mothers enrolling in WIC prenatally were 12-18% more likely to breastfeed their infants for at least 3, 6, and 12 months (Katsaras et al., 2015)

Contrary to Katsaras et al. (2015) findings, earlier findings explored by Guest and Hernandez (2010) comparing WIC participants to non-WIC participants, suggested that prenatal WIC participation during the first and second trimester is linked to reduced likelihood of breastfeeding *initiation* and duration. Their study suggests that participation in WIC at any trimester is positively related to formula feeding (Guest & Hernandez, 2010). Guest and Hernandez (2010) conducted interviews and matched birth certificates nine months after birth with mothers who were participants in the WIC program (Guest & Hernandez, 2010). The study findings suggest first trimester WIC participants are less likely to initiate breastfeeding, less likely to breastfeed for four months and less likely to exclusively breastfeed than non-WIC participants. WIC participants who enter the program during their third trimester are more likely to initiate breastfeeding compared to WIC participants who enter the program in their second or first trimester (Guest & Hernandez, 2010). Guest and Hernandez findings are consistent with other findings previously mentioned regarding WIC participants and initiation. Guest and Hernandez findings suggest despite early breastfeeding education (in this instance first or second trimester), mothers enrolled in WIC while in the hospital are aware that formula is an available option once the baby is delivered thereby providing more incentive to use formula and not initiate breastfeeding (Guest & Henandez, 2010).

Kulka et al. (2011) conducted a focus group study that looked at the breastfeeding barriers on initiation and duration for African American women. (Kulka et al., 2011). They performed a community-based research project examining the perception of support or lack of support relative to breastfeeding among African Americans (Kulka et al., 2011). Kulka et al. (2011) research is different from aforementioned focus group studies in that their research included fathers and grandmothers of the participants who were planning to breastfeed and who were breastfeeding. The aim for this inclusion was to obtain information from individuals who may influence women's breastfeeding intent and who affect the quality of support for the mothers.

Kulka et al. focus group was audiotaped and consisted of 41 individuals' participants. There was a total of eight different focus groups one of the findings from the focus group was similar to findings from Spencer's (2014) group and that mothers reported unmet needs from healthcare providers and need more information from their healthcare providers on how to address problems with breastfeeding (Kulka et al., 2011). Another highlight in their results was that participants felt there was differential treatment from healthcare providers when it came to encouraging and providing information on breastfeeding (Kulka et al., 2011). In this respect, participants expressed that they perceived the information they received from healthcare providers was "unrealistic" and needed more detail on how to breastfeed and how to handle issues related to breastfeeding (Kulka et al., 2011). Spencer's work in 2014 had similar findings with reports that healthcare providers were not promoting breastfeeding as a health behavior or health benefit. A total of 68% of Kulka et al. (2011) respondents reported lack of access

to breastfeeding information to promote and support breastfeeding. Regarding workplace issues, half of the respondents thought workplace issues made it difficult to continue breastfeeding because African-American women are more likely to work in service sector employment environment (Kulka et al., 2011). A total of 64% of respondents disagreed or strongly disagree with the statement "Breastfeeding is easy" (Kulka et al., 2011). Although fathers were included in the study, few results were presented for this group. Grandmothers offered comments around perceived barriers to breastfeeding that included; lifestyle (smoking, alcohol use) and young women free to leave their babies in the care of others. Grandmothers also thought the availability of free formula from WIC did not promote breastfeeding (Kulka et al., 2011). An focus group study investigation by Avery and Magnus (2011), aimed to better understand how pregnant women and their male partners viewed infant feeding and support for breastfeeding (Avery & Magnus, 2011). Male partners in this study expressed empathy for their partners' pregnancies and looked for their partner for guidance on infant feeding decisions (Avery & Magnus, 2011). Kulka's findings and Avery's findings demonstrate the role of father's support will guide the mother decision to breastfeed. Avery's specific findings from fathers indicated that fathers disapprove of breastfeeding in public and fathers had difficulty conceptualizing the father's role when mothers are breastfeeding (Avery, 2011).

Breastfeeding Intention

Recent research studies on breastfeeding have measured the impact of set interventions on intent to breastfeed when mothers are discharged from the hospital post-delivery and initiation when mothers have delivered. The gap remains on measuring

intent to breastfeed during prenatal stages of pregnancy. For the purposes of this research, "intent" pertains to preterm exposure to breastfeeding. The current and past literature focuses on intention to breastfeed during post-partum (within hours of when the baby is delivered in the hospital) and the duration of breastfeeding when the mother has been discharged from the hospital. In this case, where this is little research on specific measurement of "intent" prior to delivery to breastfeeding. Therefore, emphasis was placed on identifying the need to investigate further pre-term intention defined as during pregnancy gestational age or prior to admission to the hospital for delivery. Examining pre-term intentions measures the strength of intention and gives a better sense of a stronger self-efficacy towards performing the health behavior, thereby the susceptibility to breastfeeding in more likely.

Focus group investigations conducted by Furman, Banks, and North, (2013) concentrated on African-American mothers and barriers to initiating breastfeeding. Their findings help to identify barriers to initiation and duration on breastfeeding in the inner-city among high-risk African-American mothers who had previous cases of domestic violence or history of an infant who died before the age of 1 year (Furman et al., 2013). Overall there were three focus groups with a total of 20 high-risk inner-city mothers. There were mothers that was either expecting or who had their babies. Furman's group expressed certain duration barriers such as pain, the fear of not eating healthy themselves, and questions about having a good enough latch to breastfeed (Furman et al., 2013). This research also used self-perception questions for the focus group that looks at the internal thought processes that influence a woman's choice to breastfeed (Furman et al., 2013).

Focus group interview questions addressed interest in breastfeeding, beliefs in the value of breastfeeding and a sense of being capable of breastfeeding (Furman et al., 2013). A large component of this section of the interview related to the beliefs and attitudes about oneself. The questions were addressed during the large group discussion. Specifically, this question examined self-efficacy responses and qualitative measures on self-efficacy. The next section of their research questions pertained to intention to breastfeed. They describe *intention* as decision to *initiate* breastfeeding and planned duration. Furman et al. (2013) study is one of the few studies that apply a qualitative approach to look into *intentions* to breastfeed. Their findings identified new themes such as self-esteem and self-efficacy. Participants reported in the taped comments, feelings positive about bonding with the baby when breastfeeding and feeling confident to perform breastfeeding believing that it was the best thing to do (Furman et al., 2013).

Robinson and VandeVusse (2011) used a mixed method approach to investigate prenatal self-efficacy and infant feeding choices among African American women (Robinson & VandeVusse, 2011). This perspective is helpful in understanding what may ultimately drive prenatal decisions to choose formula. Their approach was used to determine differences between intended breastfeeding and formula feeders. Interviews were conducted, and the Prenatal Breastfeeding Self-efficacy Scale was administered. Bandura's self-efficacy approach was applied to their research (Robinson & VandeVusse 2011). Robinson and VandeVusse's (2011) findings were categorized based on Bandura's self-efficacy constructs (i.e., master the skill of breastfeeding, confidence to perform behavior and vicarious experiences). Performance accomplishment findings

from mothers interviewed included having confidence in mastering the skill (breastfeeding) based on past successful experience. Mothers who did not have a successful past experience chose to formula feed (Robinson & VandeVusse, 2011). Performance accomplishments finding align with Bandura's self-efficacy construct which is dependent on prior experience as one of the key builders of self-efficacy. If the past experience is not positive, that will significantly influence any future behaviors. Other interview findings were around vicarious experiences (which are also a part of Bandura's theory of self-efficacy) where mothers expressed seeing other mother's breastfeed and other breastfeeding role models had a positive impact on intention to breastfeed (Robinson & VandeVusse, 2011). Verbal persuasions had an influence on both formula feeding decisions and breastfeeding decisions. Family members along with healthcare providers offered positive counsel on benefits of breastfeeding which helped some mothers, in this case, intend to breastfeed. Physiological reactions and social embarrassment were two of the themes that emerged from the narrative interviews. Participants in this respect expressed issues around purchasing a certain kind of bra and pain associated with nursing (Robinson & VandeVusse, 2011). Robinson's study encompasses both quantitative intent and qualitative intent which is a unique approach used as compared to other intent and initiation studies. Robinson used the Prenatal Breastfeeding Self-efficacy Scale to measure differences between intended breast-feeders and formula feeders. As a result, both groups measured confidence in their ability to breastfeed. Women planning to nurse (M=82.59, SD= 12.53) showed significantly higher confidence scores than anticipated formula users (M=70, SD= 15.45) p=0.001 (2-tailed)

(Robinson & VandeVusse, 2011). Robinson and VandeVusse (2011) research is closer to this proposed study as it offers a comprehensive look at prenatal intent to breastfeed and potentially influential factors.

Hundalani, Irigoyen, Braitman, Matam, and Mandakovic-Falconi (2013) examined breastfeeding intention before delivery and breastfeeding initiation at discharge. This study is the first to examine intention to breastfeed in terms of measuring breastfeeding at various maternal stages and outcomes specifically at discharge. Their study looked to assess the degree to which a woman's intention to breastfeed before she delivered resulted in an actual initiation of breastfeeding when she left the hospital (Hundalani et al., 2013). Intention to breastfeed was measured at discharge by using a sign test on paired observations (Hundalani et al., 2013). Their results were of the 60% of women who intended to breastfeed, 54% actually initiated breastfeeding, and a reported50% were breastfeeding at discharge ($p<0.0001$ significance) (Hundalani et al., 2013). Among those mothers who intended to breastfeed 75% were breastfeeding at discharge. Another variable examined in this study was to look at predictors of breastfeeding in a minority inner-city population. Previous studies have shown a woman's intention is the strongest predictor of initiation breast-feeding (Hundalani et al., 2013). Intention to breastfeed and how it may differ from actual practice is particularly pertinent to exclusive breastfeeding where intention and outcome are most divided, and the primary goal is to help women with the intention to successfully breastfeed (Hundalani et al., 2013). In this regard, the higher the intention propensity, the increased chance a mothers will perform the health behavior and perform the behavior for the recommended

amount of time. Although Hundalani research was the first to measure intention and initiation during the immediate postpartum period among inner-city mothers, Stube and Bonuck (2011) examined the association between intentions to exclusively breastfeed and knowledge of the benefits to the baby, information on feeding and comfort with breastfeeding in social settings among mothers who are enrolled in the WIC program (Stuebe & Bonuck, 2011). Using questions adopted from the Infant Feeding Practice Study (IFPS) they measured breastfeeding intentions. IFPS was a national longitudinal study of infant feeding where mothers reported how they plan to feed their infants in the first week of life. Stuebe and Bonuck study used IFPS II data to compare results with participants who were lower income, ethnically diverse women in two randomized controlled trials of breastfeeding support (Stuebe & Bonuck, 2011). Mothers who intended any breast-feeding were asked how old they thought their baby would be when he or she was first fed formula or baby food (Stuebe & Bonuck, 2011). The objective of this study was to measure the association between maternal opinions about breastfeeding and exclusive breastfeeding intentions. The participants consisted of 59.9% Hispanic and 31.6% African American and 46.3% were enrolled in WIC. These participants were compared with a multi-ethnic, national sample of low-income pregnant women (Stuebe & Bonuck, 2011). Stuebe and Bonuck researched a total of 883 participants of which almost half or 46% were enrolled in WIC. Data analysis included a chi-squared test to compare categorical variables and a *t*-test to compare continuous variables. Multinomial logistic regression was used to quantify the association between maternal opinions about health effects of infant feeding and prenatal intention. Logistical regression was used to measure

the association between comfort in breastfeeding in social setting and intention to exclusively breastfeed, compared with intention to mix feed (Stuebe & Bonuck, 2011). They found that approximately 46% of participants intended exclusive breast-feeding, approximately 46% intended mix feeding and 8% intended to formula feed. Compared with the IFPS study group a significantly greater proportion of IFPS participants intended to exclusively breast-feed (59%) and exclusively formula feed at 15%, while significantly fewer intended to mix feed (25.7%, $p<0.001$ for all comparisons) (Stuebe & Bonuck, 2011). Maternal knowledge of breast-feeding health effects was significantly associated with prenatal feeding intentions ($p=<0.0001$). Women who disagree with the statement that formula equivalents with breastmilk were 3.44 times more likely to intend to breast-feed (95% Confidence Interval 1.13-4.02) exclusively. Overall, women disagreed that "formula is as good as breastmilk" both in the IFPS II national study (59% disagreed) and Stuebe and Bonuck study (65%). Maternal agreement with statements about health effects also predicted exclusive breast-feeding ($p< 0.0001$). Mothers who agreed that baby should be fed only breastmilk for the first six months were 3.16 times as likely to intend to exclusively breast-feed versus mixed feeding (95% confidence interval 2.28-4.37) (Stuebe & Bonuck, 2011). Stuebe and Bonuck research specifically examined how comfortable women are in social settings and their likelihood to breastfeed and explored mothers' maternal knowledge about health effects of breastfeeding. As previously mentioned, there is not a hearty body of research that focuses on true maternal and prenatal intention to breastfeed; their finding offer sufficient findings to support future program or policy planning implementation. Even though their research offers strong

results on prenatal intention to breastfeed and the association of maternal knowledge, and comfort with breastfeeding, there is still some room to research social influences, health care access and various methods to increase intention. Therefore, the need to explore prenatal intention to breastfeed among low-income African American women in respects to impact on intent via a pre and post community outreach breastfeeding program evaluation and obtain local perceptions and beliefs on breastfeeding within the Ohio, Hamilton County area.

Further exploring initiation and intention among low-income WIC eligible and WIC participants is the work performed by Alexander, O'Riordan, and Furman (2010). Their research explored breastfeeding intentions among pregnant inner-city teens and adults. Alexander et al. (2010) conducted quantitative interviews with pregnant women of a women's health clinic in Cleveland, Ohio. The participants received a questionnaire during their prenatal visits. The initial objective was to determine variance among low-income teenager breastfeeding *intent* and low-income adult breastfeeding intent. The conclusion of their findings was that there was not any statistically significant difference in pregnant teens intent to breastfeed and adults intention to breastfeed ($p=0.37$). Their research also discovered that there was not a significant difference in intention to breastfeed between teens and adults that sought out or received advice from grandmothers (57%) compared to the mothers who talked to their mother about breastfeeding (49%) ($p=0.72$) (Alexander et al., 2010).

Another quantitative study that looked at WIC mothers and *intention* to breastfeed for six months was conducted by Bai and Wunderlich (2011). A multiple regression

analyses was conducted using the forward method for racial groups to determine the relative importance of attitude, subjective norm, and perceived behavioral control in predicting intention (Bai & Wunderlich, 2011). Their study recruited WIC moms during their WIC initial certification visit. A questionnaire was administered to mothers that measured intention by two items on a scale to rate the likelihood of exclusive breastfeeding for six months (Bai & Wunderlich, 2011). A multiple regression analysis was used to determine the relative importance of attitude, subjective norm, and PBC in predicting the intention. In their findings, African American women subjective norm was a stronger predictor of intention than attitude. They used Theory of Planned Behavior (TPB) to define subjective norm in this study. Subjective norm is determined by cultural beliefs of what valued social referents think about performing the behavior and is weighted by the general motivation to comply with those referents (Bai & Wunderlich, 2011). In other words, for the African American community grandmothers and fathers are considered highly valued in terms of their position on a health behavior. As a result, mothers will favor the opinion of those persons. Other findings from Bai's study were the overall constructs of TPB were attitude and perceived behavioral control. Findings suggest for African American mothers that support from family and friends were important. Also providing a positive public breastfeeding environment would help increase positive perceptions of breastfeeding (Bai & Wunderlich, 2011). Bai and Wunderlich, (2011) research offered an interesting perspective in terms of intention and breastfeeding and African American mothers as it relates to TPB theory and subjective norms. Intention scores were similar among racial groups. In their research, a significant

difference (p=.0001) was found in intention based on the social cognitive theory elements (attitude, subjective norm and perceived behavioral control). Predictive intentions to continue to exclusively breastfeed for six months that resulted in high significance (p=.001) was found with attitude for white mothers, subjective norm for African American mothers, and perceived behavioral control for Latina mothers (Bai & Wunderlich, 2011). Their findings provided highlights on the racial differences in terms of predictive influences. African American women most predictive influences on intention are social norms. Social norms were measured in their study using a scale to indicate perception of whether or not 'most people who are important to me' and 'most mothers like me' agree to breastfeed for 6 months ($p<0.001$) (Bai & Wunderlich, 2011). Opinions of social referents such as the baby's father, other family members and friends, and people in public places were valued by African American mothers and influenced their subjective norm favorably to perform the target behavior (Bai & Wunderlich, 2011). Latina mothers perceived behavioral control and for White mothers it was attitudes. For Latinas, the control belief relating to 'pumping breast milk' was significantly correlated with perceived behavioral control ($p<0.001$). Thereby the differences presented here are predictors of key drivers to intention to breastfeed per ethnicity.

A fairly different quantitative research approach conducted by Tenfelde, Finnegan, and Hill (2011) involved a secondary data analysis of clinical and administrative data of women enrolled in WIC in the Chicago area. Tenfelde et al. secondary data research proved different than Guest et al. finding, in that first trimester prenatal care does promote intent to breastfeed. Their research looked at documentation

on first trimester information relative to entry into the WIC program and the effects of exposure of the WIC programs interventions on intent (Tenfelde et al., 2011). They found that 64% of women were more likely to breastfeed when they were exposed to information, training and breastfeeding promotion. A logistical regression model of secondary data analysis was performed from existing clinical records and administrative data from women who received WIC from 1999 to 2003. Their report indicates women who entered prenatal care during the first trimester were twice as likely to exclusively breastfeed in the hospital as women who entered prenatal care in the second or third trimester (OR=3.85, CI, 1.70, 8.77) (Tenfelde et al., 2011). Tenfelde et al. study encapsulated some specific predictors for prenatal feeding intentions such as early prenatal classes on breastfeeding, and normal weight (not obese) (OR = .50, 95% CI, 0.25, 0.97). Their unique study looked at obesity during pregnancy and prenatally and the impact weight has intention to exclusively breastfeed. Overweight women in their study were one half as likely to breastfeed in the hospital compared to normal weight women exclusively. They did not offer much in the way of suggestions around why overweight women are not as likely to breastfeed post-partum other than possible physical reasons. This opens the door for future research and exploring opportunities to look at obese women and increasing breastfeeding rates.

Breastfeeding Beliefs, Perceptions and Attitudes

The overall arching discovery in the qualitative research on African American women and perceptions, beliefs and attitudes towards breastfeeding stem from a myriad of experiences. These experiences range from a gap in the healthcare prenatal system,

lack of social support, lack of health education and training on breastfeeding and the absence of policy and funding support to address this public health issue (Cottrell et al., 2013; Lutenbacher et al., 2016; Stuebe et al.,2011).

A qualitative study recently conducted by Obeng, Emetu, and Curtis (2015) focused on low income African American women and their breastfeeding perceptions. Their focus group results were collected and grouped into themes: (a) health benefits, (b) lack of information, (c) negative perceptions of breastfeeding by others to include family, friends, employers, and the public, and (d) organizational support and unforeseen circumstances; for instance dietary dairy restrictions (Obeng et al., 2015). Obeng et al. findings echo the findings of Lewallen and Street (2010), Cottrell and Detman (2013), Furman et al. (2013), Kulka et al. (2011), and Spencer et al. (2014) which were perceived lack of support from health professionals, lack of support from families members, lack of knowledge on the benefits of breastfeeding to both the mother and the baby and having to return to work early. Avery and Magnus (2011) qualitative research had a different but small sample size approach as their focus group invited mothers as well as fathers to be interviewed. The total of 18 focus groups in 3 major US cities consisted of 121 subjects with half of the participants being African American fathers. Their research obtained data on the perception, beliefs, and attitudes on breastfeeding. This was the largest qualitative study that invited both mothers and their partners to participate in a study (Avery & Magnus, 2011). In comparison, Kulka et al. qualitative research included fathers as a part of the study, however, the fathers represented in Kulka et al. research project were fathers in general and not fathers of the pregnant mothers enrolled in the study. The fathers that

participated in this study were fathers who agreed to participate in the study and who were open to speak on their breastfeeding experience with their significant other or spouse. Also, a notable difference between Kulka et al. study and Avery and Magnus study are Avery and Magnus study invited both Caucasian and African American fathers. Avery and Magnus study does not report differences by ethnic groups among fathers. Their report does highlight a difference from previous literature on breastfeeding in a public place. Avery and Magnus (2011) found that a larger percentage of African American men felt breastfeeding in public was embarrassing (Avery & Magnus, 2011). Avery and Magnus (2011) study used the Atlas program which identifies emergent themes and organizes data within themes. One of the critical themes that emerged from the focus group was the father's perceived role during infant breastfeeding. Fathers reported bonding more with the infant during this time rather than being a support to the mother (Avery & Magnus, 2011). These findings were significant in Avery and Magnus study and did not further explain how their perceptions impacted the mother's decision to breastfeed (Avery & Magnus, 2011). The most recent study of U.S. fathers, Pollock, Bustamante-Forest, and Giarratano (2002) found that 41% of African American men and 27% of Whites felt that breastfeeding in public was "embarrassing". These research cases are unique and critical additions to evidence of research because reported literature findings in this literature review directly relate to fathers being a key component to African American mother's decisions to breastfeed (Pollock et al., 2002). Studies by Freed, Fraley, and Schanler (1992) reported more than 70% of U.S. fathers felt public breastfeeding was unacceptable.

Fischer and Olson's (2014) research examined race and socioeconomic status, perceived barriers and attitudes among participants of the WIC program. Their study included interviews with both African American and Caucasian women. There were reported differences among White women responses and African American women responses. In particular, White women didn't seem to be as influenced by family members, friends or grandmothers on their decision to breastfeed as African American did. Both races who were WIC participants did share a concern of returning to work and continuing to breastfeed. Overall both groups of women that participated in the focus group reported similar concerns of not being well informed on breastfeeding and its benefits, they were influenced by family and fathers on their decision to breastfeed or not, they had doubt on being able to work and breastfeed and they had low confidence on their ability to breastfeed (Fischer & Olson, 2014).

A unique research study conducted by Gross et al. (2015) obtained WIC peer counselors perceptions of breastfeeding in the African American community. Gross et al. conducted focus group discussions among peer counselors from the WIC program (Gross et al., 2015). Peer counselors (PCs) to WIC participants support breastfeeding mothers within the community, and they have also breastfed their children. It was useful to obtain the perspective from peer counselors and how their influence on mothers within the WIC program can help shape their decision breastfeed (Gross et al., 2015). Gross et al. (2015) conducted three focus groups with 23 WIC PCs. The responses were recorded and grouped into common themes. The findings offer some of the same results as other reported literature such as the women not having enough knowledge on breastfeeding,

body image and viewing breast as sexual objects, family support or lack thereof, healthcare system not initiating conversations around breastfeeding and the workplace issue. In terms of the workplace issue, low-income African American women return to work sooner and can hold positions in fast food or retail and are not comfortable asking their boss for breastfeeding time (Gross et al., 2015).

Posttraumatic Slavery Perceptions on Breastfeeding

During the era of slavery, negro women slaves were required to feed the slave master's baby (known as "mammy wet nurses" before they fed their own (Collins, 2002). During the slavery era, enslaved African American women were required to nurse their owner's infants as yet another form of work. This work was particular only to slave women who themselves had recently given birth and who were lactating. White women used wet nursing to manipulate enslaved African American women as a means of control and superiorism (West & Knight, 2017). West and Knight (2017) reported African women's bodies were exploited and led slave owners to believe slaves bodies were made for easy breastfeeding and should be sexually exploited thereby justifying the use of them as wet nurses and to perform hard manual labor. Wet nurses were exploited and treated as a subclass of society during the Antebellum era. Authors West and Knight (2017) posit that contemporary breastfeeding is unpopular among African Americans women due to its association with wet nursing during slavery. This known history adds to a perceived barrier to breastfeeding among African American women. Under this perception, African American women view this act as a behavior that was mandated by the oppressor and not as a health behavior act of improving the health of their infant and the providing long-

term health for themselves (West & Knight, 2017). The requirement to wet nurse has carried a negative perception of breastfeeding among African American women. Gross et al. (2015) mentioned this different perspective in her research which introduced the theory of African American women beliefs around the history of slavery and being made to breastfeed the slave owner's children and how this can decrease the interest of breastfeeding among African American women. Both Gross et al. (2015) and Collins (2002) identify the history of slavery as a current barrier to breastfeeding among African American women (Gross et al., 2015). The results reported by Spencer et al. (2014) also emphasized the relevant importance of African American women and their WIC peer counselors perceptive ideas on breastfeeding and their bodies as sexual objects, and how this is viewed as culturally abnormal, or breasts are seen as sexual object Spencer et al., findings reported participants concepts of being stereotyped (young, unintelligent; "showing skin in public, particularly in the African American community, as being "taboo" (Spencer, 2014). Spencer's participants also addressed the images of the "sexual breast vs. the nurturing breast". During a focus group discussion, a participant shared information on negative images of African American women's bodies as portrayed by the media: "The Black woman is so voluptuous. We have the hips, we have the butt, you have the breasts, so society has made us so cognizant of our bodies and being of a sexual nature only." Both Gross (2015) and Fischer and Olson (2014) studies capture perceptions from mothers who participate in the WIC program and highlight distinct views from this sub population.

Summary

The literature suggests intention to breastfeed can be impacted by how informed a mother is on breastfeeding benefits, how comfortable she feels while breastfeeding, and what social support she has in terms of support from the baby's grandmother or the child's father. The major themes in the above literature center on reoccurring findings from both qualitative and quantitative research projects that indicate lack of support from health care providers, lack of prenatal education and knowledge around the importance of breastfeeding, and the perceptions and beliefs of fathers and grandmothers within the African American community. Other themes that emerged from the literature were African American women having to return to work sooner, and therefore breastfeeding duration is a great deal shorter than other ethnic groups. It is well documented the overall breastfeeding disparities among the African American community exist as it relates to promotion, education and available resources. A fair amount of literature examines breastfeeding initiation among the African American community at different stages post-partum. Breastfeeding initiation has been explored when mothers have delivered and when mothers have returned home from delivery.

Very few current research studies (within the last six years 2010 – 2016) investigate low income or African American women intent to breastfeeding by either qualitative or quantitative methods. The importance of understanding intentions prior to delivery is that it allows for development of interventions to increase intentions to breastfeed by designing programs, policies, and promotions that will ultimately increase initiation and duration rates. Research that explores low income African American

women and *intent* to breastfeed are lacking. This study fills a gap in literature by adding to the literature both qualitative and quantitative information. Qualitative information will offer voices from the community on perceptions, knowledge, and beliefs on breastfeeding.

Unlike the copious amount of data collected and research conducted on breastfeeding initiation rates among low income and minority populations, there is over a ten year and longer gap on factors that impact intention rates among low-income African American mothers. There is a further gap of knowledge pertaining to what specifically increases intention to breastfeeding among low-income African American women. Understanding intention to breastfeed will help in designing promotion and programs that increase rates of breastfeeding initiation. Intention ultimately leads to initiation which in theory can lead to extended breastfeeding. Intention to breastfeed has been understudied in relation to mothers within the African American community.

This research proposal fills the gap of antiquated research among African American women and factors that impact intent to breastfeed. This research also gathered information from expectant mothers on their perceptions, beliefs, and ideas on breastfeeding.

Chapter 3: Research Method

Introduction

Breastfeeding among low income African American women is 20% lower than any other ethnic group according to CDC breastfeeding reports (CDC, 2014). Recent studies focused on initiation rates among low income African American women postpartum (Pattison et al., 2019). There is limited research that has addressed actual intention to breastfeed and understanding breastfeeding attitudes, beliefs, and perceived barriers in an exclusive sample of African American women who are eligible for the Head Start program. Intention refers to an individual's choice to engage in a certain behavior in the future (Ajzen, 1991). Intention is also a function of the SCT framework and is influenced by human attitudes, behavior, and social norms (Ajzen, 1991). It is important to include that intention has been shown to be directly correlated with behavior (Bandura, 1977); therefore, understanding intentions and perceptions among a at risk population is a necessary step in improving this issue from a public health perspective.

Past research where African American women were sampled has indicated that mothers who are exposed to prenatal interventions such as support groups have strong prenatal intentions to breastfeed will more likely breastfeed (Mickens, Modeste, Montgomery, & Taylor, 2009). Also, past research indicated subjective norms (people who are deemed important and other mothers who are alike) are a stronger predictor of intention among African American mothers (Bai et al., 2011). Intention to breastfeed increased among African American women who received a counseling session on the benefits of breastfeeding for both the mother and the baby (Ross-Cowdery et al., 2017).

Similar to Bai et al.'s research, Hill, Arnett and Mauck (2008) found subjective norms and referent others (husband, siblings, friends) can relate positively to intent to breastfeed among African American women . A study completed by Jefferson (2014) issued self-reported questionnaires to African American college women to explore their intentions to breastfeed. The study findings showed significant predictors of breastfeeding intentions are associated with age, knowing someone who has breastfed, education level, being breastfeed as an infant, and overall attitude towards breastfeeding (Jefferson, 2014). Even though past research offers some research insight on what drives intentions to breastfeed and explores beliefs, attitudes, and perceived barriers, there remains a gap in recent research pertaining to lower income African American women particularly in the Midwest area.

African American women's beliefs and perceived barriers on breastfeeding as documented in recent studies suggest that African American believe breastfeeding is the best source of infant nutrition for early feeding and their perceptions on breastfeeding is influenced by cultural and social environments (McCarter-Spaulding, 2007). Other studies share the same findings in terms of family, knowing other mothers who have breastfeed, and having more difficulty when returning to work influence decisions to breastfeed (Fischer & Olson, 2014; Hurley et al., 2008). Perceived barriers to breastfeeding among African American women include returning to work soon, lack of support from healthcare providers, and lack of support from the child's father and/or grandmother (Hurley et al, 2008; Kulka et al., 2011; Obeng et al., 2015; Spencer et al., 2014).

The purpose of this study was to explore the breastfeeding intentions among African American Head Start eligible pregnant women and to understand beliefs, knowledge, and perceptions of breastfeeding experiences among this population of expectant mothers. This study fills a gap in the literature by focusing on voices from African American women who are Head Start eligible and their breastfeeding intention and experiences.

In this chapter I will discuss the study design, sample, data collection, my role as the researcher in data collection, ethical considerations for the research, research questions, study population, data collection instrument, data analysis, and human subject protections.

Research Design and Rationale

The specific aim of this project was to obtain qualitative data from African American mothers who are eligible for the Head Start program regarding their infant feeding intentions, along with understanding their beliefs, perceived barriers and perceptions of breastfeeding.

In this study, I answered the following research questions:

1. What are the prenatal breastfeeding intentions among African American women whose children are Head Start eligible?
2. What are the beliefs, attitudes, and perceived barriers towards breastfeeding among pregnant African American women whose children are Head Start eligible?

A basic qualitative inquiry approach was conducted in this study. Basic qualitative research is a qualitative method that investigators use to explore human experiences from the point in which they have lived (Morse, Field, & Field, 1995). Basic qualitative research approach seeks to understand what an experience means to a specific group of people (Caelli & Mill, 2003). Through basic qualitative inquiry participants share how they make sense out of personal and the social world (Caelli & Mill, 2003). It is the researcher's responsibility to collect the essence of those shared experiences and provide a description of those experiences in a way that doesn't taint or lessen the experience but allows the rest of the world to have a better understanding of the phenomenon (Creswell & Creswell, 2013).

When conducting a basic qualitative inquiry, the number of participants is usually small but large enough to obtain valuable data (Thompson & Walker, 1998). Data is gathered from individuals who have experienced the phenomenon (Creswell & Creswell, 2013). The researcher role is to collect data that captures the verbal experience and artistic expression of the phenomenon (Baker et al., 1992). Data collections methods can range from in-depth interviews face to face, over the phone, or via focus group discussions. Other forms of data include observations, journals, poetry, music, and some art (Creswell & Creswell, 2013).

A basic qualitative approach was used in this study to capture the essence of experiences from focus group participants. My choice to conduct a basic qualitative research study was so that I would have the opportunity to have a close interaction with this specific group of African American pregnant women. Basic qualitative research is

the method of choice when researchers want to gain a better perspective of what an experience means to a particular group of people (Thompson & Walker, 1998), in this respect, I had the opportunity to have a direct presentation of experiences from African American pregnant women who are Head Start eligible.

Role of the Researcher

Part of my role as the researcher was to uncover and provide rich description of experiences through the lens of the specific subpopulation. As the researcher in qualitative research, I served as the instrument bringing my own perspectives to the selection and meaning of the data It's imperative that researchers are sensitive and know to be transparent to ourselves, to allow whatever is before us to develop as it is and approach the research with new eyes and with an open mind (Moustakas, 1994). As the instrument in this research study, I conducted a focus group discussion with open ended questions aimed at intentions to breastfeed and perceptions, beliefs, experiences, and perceived barriers to breastfeeding. As the researcher, I was responsible for ensuring there was full participation from each participant and that each participant felt validated, safe, and respected when responding. As the researcher, I also needed to feel comfortable interviewing participants. I needed to be observant andto control and guide the group discussion and maintained my own personal views (see Creswell & Creswell, 2013). As the principal investigator of this research project, my role was to have full participation in designing, planning, data collection and conducting the research project.

Methodology

Participant Sampling, Selection, and Recruitment

Participant sampling. Basic qualitative research studies are designed to describe the essence of a given phenomenon and informants are selective because they have lived the experience which makes sampling purposive (Baker, 1992). Purposeful sampling) is used as a subjective judgement to select participants that appear to be representative of the population (Creswell, 2009, p. 178). The selection was based on African American pregnant women who are Head Start eligible within the Hamilton County, Ohio area. This population was identified because they possessed the characteristics (i.e., pregnant, African American, lived in Hamilton County, are potentially Head Start eligible) and have lived in circumstances related to the phenomenon being addressed. Pregnant African American women who are planning for the birth of their child and have had various levels of exposure to infant feeding methods could provide good information on their intentions to breastfeed or formula feed and their beliefs, perceptions, attitudes, and perceived barriers on breastfeeding. The advantage to purposive sampling in this study is that is cost effective and time effective (Purposeful sampling, 2013, p. 33-44). One disadvantage of this sampling approach is participants are selected with the expectation that they will provide unique and rich information of value to the study; therefore, the researcher must rely on data saturation and not statistical sample power analysis (Purposeful sampling, 2013, p.33-34)..

Participant selection. The target population for this study was African American pregnant women who are Head Start eligible within the Hamilton County,

Ohio area. This location is geographically close to me and I also have a professional relationship with the organization.

For participants to qualify for the purposive sample inclusion they had to meet the six qualifying criteria questions. These questions were asked verbally when the participant calls a published number to inquire on the research project. There were six qualifying questions: (a) Are you currently eligible for the Head Start program? (b) What is your ethnicity? (c) Are you currently expecting? (d) What is your current residential zip code (e) Are you currently breastfeeding ? and (f) are you over the age of 18 ? To qualify for the study, respondents had to answer yes to Question 1; African American to Question 2; yes to Question 3, a zip code within the Hamilton County residential district for Question 4 (see Appendix A); no to Question 5 and yes for Question 6, proving they were 18 years of age or older. When the respondent qualified for the focus group, they were given the information on the time, place and date of the focus group. Basic qualitative studies are designed to capture the beliefs, culture and experiences from a select subculture under a purposive sampling structure which is generally small (Baker, 1992). The number of participants for the focus group discussion was 13 participants.

Exploring a phenomenon with a group of individuals who have lived the phenomenon involves selecting a heterogeneous group that should vary in size from three to 15 (Creswell, 2013). Focus group discussions are effective in providing context details into participants, attitudes, beliefs, and opinions (Kitzinger,1995). The ideal group size is between four and eight people (Kitzinger, 1995). This sample size mirrors McCarter-Spaulding's (2007) study (sample size n= 8) of African American women recruited for a

focus group discussion to talk about their breastfeeding experiences (. Similarly, Furman et al.'s (2013) focus group study (sample size n = 10) that investigated barriers to breastfeeding as expressed by African American women in the inner city.

Study setting. Focus groups were held at the Cincinnati Hamilton County Community Action Agency -Head Start (CHCCAA). CHCCAA services approximately 1,900 families enrolled in Head Start and in early Head Start (CHCCA Annual Report, 2016). The organization is a social service and Head Start organization that has been a resource in the community for over 52 years (CHCCAA Annual Report, 2016). The organization has 140,000 square feet of physical space per Mr. Fletcher (personal communication, December 9, 2016). The site houses 22 Head Start classrooms, 10 of which are infant and toddler classrooms per Mr. Fletcher (personal communication, December 9, 2016). The building space has several meeting and training space to hold face to face confidential individual interviews as well as board room space to conduct focus group discussions. The second site is located approximately nine miles south of the parent site, houses two infant rooms and three toddler Head Start classrooms (Mr. Fletcher, personal communication December 9, 2016). This site is primarily dedicated to Head Start infant and child care services.. The setting was convenient for the pregnant mothers who are geographically located near the organization and who are familiar with the organization's resources. CHCCAA serves approximately 1,900 Head Start and early Head Start families for 9 months within a calendar year (CHCCAA Annual Report, 2016). The Head Start program serves low income families who meet the federal poverty guidelines to qualify (CHCCAA Annual Report, 2016). Over 83% of the mothers are

single parents and head of household, 86% African American, and 97% of the families they serve have no income or one source of income (CHCCAA Annual Report, 2016). The mothers who are eligible for the Head Start program are also eligible to receive WIC benefits. In addition to the head start program and early head start program, CHCCAA has over nine social service programs. From apprenticeship construction programs, summer youth employment programs, rental or mortgage assistance, water bill assistance, transportation assistance, and home energy assistance to name a few. The Head Start Agency – Cincinnati Hamilton County Community Action Agency has agreed to offer in-kind facility space for this research project.

Participant recruitment. A color printed flier was posted throughout each of the two agency sites (Appendix B). The fliers were made available at the front desk, at the resource table, available for pick up with the Head Start classrooms and at both of the Head Start sites. The fliers have culturally appropriate picture of pregnant women in a group with information on what the study is about. The flier provided information on the study and provided more information on how to participate. The flier invited African American pregnant women to attend a group sharing discussion session on infant feeding. Mothers who participated in Head Start had the option to call or email if they were interested in participating. They also had the option to share the flier with other pregnant women who meet the study inclusion criteria.

There was an email address and contact number listed on the flier for registration (Appendix B). The Head Start Agency – Cincinnati Hamilton County Community Action

Agency - CHCCAA offered in-kind meeting space to hold discussion groups and agreed to help distribute fliers to the 22 head start classrooms at each of the locations.

Instrument Development

I conducted two focus groups with a total of 13 participants in the focus groups that explored infant feeding intentions and opinions beliefs, attitudes and perceived barriers towards breastfeeding. In addition to myself serving as an instrument to collect qualitative data, I used a set of open-ended research questions (Appendix C), an audio recorder to record responses from participants, and an interview protocol (Appendix D). The open-ended research questions were adapted from a combination of a published focus group research projects conducted by Dr. Julie Ware and an intention to breastfeeding project conducted by Dr. Laurie Nommsen-Rivers (Nommsen-Rivers, 2009; Ware, 2014). Both of these studies explored African American women and breastfeeding. Dr. Nommsen-Rivers in person interviews researched intentions to breastfeed among various ethnic groups, however African American women in this case proved to have the lowest intention rates of all the other reported ethnic groups (Nommsen-Rivers, 2009). The interview questions to be used from their published studies have been vetted and approved by qualitative research experts and peer review specialists within the content area.

Data Collection

Informed consent was collected face to face from each of the mothers who are recruited to participate. The consent forms were read verbatim to each of the participants that qualified. The informed verbal consent also had information on why the data is being

collected and what will happen with the data that is collected. Once all participants were verified by initialing next to their registered last name only, I introduced the focus group session and provided background information on why their responses are important and shared information on how the recorded responses will be used and ensured confidentially associated with their responses. The focus group area was set up to ensure an inclusive conversation with all participants, and there were instructions and an explanation of the study. After the introduction was given and the interview protocol information was shared, I began with asking each of the 15 questions. I facilitated the group so that each respondent was encouraged to speak one at a time and to also respect all responses shared amongst the current group. Each participant's responses were recorded using an alphabet seating chart. The document used to record the responses was formatted from A – J respondent squares (Appendix E). This format organized specific respondent comments and helped with keeping comments specific for participants. Each discussion question had separated sheet of paper with respondent squares and each of the group's responses were recorded on each of the squares. Participants were encouraged to engage in open dialogue on each of the questions asked. I worked to make sure each respondent has some input on each of the questions, however, I made sure to respect any of the pregnant mothers' decision not to respond to any individual questions. I was responsible for collecting data using both an audio recorder and hand-written template diagram that matches the letter seating of each of the respondents. I set up the sitting arrangement for each participant to include a "table tent" that was labeled alphabetically. Once I had all the questions answered, I opened the group up for any further discussion.

At that point I thanked each participant for their time and provide them with my follow up contact information. Each focus group took place in a small conference room at CHCCAA and last up to 90 minutes.

Data Analysis Plan

Qualitative focus group data will be collected via handwritten notes and audio recording. The data was transcribed, and responses were replayed to be checked against the recorded responses on the template used for the focus group questions for the researcher's data analysis validity purposes. There was close attention made on all of the responses recorded to ensure all responses are included and to help mitigate inconsistencies in data that will be analyzed. Hand written data was compared to audio recorded responses to ensure responses closely mirror the responses that were audio recorded.

The recorded responses were transcribed into a word document for further data analysis and coding using NVivo 12 Plus qualitative software. NVivo 12 Plus is a computer software package produced by QSR International and has been noted to improve the quality of qualitative research. This software can reduce manual task and provides more time to discover tendencies, themes and derive to conclusions (Hilal & Alabri, 2013). A qualitative study using NVivo 9 to analyze focus group questions regarding breastfeeding was conducted by Fisher and Olsen (2014). As a result of their usage of NVivo, they were able to identify three major themes that aligned with their initial theory of planned behavior or (TPB). Spencer et al. (2014) also used NVivo computerized software to analyze interviews with African American women on their

breastfeeding experiences in context of their day to day lives. Their findings with using NVivo, allowed three main themes to emerge from the data; self- determination, empowerment, and spirituality and breastfeeding (Spencer et al., 2014).

For this proposal, participant's responses were transcribed from audio responses, and all handwritten responses were reviewed several times for comparison to audio responses for data validity. The handwritten responses were then typed and uploaded into NVivo 12 Plus for processing. The process involved when working with NVivo 12 Plus is to create nodes, begin analysis with concepts and categories, moving forward to emergent themes and narrating findings and points of view.

Trustworthiness

Trustworthiness is defined in research as confidence in data, interpretation, and methods used to ensure quality of the study (Pilot & Beck, 2014). Trustworthiness can be accomplished several ways in qualitative research; credibility, dependability, confirmability and transferability (Lincoln, 1985). In this study I accomplished trustworthiness by demonstrating authenticity and transferability. Authenticity can be demonstrated by the researcher's ability to show a range of different realities, authenticity emerges when it displays feeling tone of participants' lives as they are lived (Polit, 2014). Through the analysis of the focus group discussions, I provided rich descriptive context of their experiences and through vivid written respondent comments captured their feelings and beliefs on breastfeeding in order to demonstrate authenticity. Prolonged engagement is also a measure of authenticity, in this respect my investment of how much time I put into the collection of data, taking an involved interest to have an in-depth

understanding of the culture and the language or views of the sub population being studied added to the measure of authenticity in this project. Also, transferability was satisfied by providing comprehensive field notes from each of the focus group discussion in which, provided sufficient descriptive data that can be applied in other research settings (Polit, 2014).

Ethical Procedures

Understanding and respecting the ethical procedure in qualitative research is imperative to completing a trustworthy research project as well. Qualitative research in particular, focuses on complexities of "researching private lives and placing accounts in a public arena" (Birch, Miller, Mauthner & Jessop, 2002; Brinkmann & Kvale, 2005). Primary qualitative ethical issues concern when working with human subjects are: 1) informed consent and 2) privacy or confidentiality. Ethics in research also extends to how to ethically present collected data. This research proposal followed the Institutional Review Board (IRB) at Walden University application process to conduct the study due to human subject involvement.

Informed Consent.....

Following the approval from the IRB department at Walden University, informed consent was obtained from any voluntary African American pregnant mother who met the qualifying criteria prior to participating in the focus group discussion. Information was shared with each of the participants on the reason for the research, the procedure of the focus group, voluntary statement, compensation for time and travel, privacy, confidential statement, contact information and a place for signature and date.

Privacy and Confidentiality

This research proposal collected interview responses and reported those responses by labeling respondents alphabetically from A – J. Respondents did not have their actual names recorded anywhere throughout their responses. This protected their identity and ensured confidentiality when reporting results of data. Audio reordered responses were used to cross check for validity against hand written responses and final written reports will include composite stories or statements so that individuals cannot be identified.

Data Collection

Ethical research concerns are addressed during each of the planned phases of the study. I have successfully completed human subject research training and will be submitted to the Walden University Institutional Review board. The selected site for the research has been made aware of my research project and has submitted written approval for recruitment and data collection (Appendix E). Prior to conducting the focus groups, participants I fully disclosed the purpose of the research, what the data will be used for and how they can obtain the final reporting of the data collection. Participant confidentially was discussed during the beginning of recruitment, during informed consent phase and at the start of each focus group. Data collected from participants (both hand written notes and audio recorder) were kept confidential in a locked file drawer and scanned electronically under a password protected desk top for storage. Scanned copies of informed consent pages, and other University required documents will also be on file with the IRB department of Walden University for the allotted IRB research records time of three years. The final data summary will be shared with the study population as well as

CHCCAA organization as they are a key stake holder and hold interest in fostering any improvements necessary with this sub population.

Summary

In this chapter, I described the manner in which research questions were methodically addressed and how I analyzed the data results. I applied a phenomenology approach in examining intensions to breastfeed and exploring perceptions, beliefs and perceived barriers to breastfeed. Purposive sampling was selected which provides a subjective representation of the population to be studied. Participants were recruited by posted fliers throughout the collaborating organization and met the qualifying 6 question criteria in order to participate in the study. Two focus groups will be conducted at the CHCCAA for a total of 13 participants. The focus group sessions had 15 questions and last approximately 90 minutes. Data was collected using an audio recorder and by hand written notes. Data was analyzed using qualitative computerized software NVivo 12 Plus. Findings and reporting of the study will be shared with the collaborating agency and submitted for final approval to Walden University.

Chapter 4: Results

Introduction

The purpose of this qualitative research study was to gain a better understanding of breastfeeding intentions, beliefs, and perceived barriers on breastfeeding among African American pregnant mothers who were Head Start eligible. A focus was made on breastfeeding intentions prenatally, immediately postpartum, at 3 months, and at 6 months postpartum. For this study, data analysis was conducted using data collected from two focus groups with 13 African American pregnant mothers who lived in the identified zip codes, were 18 years of age and older, who were not currently breastfeeding and who are Head Start eligible. In this chapter, I restate the research questions and describe the relationship to the findings. This section also explains the setting, participant's demographics, the data collection process, data analysis, and evidence of trustworthiness. The final section of this chapter will contain the results of my findings.

Research Questions

The research questions were:

1. What are the prenatal breastfeeding intentions among African American women whose children are Head Start eligible?
2. What are the beliefs, attitudes, and perceived barriers, towards breastfeeding among pregnant African American women whose children are Head Start eligible?

Setting

The two focus groups took place at the CHCCAA Head Start. The facility is a social service agency that has served the community for over 50 years (CHCCAA Annual Report, 2016). The parent location contains 22 classroom settings along with office and meeting space. The site is primarily dedicated to Head Start and child care services. The facility is parent and pregnant mother friendly as it provides space conducive for child care, training, and meeting space. The focus groups were held in a meeting room where there were tables and chairs arranged in a U-shape to help promote full participation and support individual engagement. As outlined in Chapter 3, each of the participants sat next to a letter labeled table tent. The table tents were labeled from A – J. The letters were facing myself as well as the participant, so they would know when they were being referred to for a response to a question and if I needed to probe a question (Appendix E). After welcoming the participants and introducing myself, I explained the interview protocol (Appendix D) and informed consent procedure. The informed consent was distributed to each participant so that they could review and sign. I collected each of the informed consent forms and signed each of them per the instructions as approved (approval #06-10-18-0198200) by Walden's Office of Research Ethics and Compliance. Participants were offered soft drinks and light refreshments prior to the start of each session and they were free to help themselves during the session as well. There were no personal or organizational conditions that emerged during the focus group discussions that would have influenced participants or their experiences at the time of the study.

Demographics

Over a 3-week period I was successful in recruiting and hosting the two focus group sessions. There were fliers displayed and distributed throughout the organization. Within one and two days of the flier being displayed and distributed, I received phone calls in response to the flier. I recruited 22 participants for the study. Of the total number of interested mothers there were two that did not qualify; one who did not reside in the identified zip code area and another one who was not Head Start eligible. Of the 20 participants who I spoke to and who were registered to attend the focus group session, 13 came to the session. There was a pregnant mother who contacted me to let me know her work schedule changed and she was not able to make either of the sessions and another mother who was very close to delivering her baby and she believed she would be in labor at that time. Over 80% of the participants were between the ages of 18 – 28, 3% of the participants were between the ages of 29 – 39. There were no participants who were over the age of 39. None of the participants were currently breastfeeding. Table 1 displays participants' demographics relevant to this study.

Table 1

Demographics of Participants

Zip code	Ethnicity	Currently expecting	Head Start Eligible	Age Range	Currently Breastfeeding
45232	African American	Yes	Yes	18 – 28	No
45232	African American	Yes	Yes	18 - 28	No
45237	African American	Yes	Yes	18 - 28	No
45202	African American	Yes	Yes	29 - 39	No
45211	African American	Yes	Yes	18 - 28	No
45229	African American	Yes	Yes	18 – 28	No
45237	African American	Yes	Yes	29 – 39	No
45237	African American	Yes	Yes	18 – 28	No
45237	African American	Yes	Yes	18 – 28	No
45227	African American	Yes	Yes	29 – 39	No
45205	African American	Yes	Yes	18 – 28	No
45213	African American	Yes	Yes	18 – 28	No
45214	African American	Yes	Yes	18 – 28	No

Data Collection

The data collection phase of this research project went according to plans outlined in Chapter 3. Data was collected via focus groups using an interview template and breastfeeding perceptions and barriers interview questions as validated and published by Ware, Webb & Levy (2014) and infant feeding intention questions by Nommsen-Rivers and Dewey (2009). I began each interview session the same with both groups. First, I introduced the study and the purpose, and I then went through the interview protocol and distributed the informed consent for review and signature. I encouraged the participants to have a no judgement approach with other pregnant mothers when responding to questions. I also encouraged full participation for each of the pregnant mothers in attendance. After all the consent forms were both signed by participants and myself, I started the audio recorder and began asking the interview questions. I made sure to have plenty of pens to write with, several extra blank copies of the recording templates, the labeled table tents, and a charger for the audio recorder. The audio recorder was placed in the middle of the table and the volume turned up high so that I could capture responses despite any movement or noise from children. I used the interview template (Appendix E) to hand write each of the responses from participants relative to the question. Participants were referred to by the letter in front of them (e.g. participant “c” or “d”), and responses were recorded accordingly. As I went through each of the interview questions, there were some mothers who offered a lot of insight for some of the questions and then there were other times where I would have to encourage some of the pregnant mothers to expand on their responses. It was initially a challenge to write and keep up with the responses from

ech of the mothers. There were instances where mothers would say they wanted to add" to what they said previously. This was not an issue and I welcomed as much information as possible. Having multiple copies of the recording template allowed for extensive responses to be recorded. Each of the focus group sessions were the same in structure, the only difference in focus group sessions was that there were more follow up questions related to breastfeeding that came up in the second focus group session that were addressed through referring to outside sources. Each of the sessions lasted exactly 90 minutes. A week after the sessions I began to listen to the audio recording to verify the information with the hand-written information. In order to ensure validity, I listened to the audio recording from both sessions and made sure the responses from each letter labeled respondent aligned with what was hand recorded. The review of the hand-written responses and the audio recording took about a week to fully review and validate.

Data Analysis

I followed the six steps of data analysis and representing data as described by Creswell and Creswell (2013). There were 13 participants in the study, three in the first session and 10 in the second. The first initial step in the process was to avoid bias in the data collection process, therefore all the responses were handwritten, audio recorded and typed per the hand-written notes according to actual responses. I allowed only recorded responses from participants to be included in the data and the analysis and did not include any previous information or personal perspectives. As explained in Chapter 3, NVivo 12 plus was used to organize the collected data. The responses from each of the 15 focus group questions were typed up using Microsoft Word resulting in a total of 19 typed

response pages to the 15 focus group questions. Each of the responses answered the open-ended interview questions. In a case where I felt as though I needed to probe for clarity to a response, I made sure to do so by probing the respondent for further clarity on her response. All 19 pages were typed and compared to audio recording for validity. Step 2 involved the files being uploaded one interview question at a time (total of 15 files). After each of the files was created, which moves my process to Step 3 of my analysis, I was able to go through each of the uploaded files, starting with question one and begin to identify specific and similar words or phrases per participants responses. The repeated, specific, and similar words were then grouped into codes. A total of 16 codes were created based on responses. The 16 codes are reflected in Table 2 with the corresponding number of text responses from NVivo 12 plus.

After I reviewed the recorded texts exhaustively for repeat information and reached saturation, I began Stage 4, which was to reduce the codes in to categories. The categories are reflective of the reduced codes from participant's responses and larger classifications of the collected data. Table 3 shows the codes that emerged from the codes.

From this point, I moved into Step 5 which entailed organizing codes into categories, and I was then able to develop overarching themes. The discovered themes aligned with the research question to demonstrate the direct association between the data and the research questions. Within the final Step 6 of the analysis process, I assigned a name to each of the three themes: *breastfeeding is the best feeding, breastfeeding*

barriers, and *breastfeeding intentions and duration.* I went back through the categories, the codes, references and checked for redundancy and further reduction.

Table 2

Developed Codes and Number of Reference Responses

Codes	References
Advanced, smarter children, healthier kids	5
Attachment	4
Bonding with baby	7
Breastfeeding and returning to work or school	17
Initial Breastfeeding Plans from birth to six months	32
Breastmilk and some formula supplement feeding	6
Easier on mother	3
Economical	8
Formula Feeding plans	4
Healthy	35
Infant feedings Not clear	8
Outside advice	46
Milk supply production	8
Negative experience	42
Positive experience	16
Previous Breastfeeding Experience	18

Table 3

Sample Codes to Categories Reduced into Themes

Example of Codes	Category	Themes
Advanced, smarter children, healthier kids	Breastfeeding matters	Breastfeeding is the best feeding
Attachment	Physiological and Personal Experience Matters	Breastfeeding barriers
Bonding with baby	Breastfeeding Matters	Breastfeeding is the best feeding
Breastfeeding and returning to work or school	Work life balance matters	Breastfeeding barriers
Initial Breastfeeding Plans from birth to six months	Breastfeeding and returning to work and school	Breastfeeding intentions and duration
Breastmilk and some formula supplement feeding	Physiological and Personal Experience Matters	Breastfeeding intentions and duration
Easier on mom	Breastfeeding matters	Breastfeeding is the best feeding
Economical	Work life balance matters	Breastfeeding is the best feeding
Formula Feeding plans	Work life balance matters	Breastfeeding intentions and duration
Healthy	Breastfeeding matters	Breastfeeding is the best feeding
Infant feedings Not clear	Work life balance matters	Breastfeeding intentions and duration
Outside advice	Physiological and Personal experience matters	Breastfeeding is best feeding and Breastfeeding intentions and duration; Breastfeeding barriers
Milk supply production	Physiological and Personal experience matters	Breastfeeding barriers
Negative experience	Physiological and Personal experience matters	Breastfeeding barriers
Positive experience	Physiological and Personal experience matters	Breastfeeding is the best feeding
Previous Breastfeeding Experience	Physiological and Personal experience matters	Breastfeeding is the best feeding and Breastfeeding barriers

Evidence of Trustworthiness

Demonstrating qualitative research rigor or trustworthiness within this research project is important to add to the body of qualitative research knowledge and to also make the knowledge current as the past research concentrated on African American women and breastfeeding intentions is over 10 years old. This research will not only validate the data collected, the method in which it was collected and the quality of the research. For this basic qualitative research project, I achieved trustworthiness by applied credibility, transferability, dependability and confirmability.

Credibility

Credibility is the qualitative research assurance that a researcher has accomplished truth of the study and the findings (Lincoln & Guba, 1995). I was able to establish credibility in my research by using an audit trail, which tracked my process from recruitment of participants to focus group discussions. Each of the steps are detailed and outlined in a way that is clear and demonstrates credibility to external readers clearly described every step of the research process from participant's recruitment, participant's enrollment, participant retention and any attrition issues. In addition, audiotaping and verbatim transcription was used to further support the authenticity of participant's responses regarding their lived experiences.

Transferability

Transferability is the extent to which findings are useful to persons in other settings or group of people (Thompson, 1998). This research project addressed transferability by recruiting a sample that varied in age and various geographic zip codes.

This research project conducted two focus groups on separate days with a separate group of participants, which supports the importance of qualitative research not being generalized and aids in stories and experiences being specific and not ubiquitous. This study provides individual responses, describes the location and the women studied, and I am transparent about analysis and trustworthiness of the research. This also promotes applicability in the ability to have this research duplicated in the same approach.

Dependability

Dependability is referred to as consistency and the stability of the data over time and over study conditions (Connelly, 2016). I implemented the dependability strategy of consistency by describing the exact method of interview notes, data gathering, analysis, and interpretation. There was also a review from my committee member of my transcripts for codes and themes to make sure I followed the process accurately. These well described methods offer an auditable and repeatable trail.

Confirmability

Confirmability is demonstrated when data helps confirm the findings and lead to the implications (Polit & Beck, 2014). Within this study confirmability is achieved by having an approved external research mentor audit and follow the series of processed used to arrive at the conclusions around the data and research. In addition, audio recorded file that match participant responses, process notes with data reduction and analysis with computer stamped dates of modifications from the systematic usage of NVivo 12 Plus qualitative software and an iterative process review between my committee chair and co-chair.

Results

Research Question 1

Theme 1: Breastfeeding intentions and duration. Following each of the research questions are the themes that emerged from collected data and analysis and associated findings relative to social cognitive theory with a specific focus on self-efficacy.

The theme that resulted from data analysis was *breastfeeding intentions and duration*. All of the pregnant mothers indicated that they plan to initiate breastfeeding immediately after delivery. Of the 13 participants, 10 had other children, 3 of the participants will be first time mothers. Having previous children may have had some influence on the decision to breastfeed. The only mention of formula feeding upon delivery was a mother who had previous experience with breastfeeding and she felt as though she would have to follow the same course she did with her first baby, which was to initiate breastfeeding and then move to formula feeding. She did not indicate how soon she would start formula feeding. A similarity shared amongst the mothers was that they all had some other exposure to the idea or promotion of breastfeeding. Participants had a wide range of reasons and responses as to their plans to breastfeed or formula feed. Reponses varied from previous experience breastfeeding and knowledge of it being the best infant feeding choice:

> FG1B: Breastfeeding. I heard its better. Doesn't cause too much sickness and ear aches with your baby.
>
> FG1D: Plan on breastfeeding. I breastfed all my kids. Never had ear infections and never got sick.

FG2A: Breastfeeding. I breastfed my first two. My second child had issues she was allergic to my milk. I had to do formula; she was sensitive. I think breastfeeding is much healthier and better for immune system.

FG2C: Plan to breastfeed because it's better for baby and better nutrition and healthier for the baby. I fed my other two children breastmilk they were not as sick.

FG2E: I would like to breastfeed because I tried to breastfeed with him but he wouldn't latch so I couldn't with him. I want to breastfeed to try it out.

Breastfeeding duration at 1 month. As it relates to responses specifically pertaining to breastfeeding at 1 month, participants explained that they will still breastfeed.

FG1C: I will still be breastfeeding because the baby will be used to it by then.

FG2A: Plan to breastfeed exclusively since I won't go back to work yet.

There were quite a few responses that mentioned duration of breastfeeding beginning to shift after one month to supplementing with formula, "start pumping breastmilk" instead of skin to skin breastfeeding and there was a few that expressed a concern around a perceived "low supply of milk" by 1 month:

FG2C: I'm not going back to work for at least six weeks so I will exclusively breastfeed. If it doesn't work out then feed breastmilk through bottle.

FG2H: Breastfeeding but if I don't have enough milk may start supplement.

FG2J: I plan to continue to breastfeed. Similar to "I" instead of supplement I will try baby food.

There was a respondent that felt as if she didn't know many that breastfeed for as long as a month, she is also a new mother:

FG1D: Start pumping some more. A lot of people I know don't breastfeed that long.

In one case, a new mother indicated that she was not sure what her infant feeding intention would be at 1 month:

FG2F: I don't know. I will be winging everything. I won't be sure until I get to that point.

Breastfeeding duration at 3 months. There was more trepidation around breastfeeding duration at the breast at three months. Although the responses were clear on breastfeeding, more of the responses expressed pumping breastmilk instead of breastfeeding at the breast.

There were a couple of respondents who felt strongly about continuing to breastfeed. They also felt strongly about how breastfeeding directly at the breast helped to produce a good supply of milk:

FG1B: I hope to still be producing milk. It's easier than having to get up go downstairs to prepare a bottle.

FG2J: As long as I can still produce breastmilk, I will continue to

breastfeed at three months.

More respondent's intentions were to pump breastmilk, for reasons pertaining to attachment, fears of pain, returning to work, storing milk and being free to perform house duties:

> FG2B: I will still be breastfeeding at 5 months. It may start hurting after a while and they get attached
>
> FG2C: I'm not sure. I think by then I will be going back to work. I can't see myself directly breastfeeding at breast. With my patience, I can't see myself being able to cook and clean. I still want to stick with breastfeeding.
>
> FG2H: Breastfeeding still but mostly pump because I don't want baby too attached.
>
> FG2I: At three months breastfeeding still. At that point pumping more and feeding the baby from a bowl. I don't want the baby to get too attached.

The 3-month breastfeeding intention plans were notably different for first time mothers. Two of the three first time mothers commented on their lack of experience around new babies and their plans will vary according to returning to work:

> FG2F: I've not been around a lot of babies. I really don't know.
>
> FG2G: I've not been around a lot of babies. My plans are to still breastfeed and pump. I am not sure about when its time back to work if I

will still be able to breastfeed. By that time I will prefer to breastfed and then pump. I plan to pump and have a supply to freeze.

Breastfeeding duration at 6 months and beyond. Breastfeeding duration at six months and beyond for most of the mothers were around starting infant solids, pumping, and bottle feeding breastmilk:

FG2B: I will be pumping and introducing the baby to the bottle so she can get use to bottle. I will also introduce cereal and rice so the baby is not hungry every hour.

FG2H: If I'm producing milk by then, I will still pump. I plan to add cereal or oatmeal in the bottle.

FG2I: At six months I will no longer offer breast. If I can, I will do a bottle with breastmilk. I no longer want the baby sucking on me. They learn to undo bras by themselves and they are very demanding for it.

FG2J: I plan to pump so that the baby will get adjusted to drinking out of a bottle. I plan to also introduce to fruit, veggies and cereal.

Few of the respondents referenced going back to work or school by six months and therefore, weaning, pumping or supplementing with formula were mentioned options:

FG1B: Hopefully back to work or school and breastfeeding if I can still produce

FG1D: I will start weaning at six months. I don't have a lot of time. I won't keep track of pumping so by 6 months it can be both supplement plus breastfeeding

FG2G: I will still pump. There is no clear research on when you should start feeding baby other than milk. I need to research when it's a good time to do that. I will do mostly pumping and not feeding from breast.

Research Question 1 pertained to what are the prenatal breastfeeding intentions among African American women whose children are Head Start eligible. The data analysis from participant's responses resulted in an emergent theme of *breastfeeding intentions and duration*. The concluded breastfeeding intentions of the participants are to breastfeed immediately post-partum for all participants, to breastfeed at one month, to breastfeed at three months and to breastfeed at six month with more concentration on providing pumped breastmilk along with solids. The participants commented on their plans on infant feeding and why they felt that way towards their infant feeding intentions. Their reasons associated with breastfeeding intentions included having previous positive experience, knowing how healthy (less sick, smarter, less ear infections) it is for the baby, they felt it was cheaper, they felt it was better for the mother, they felt it was easier on the mother to manage rather than preparing a bottle, and bonding with the baby. The expected duration of breastfeeding varied in terms of whether the mother expressed anticipation of experiencing pain, going back to work at six months or sooner, if they are able to still produce milk at three months and pumping milk or feeding directly from the breast. Overall, infant feeding intentions are to breastfeed among this group of

participants. There were few variances in terms of new mothers and experienced mothers in early infant feeding intentions. New mothers felt as though they didn't have a strong sense of personal reference or any previous experience in breastfeeding compared to the experienced mothers. New mothers also were more fearful of the pain associated with breastfeeding and they were not sure how to manage returning to work and/or school and continuing to breastfeed.

Research Question 2

The analyzed data collected from focus group responses suggested that African American pregnant mothers whose children are Head Start eligible believe that breastfeeding is the optimal infant feeding option. There skepticism on how to balance successful breastfeeding and returning to school and work. Participants spoke about their concerns regarding low milk supply and pain while breastfeeding. These concepts evolved into the themes: *breastfeeding is the best feeding option* and *breastfeeding barriers.*

Theme 2: Breastfeeding is best feeding option. The participants intentions are to initiate breastfeeding immediately post-partum. There were 32 codes references pertaining to intention to breastfeeding, which were derived from five of the focus group questions. There was a consensus that breastfeeding is best feeding method for the baby for a number of reasons. There were 38 codes with combined references relating to breastfeeding being the healthiest option for the baby and the mother.

One of the many responses mentioned was how healthy breastfeeding is for the baby. Related specifically to the infant's growth and development participants believed

the baby would be more advanced. Participants also shared comments on how much healthier breastfeeding is compared to formula feeding:

> FG2A: Based on my experience, the baby's immune system is stronger. My daughter didn't get sick and she was advanced in stages in what she was doing.
>
> FG1B: Breastfeeding helps with ear infections, their immune system, and the babies don't get sick.
>
> FG2B: I think they develop more quickly on breastmilk. My daughter thinks she can do everything- she's two. At 1 she was walking and at 9 months, 10 months she was doing things above her age. I feel like she developed a little faster.
>
> FG2I: Breastfeeding is in the best interest of my child. It contains antibodies with things that will protect them when they get older.

Next, there was some mention of shared testaments on how breastfeeding is healthy for the mother. Information was shared amongst the participants on how breastfeeding is convenient, in terms of the involvement of making a formula bottle. Participants shared comments that formula is far more expensive than breastfeeding. Additional comments were related to how breastfeeding is beneficial to the mother such as losing weight faster, lack of monthly cycle, and bonding with baby which made breastfeeding even more important as an option:

> FG2I: As I said before, when you breastfeed exclusively you won't get a period. Breastfeeding also lower risk of breast cancer. Your body will lose

weight faster. Breastfeeding will help with the bleeding and you don't bleed as much after you have the baby.

FG2D: It helps you financially because you don't have to see how you get $22 for a can of formula.

FG2G: I think it's a natural function of the body so it's something that women are supposed to do. It helps keep the mother healthy, get back down to regular size quickly.

FG2C: Women don't have a menstrual period for the first six weeks. When I had my second child I didn't have a period for 9 months and my weight too quick. I think bonding is something that mothers would like to experience.

FG2A: I think the bonding with mother and child, it's inexpensive and it helps with natural weight loss.

FG2J: It helps the mother develop a good connection with the baby, which is good bonding for mother and the baby.

Previous positive breastfeeding experiences also contributed to the theme breastfeeding is the best feeding option. Shared comments around previous breastfeeding experiences included, that mothers were willing to breastfeeding again because they had a positive experience and often were able to breastfeed for a long time. In addition, their previously breastfed children were not sick.

FG2I: When I breastfed the first one I breastfed the other ones

FG2C: I fed my other two children breastmilk they were not as sick

FG2B: Breastfed my daughter until she was 1

FG2I: My oldest son was the only influence. He was what matter. He got breastmilk. He loved it so I kept feeding him. I tried to wean him at six months and gave him Similac. He just let it run out of his mouth. I tried for three days but he never took Similac so I started back breastfeeding

The data analysis found that breastfeeding is perceived among African American pregnant women who are Head Start eligible as the best feeding option because both mothers and babies benefit from it. Mothers benefit by losing weight quicker, saving money, convenience, sharing a bond with the baby and delay in menstrual cycle. Babies benefit by having a healthier immune system, and cognitively advanced. The next theme discusses the barriers participants relating to breastfeeding.

Theme 3: Breastfeeding barriers. Barriers to breastfeeding range from lack of knowledge on breastfeeding, outside negative advice, previous negative experiences, and perceived lack of low milk supply, attachment, fear, and previous experience of pain. For this research project, pregnant African American women expressed some of these same barriers during the focus group discussion. There were 42 coded referenced negative experience responses relating to either a negative previous personal experience and advice offered from outside referents. There were 46 outside referents comments that were related to non-successful breastfeeding experiences as well as positive experiences. Participants talked about negative previous personal experiences such as problems with latching and nipple pain. Several participants commented on their past personal

experience with low milk supply. One mother talked about wanting to use recreational marijuana and participate in social drinking as a barrier to maintaining breastfeeding:

> FG2C: I wasn't producing enough milk so I had no choice but to use formula
>
> FG2H: When he was first born he wouldn't latch on. I think the problem was the whole breastfeeding process because when I was breastfeeding my nipples were always sore and always red. The top of my nipples were peeling off and it was really scary to me. That made me want to quit.
>
> FG2J: I was discouraged because he really wasn't latching on. Because he wasn't' latching on I had a low milk supply.
>
> FG1D: My "thing things" are inverted. That has been discouragement. If I can't breastfeed, I will pump.
>
> FG2E: I'm not going to lie, when I'm not pregnant I like to smoke a little and drink a little. That is something that encourages me not to breastfeed and to stop.
>
> FG2A: I was afraid of getting my nipple bit off the very first time. Some of the mothers that breastfed talked about how painful it was. The doctor did give me some medicine that made it better.

The lack of knowledge relating to the importance of breastfeeding, how to breastfeed knowing others and/or seeing others who successfully breastfed contributed to barriers to breastfeeding. Respondents in this study also talked about what they heard from other mothers, and a specific experience from the hospital nurse:

FG2C: Myself and the father of my children made the decision. My family were not giving me a lot of direction and I really didn't know too much. I was just going to follow the baby.

FG2F: I over think too much so when somebody tells me something I start thinking. A family member said she had a yeast infection that was painful; I also had someone say they got aroused when the baby was on the nipple so that was disturbing. I think about everything somebody tells me and I don't know if I want to go through it.

FG2C: One thing made me kind of nervous is my mom saying that I bit her. The alcohol thing never really discouraged me but it does make you think twice.

Another barrier that resulted from this discussion was coordinating a new baby, breastfeeding or pumping breastmilk when returning to work or school:

FG2A: I plan to breastfeed and pump as much as possible. By eight or nine months the baby will be at daycare. I may have to formula feed.

FG2E: I plan on breastfeeding for six months until I go back to work or school.

FG2A: Some women stop breastfeeding because they go back to work, the pain that it causes and or maybe not producing enough milk to keep the baby fed so they have to go to formula

FG2J: You stop breastfeeding because you have to go back to work and you can't pump as much. And you are not with the baby when it time to feed.

FG2A: Everyone's situation is different. When talking to my friends a lot are not successful at breastfeeding because they have to stop because they have to go back to work. I feel like if our employers could give us a year off with pay we can stay home with our babies and breastfeed. We can use that time to bond. I think that would be helpful.

Additional comments on negative barriers derived from previous experiences and negative experiences shared from close friends and family members, a few participants highlighted negative body images that would deter them from considering breastfeeding:

FG2D: I don't like being touched. "Eah, baby on me". I don't' feel comfortable with taking my shirt off and being naked, but I got use to it.

FG1C: I don't know about the "sucking on your chest part" will feel weird.

Besides this group of participants expressing negative self-image as being a deterrent to breastfeeding, baby attachment was mentioned as one of the reasons to not breastfeed for any extended amount of time and the fear of the baby's father not feeling involved:

FG2C: One thing can be pain and that its time consuming. The baby may become too attached. Also if you're not producing enough milk it will discourage you.

FG2B: I will still be breastfeeding at five months. It may start hurting and babies can get attached.

FG2H: I will continue to breastfeed but pump mostly because I don't want baby too attached.

FG2I: At three months I will still breastfeed. At that point pumping more and bowl feeding the baby. I don't want to get too attached at that point.

Ancillary Themes: Breastfeeding Encouragement and Influences and Recommended Future Breastfeeding Support.

There were also ancillary findings from the analyzed data that led to two themes from participant's responses, one being *breastfeeding encouragement and influences* and *recommended future breastfeeding support.* This discovery is abstractly related to the research question and is essential in fully expressing the essence of participant's backgrounds, experiences and perceptions. This is important to note as breastfeeding literature stresses how both breastfeeding support and breastfeeding encouragement impact positive or negative breastfeeding results (Lutenbacher, 2016).

Theme: Breastfeeding Encouragement and Influences

Participants indicated they were encouraged and influenced to breastfeed by the child's father, WIC offices, doctors, nurses and self-determination.

FG1C: My doctor and my mom were my influences. My mom breastfed all seven of her kids.

FG1D: The WIC office, doctor, and my family members helped me. My granny was a greater influence she said “you never run out if you feed it to them”

FG2I: For me it was WIC who encouraged me. The lactation nurse kind of forced me to breastfeed a little bit. She made me feel guilty if I said no. When I got started I liked the bond so I continued. When I breastfed the first one I breastfed the other ones.

FG2C: The father of my child and myself made the decision. I felt like I wanted to give my baby a chance to have breastmilk.

FG2G: My husband, all the pregnant moms that I know and myself influenced my decision. All of my friends have breastfed so it seems like the natural thing to do.

FG2F: The women in my family are very dominate saying “girl you better”.

Theme: Recommended Future Breastfeeding Support

Their responses were also directed towards suggested future breastfeeding support education classes, research, physician support, latching support and financial support to be able to afford pumping supplies.

FG2F: A breastfeeding classes is needed

FG2G: There should be more access to classes, discounts on things like pumps, and adaptors. Those are the things that can get expensive. Mothers

should be able to have the support of other people at their disposal. For instance someone they can either call if they need help and get it done.

FG2I: I agree with the classes' part. I feel classes should be for our partners. Dads feel like they don't have nothing to do when they see us breastfeeding. I feel like they should take a breastfeeding class and figure out something to do.

FG2C: There should be more education and more support (partner, family members), anyone who can step in and help. If you have a problem with your latch you should have someone that you can go to for help with that.

FG1D: I think you should see the effects of it for yourself. With my three kids, I see the difference in all my three kids depending on how long I breastfed and how long I didn't. There are doctors giving out brochures but that's like not close to reality. It's different when you actually experience it for yourself. I do feel like you can build a strong bond with you and your kids. Real life situations help you to see the real effects of it.

Figure 2 provides a visual word cloud of prevalence of comments and response words from the focus group discussion. The word cloud is also a summation of the key concepts mentioned, experiences, breastfeeding plans, influences and above all the words "breastfeeding" and "breastfeed" being the leading dominate response.

Figure 2. Word cloud description of focus group comments and responses.

Summary

This chapter included an analysis that was driven by two research questions that help to capture the essence of the pregnant African American women's breastfeeding perspectives, beliefs and intentions on infant feeding. The responses described their experiences and beliefs on planned intentions and influences from others. The overarching themes derived from planned infant feeding intentions are breastfeeding is the best infant feeding option, breastfeeding intentions and breastfeeding barriers. African American pregnant mothers intentions are to breastfeed their infants immediately post-

partum. There was some variance of feeling confidence of being able to continue to breastfeed when they had to return to work and/or school they planned to provide their babies breastmilk when the baby is between birth and six months, either by way of feeding directly from the breast or from pumped breastmilk. Breastfeeding barriers ranged from pervious negative experiences, negative comments and advice from close family and friends, perceived lack of milk supply and pain. Exploratory findings offered sub-themes relating to breastfeeding encouragement influences and recommended future breastfeeding support.

This chapter also contained the study results, tables of demographics, a description of codes, categories and theme development, and a report of the data analysis process and results.

In Chapter 5, I will present a discussion of my findings from chapter 4. Possible implications for social change and recommendations for further research will be reviewed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The nature of this basic qualitative study was to gain an in-depth understanding of prenatal infant feeding intentions among pregnant African American women who are Head Start eligible and to further understand perceptions, beliefs, and attitudes towards breastfeeding. Current research indicates that African American women have the lowest rates of initiating and sustaining breastfeeding of all other ethnic groups (CDC, 2014). One of Healthy People 2020 (MICH-21.1) goals is to increase the proportion of infants who are ever breastfed (Healthy People 2020, 2018). In addition, there is a specific focus to eliminate health care disparities among African American women as it relates to breastfeeding (Healthy People, 2018). Another critical fact important to the impetus of this research investigation is the relationship of African American infants dying prematurely. There are 2.3 more annual African American infant mortalities than White infants in the Ohio area (Ohio Department of Health, 2013). Research has shown that breastfeeding contributes to an infant's overall health and decreases infant mortality risk such as SIDS and early child hood illness, making it the most important early nutrition for infants (AAP, 2003; Lawrence & Lawrence, 2016;). My study was conducted in Hamilton County, Ohio at the cooperating Head Start facility – CHCCA. The study involved a basic qualitative exploration consisting of two focus group discussions with 13 pregnant African American women who were Head Start eligible. The focus group questions were 15 open-ended questions pertaining to infant feeding intentions ranging from birth to 6 months and breastfeeding perceptions, barriers, and beliefs. Each focus

group lasted no more than 90 minutes and responses were transcribed and audio taped for insurance of research rigor, dependability and credibility. The results of the qualitative data analysis yielded three key themes and two ancillary findings: (a) breastfeeding intentions and duration, (b) breastfeeding barriers, and (c) breastfeeding is the best feeding option; ancillary findings included (a) encouragement influences, and (b) future breastfeeding support. These three themes and ancillary findings will be discussed in this chapter, along with my interpretation of the findings, study limitations, recommendations for future research and practice, social change implications, and a conclusion.

Key Findings

The research questions addressed in this study were:

1. What are the prenatal breastfeeding intentions among African American women whose children are Head Start eligible?
2. What are the beliefs, attitudes, and perceived barriers, towards breastfeeding among pregnant African American women whose children are Head Start eligible?

During this study investigation I was able to discover three themes based upon the coded and analyzed responses provided by participants: Theme 1 breastfeeding is the best feeding option; Theme 2 breastfeeding barriers; and Theme 3 breastfeeding intentions and duration. There were also findings of exploratory analysis which produced two subthemes. Subtheme 1 was breastfeeding encouragement and influences and Subtheme 2 recommended breastfeeding support. These findings are directly aligned with the research questions. African American pregnant women in this study have clear prenatal

intentions to initiate breastfeeding and to continue to breastfeed. The intended duration of breastfeeding via pumping or directly from the breast extended to 1 month, 3 months and 6 months. Pregnant African American mothers expressed intentions to do more pumping and some supplementation of formula the closer the baby came to 6 months of age due to returning to work or school. In total, pregnant African American women perceived breastfeeding as the best infant feeding option because of its overall health benefits. Ultimately, beliefs of low milk supply, nipple pain, and attachment were presented as barriers to breastfeeding long term but did not have any bearing on intention to initiation.

Interpretation of Findings

The pregnant African American women in this study were clear and confident about their early infant feeding intentions to breastfeed. They were positive about how breastfeeding is the best feeding option and they expressed that formula feeding was not an option unless medically necessary. They were open and direct on various breastfeeding barriers (e.g. pain, low milk supply, previous negative experience, and returning to work). They shared experiences based on previous personal involvement with breastfeeding or from advice shared (positive and negative) from other outside influences (sister, mother, or a friend). A great deal of what these women had to share is parallel to the literature cited in Chapter 2 of this study.

Theme 1: Breastfeeding is the Best Feeding Option

The findings from this study indicated that pregnant African American women are certain on the benefits of early breastfeeding their infants. They were able to articulate what those benefits were (healthy, smarter, cheaper, advanced in cognitive activities,

convenient, etc.). The idea that breastfeeding was the healthiest option was shared amongst both the experienced pregnant mothers and the first-time pregnant mothers. They also acknowledged how breastfeeding was beneficial to mothers. They understood that breastfeeding mothers would lose weight faster, how it created a greater mother child bonding experience, and that breastfeeding could serve as a birth control method.

These findings support previously cited literature, where qualitative studies conducted with African American women who provided their input pertaining to their attitudes, experiences and knowledge of breastfeeding. In the published results of these studies, women mentioned the same benefits of breastfeeding and why they would initiate breastfeeding rather than formula feed (Cottrell & Detman, 2013; Stuebe & Bonuck, 2011).

Theme 2: Breastfeeding Intentions and Duration

Participants from this study intentions were clear and direct on their plans to initiate breastfeeding immediately postpartum. Their initial plans on breastfeeding steamed from previous positive breastfeeding experience to first time mothers learning that breastfeeding was the healthiest option. The pregnant women in this study shared various reasons along with their intention to breastfeed. They mentioned that they intend to breastfeed because it was the healthiest option, because it was what they did previously, or because they knew someone who breastfed. There were other participants whose intention was to breastfeed because they were not as successful at it the first time. The research of Bai et al. (2011) Wambach (1997), and Tenfelde et al. (2011) discussed prenatal intentions being a weighted driver in performing the actual behavior, in this case

exclusive breastfeeding. Their studies were conducted with low income African American pregnant women and their research highlighted strong correlations between intentions and behavior. Hill's (2008) project results indicated beliefs and references from others related to positive attitudes towards breastfeeding. These research findings are similarly aligned when compared to published study literature.

This research project took a deeper dive into breastfeeding intentions and looked at breastfeeding duration up to 6 months postpartum. It is important to understand the mind set of prenatal African American women and breastfeeding duration because the AAP recommendation is to exclusively breastfeed for 6 months and up to 12 months if possible (AAP, 2003). Respondents from this study commented that their plans were largely to breastfeed up to 6 months. There was some variation in comments mentioned in regard to the method of feeding (pumped breastmilk verses directly from the breast). Not only were the responses different in the feeding method but there were some differences in the duration of time.

1-month duration: Responses were overwhelming in support of exclusive breastfeeding through the infants 1 month of age. There were two participants (both first time mothers) who replied that they were not sure, and another replied that she would try breastfeeding for 1 month but she did not know anyone that breastfed that long.

3-months duration: At 3 months the majority participants planned to breastfeed; however, there was more mention of pumping breastmilk at this point. Again, there were different points of views when the response came from first time mothers. One of the first-time mothers talked about not being around many babies therefore she was not sure

if she would be breastfeeding at 3 months. The other first-time mothers talked about not being around babies in the past either, she believed she would be pumping more and freezing and storing milk because she would be back to work by that time.

6-**months duration**: At the six-month mark more of most mothers expressed pumping milk and offering baby food. A few respondents talked about weaning the baby, concerned of low milk supply, returning to work or school. There was only one mother who mentioned providing both breastmilk and supplement at the six-month stage. Being that breastfeeding at 6 months is the recommended stage of continued breastfeeding by the AAP, it's critical to learn the reasons why pregnant mothers choose to start weaning and/or supplementation. The findings from the mothers in this study were similar to a study of Australian women who had no intention to breastfeed for 6 months or more as there was a negatively association with breastfeeding this long. (Forster, McLachlan, & Lumley, 2006).

Theme 3: Breastfeeding Barriers

Breastfeeding barriers recorded from the participants ranged from pain, low milk supply, negative past experiences, negative references from a friend or family member, latching issues, trying to manage returning to work or school, attachment, and use of recreational marijuana and social alcohol consumption. These reported barriers are the same as suggested in previous studies such as Fischer and Olson (2014), Lutenbacher, Karp, and Moore (2016) and Cottrell and Detman (2013). Each of these studies has similar barriers as reported by African American women. There is one belief and barrier

that has been historically found in other research report that was not found in this study which is the negative influence of the father of the baby. The mothers in this study stated the decisions around breastfeeding were made by first themselves and in a lot of cases the father of the baby. This finding is contrary to findings from Avery and Magnus (2011), and Freed, Fraley & Schanler (1992) as both studies presented that fathers of pregnant African American women were not supportive of breastfeeding. The suggestion from this study is that fathers of the mothers in this research study are more involved from a family perspective than the fathers from other studies.

Ancillary subtheme 1.: A discovery from this study was the collective and shared responses was a recommendation for additional support for breastfeeding mothers. Participants were insistent that there was a need of community breastfeeding classes, assistance with purchasing breast pump supplies, and at home latching or follow up assistance. This research study findings are consistent with the CDC 2016 guide to breastfeeding.

Ancillary findings subtheme 2: In this study, I found that the pregnant women were adamant about being the prime decision maker in choosing to breastfeed their babies. They referenced previous children who were breastfeed and mentioned how well they were doing physically, and academically. Most of the pregnant mothers would respond with the word *myself* as the leading word in their response, indicating how the decision was mostly their own. Secondary influences included sisters, grandmothers, the child's father, their doctor, and the WIC office, and their doctor. sister, a grandmother, the child father, WIC office, and doctor office.

The conceptual framework inference is directly reflective in this research study findings as the SCT and its incorporation of self-efficacy. Bandura's (2004) social cognitive variables pertain to how cognitive, behavioral, personal, and environmental factors interact to determine motivation and behavior. Self-efficacy constructs are within SCT and rest within the prong of personal determinants. Self-efficacy is loosely defined as a person's self-confidence to perform a task or change a behavior (Bandura, 1977). A person's sense of self efficacy can play a major role in how they complete a task or change a behavior (Bandura, 1977). Bandura's (1977) self-efficacy theory list four areas components that help to build an individual's self-efficacy: verbal persuasion, performance outcomes, vicarious experiences, and physiological feedback. According to Dennis (1999), maternal breastfeeding self-efficacy is defined by a mothers' ability to breastfeed her child, which influences her decision on breastfeeding. Mothers with high self-efficacy are more likely to choose breastfeeding, persist when there are issues, have self-encouraging thoughts, and respond positively to challenges (Dennis, 1999). This is well demonstrated in this research study where performance outcomes from previous experiences are expressed from participants who breastfed their first child. These included statements on how successful they were in breastfeeding as well as the positive outcome they witnessed as a result of breastfeeding. Also, verbal persuasion is resulted in this study, where participants talked about family members being influential in expressing to first time mothers "girl you better" or when a grandmother encourages "you never run out if you feed it to them". In terms of vicarious experiences, participants share experiences of others, for instance the participant who stated that her sister had seven

kids, or the comment made about a mother who breastfed all her kids. The last component of self-efficacy is physiological feedback (Bandura, 1977). Physiological feedback can have a validating effect when deciding on performing a behavior (Bandura, 1977). If a person has a negative physical view or experience it can lead to a poor behavioral outcome or they may feel as though they did not succeed the first time but they would like to try again. Physiological feedback is represented in the data results where respondents mentions “my thing things are inverted” or another comment from a first-time pregnant women that says “I don’t know about the sucking on your chest part will feel weird”. The evidence of each of the components of self-efficacy being represented in the analyzed data implies that there is significant evidence of high self-efficacy that will ultimately lead to the overall health behavior initiation, which in this case is to initiate breastfeeding.

Limitations of the Study

The study limitations associated with this study was inherent to basic qualitative research studies. For one, there were a small number of recruited pregnant African American women. There were 22 women recruited, however due to different personal circumstances, there were 13 actual participants. This number of participants is adequate for a qualitative focus group study. Also in this case the pregnant African American women who were Head Start eligible lived within specific zip codes therefore the conclusions are not generalizable to other ethnic group or other geographic areas. Another limitation to the study is the possible pre exposure bias experienced by 10 of the pregnant women who participated in the study. There were three pregnant women who

participated in the study who were going to be first time mothers. Therefore their comments and statement were not directly influenced by negative personal experiences. The remainder of participants may have had some negative experience which would have been included as a response bias in the results. The theory of social cognitive theory which incorporates self-efficacy has a direct correlation with past experiences negative or positive and how it can affect the change in behavior. In this sense, the attendance of pregnant mothers with previous children would impair the results or comments from the participants from either a negative or positive standpoint based on their past experience. Moreover, as a researcher who had personal struggles with breastfeeding, I fully disclosed to the participants that I personally breastfeed both of my children and that I experienced early personal struggles with breastfeeding. Having a personal bias can present as bias in reporting and analyzing the findings of the research. I was able to overcome this limitation by actively recording responses from each of the participants and used the audio recordings to ensure written responses were accurate. During the data analysis phase I only used the information collected from participants in the study. Outside of the above mentioned limitations, the study focus group responses from 13 pregnant African American women on their prenatal breastfeeding intentions along with their beliefs, attitudes and perceived barriers toward breastfeeding.

Recommendations

Breastfeeding will remain the best early infant feeding option for infants. The U.S. and the majority of health care key policy and health care contributors all agree that the best early nutrition is human milk (AAP, 2003; WHO, 2000). Infants who are fed

human milk have fewer early childhood illnesses and experience fewer infections than their formula fed counterparts (Victoria et al., 2016). It is clear that the recommendations to pregnant mothers is to breastfeed their infants, however, it has been less clear what the intentions were among African American pregnant women and initiating breastfeeding. This study findings support strong early prenatal breastfeeding intentions among low income pregnant African American women. The findings of this qualitative study offer some basis for formulating more group discussions or individual discussions around what drives and strengthens breastfeeding intentions. As previously researched and referenced in this study, intention has been shown to be directly related to change in behavior (Bai, 2011). The participants in this study were able to voice that their prenatal intentions are to breastfeed, however, there was quite a bit of gradual decrease in intended breastfeeding duration when the question was directed to the length of time they planned to breastfeed. More research should be aimed towards facilitating and increasing rates of breastfeeding success through the age of 6 months post-partum. One of the findings of this research project was pregnant African American women expressed more of a sense of a higher self-empowerment when it came to making decisions about plans to feed their babies: FG1B: “Me myself and I . I’m the only one that has the say so.” A great deal of the respondents also mentioned how they themselves and the baby’s father were ultimately interested in making sure the baby is initially breastfed. This discovery is contrary to some earlier research that indicates the infants’ fathers view breastfeeding as negative (Avery, 2011; Lutenbacher, Karp & Moore, 2016). It would be helpful to have future exploration into a more modern view and perception on African American fathers and

initiating breastfeeding and to further examine are more pregnant African American women basing their decision to breastfeed from their personal knowledge and experiences. This research lends support of further exploration in the area of father's involvement as it relates to early decision making around breastfeeding.

Other findings from this research project disclose several barriers as perceived by this population to successful breastfeeding. A few barriers that were mentioned were, having to returning to work or school, pain, low milk supply, attachment, recreational usage of alcohol and in one case marijuana. These discoveries are not unique to other research findings (Spencer et al., 2014; Kulka et al., 2011) where these elements were impediments to successful breastfeeding duration. When considering further research recommendations pertaining to looking into barriers of breastfeeding durations, it would be beneficial to understand if birthing plans discussed with employers are helpful in terms of increasing self-efficacy of breastfeeding and returning to work. Would working directly with a home visitor post-partum help with latching issues assist with the physical issue of pain and low milk supply? It would be worth exploring parenting experts and education classes or support groups to discuss what is perceived attachment and how to manage that idea. Lastly, as the laws and knowledge is being spread around the safe usage of drinking a glass of wine and more of the laws relating to legal use of marijuana, there is some research room to explore how to best inform, prevent and support mothers in these areas.

The other side of initiation is duration. It is as equally important to initiate breastfeeding as it is to continue to breastfeed. If the overall goal is to have infants

particularly in low income African American communities have lower health disparities relating to breastfeeding and infant mortality, there must be some concentrated efforts into long term breastfeeding goals. As this research project offers strong indications that prenatal African American women who are Head Start eligible intend to breastfeed, what isn't solid is the length of time or the duration. The last suggestion is to have further studies into the granular personal experiences as to why this population stopped breastfeeding after one month. This investigation can hold a significant resolution to more infants having the healthiest quality of life.

Implications for Positive Social Change

"In all mammalian species the reproductive cycle comprises both of pregnancy and breast-feeding: the absence of latter, none of these species, man included, could have survived" (Vahlquist, 1981). This quote speaks to the vital importance of the beginning of human life and the necessary nourishment required to maintain that life. The science as well as the human understanding of contributions from early human milk are well researched and supported. There is social and scientific room to do a better job in taking into consideration what is known from medicine and what is known academically and put that knowledge into public health and community health action.

We know from a cultural and a social standpoint that breastfeeding rates are lowest among African American women (CDC, 2013, 2014). We are also fully aware that African American women have the highest incidence of infant mortality at a rate of 15.2 compared to a rate of 5.8 of White infants particularly in the state of Ohio (ODH, 2016). We are further aware of how breastfeeding helps to mitigate the risks associated with

infant mortality (Lawrence and Lawrence, 2016). We now have current information from this research project that adds to the past body of knowledge on what the prenatal intentions are among African American women which are to initiate breastfeeding. This opens the door of opportunity to further develop community breastfeeding support in the areas where we know increasing breastfeeding initiation and duration is positively working. The future of our community would benefit from community education programs that are designed to increase self-efficacy which boost intentions and initiation rates among this population. The community would also benefit if it looked into improving relationships between employers and nursing mothers so that employers can understand the business gain associated with a nursing mothers continuing to nurse her child and how mothers will miss less time at work. Lastly, efforts towards resources that flood the community with necessary community health lactation specialist, such as certified lactation counselors and international board certified lactation consultant where they can conduct home visits with the mothers who are experiencing difficulties but whom ultimately gain the assistance they need in order to continue to breastfeed for at least six months. The research findings in this study can be disseminated to stakeholders such as the Medicaid managed care organizations who all have a specific prenatal care program aimed to reduce infant mortality. Hospitals and OBGYN offices can benefit from understanding their patients intentions on initiating breastfeeding. If these key stakeholders fully implement a breastfeeding policy, they will benefit organizationally and from a community standpoint.

Conclusion

Breastfeeding is the best feeding. This qualitative focus group study answered two qualitative questions directed towards prenatal breastfeeding intentions and perceptions, beliefs and attitudes towards breastfeeding. In this research study, it was ascertained that prenatal African American women who are Head Start eligible intentions are to initiate breastfeeding immediately post-partum. Findings from this qualitative exploration provided similar findings as previous research from Spencer, 2015; Hundalani et al, 2013; and Robinson and VandeVusse, 2011. One particular outcome of this study that is contrary to previous finding (Avery & Magnus 2011), is that according to the shared information from the participants in the focus groups, the fathers of their children felt positive about breastfeeding and contributed to their decision to initiate breastfeeding. Although some historic data suggest (Gross et al 2015; Collins, 2012) that post traumatic slavery effects have presented as a barrier to African American women and breastfeeding, that did not propose to be an issued raised among this group of participants. One particular result to underscore is one of the subthemes that emerged from this study which is recommendation for the future. Responses were ubiquitous around the idea of community breastfeeding support programs, groups, and education sessions and at home assistance. These suggestions from the participants are synonymous with the CDC 2016 guide to breastfeeding. There are current community programs in place that can be supported by the key stake holders to help improve the breastfeeding intention, initiation and duration rates among the African American populations. History dictates that knowledge is the bridge between information and action. This research

proposal adds additional knowledge in hopes that it will connect the key resources needed within the community to improve lives. The research and business and professional community acknowledge, value the importance of good information, they often refer to it as “evidence based”. This evidence based information is used in the context to improve lives. Breastfeeding is an “upstream” health care approach, the better job we can do at getting in front of a public health issue, in other words public health promotion and prevention, the better the outcome downstream which in this case will be healthier babies, a healthier community and a healthier nation.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. doi:10.1016/0749-5978(91)90020-T

Alexander, A., O'Riordan, M. A., & Furman, L. (2010). Do breastfeeding intentions of pregnant inner-city teens and adult women differ? *Breastfeeding Med, 5*(6), 289-296. doi:10.1089/bfm.2009.0083

Al-Sagarat, A., Yaghmour, G., & Moxham, L. (2017;2016;). Intentions and barriers toward breastfeeding among jordanian mothers-A cross sectional descriptive study using quantitative method. *Women and Birth, 30*(4), E152-E157. doi:10.1016/j.wombi.2016.11.001

American Academy of Pediatrics. Committee on Infectious Diseases. (2003). *Red book: Report of the committee on infectious diseases*. (Ed. 26). Retrieved from http://www.aap.org

Avery, A. B., & Magnus, J. H. (2011). Expectant fathers' and mothers' perceptions of breastfeeding and formula feeding: a focus group study in three US cities. *Journal of Human Lactation, 27*(2), 147-154. doi:10.1177/0890334410395753

Bai, Y., Wunderlich, S. M., & Fly, A. D. (2011). Predicting intentions to continue exclusive breastfeeding for 6 months: a comparison among racial/ethnic groups. *Maternal Child Health Journal, 15*(8), 1257-1264. doi:10.1007/s10995-010-0703-7

Baker, C., Baker, C., Wuest, J., Wuest, J., Stern, P. N., & Stern, P. N. (1992). Method slurring: The grounded theory/phenomenology example. *Journal of Advanced Nursing, 17*(11), 1355-1360. 10.1111/j.1365-2648.1992.tb01859.x

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(20), 191-215. doi: 10.1037/0033-295X.84.2.191

Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior, 31*(2), 143-164. doi:10.111177/1090198104263660.

Barbosa, C. E., Masho, S. W., Carlyle, K. E., & Mosavel, M. (2017). Factors distinguishing positive deviance among low-income african american women: A qualitative study on infant feeding. *Journal of Human Lactation, 33*(2), 368-378. doi:10.1177/0890334416673048

Bartick, M. (2011). Breastfeeding and the U.S. Economy. *Breastfeeding Medicine, 6*(5), 313-318. doi:10.1089/bfm.2011.0057

Bentley, M. E., Dee, D. L., & Jensen, J. L. (2003). Breastfeeding among low income, african-american women: Power, beliefs and decision making. *Journal of Nutrition, 133*(1), 305S-309S.doi.10.1093/jn/133.1.305S.

Birch, M., Miller, T., Mauthner, M., & Jeeop,J. (2003) . Ethics in qualitative research melanie maunther ethics in qualitative research. *Nurse Researcher, 11*(1), 79-80. doi:10.7748/nr.11.1.79.s9

Bonuck, K. A., Trombley, M., Freeman, K., & McKee, D. (2005). Randomized, controlled trial of a prenatal and postnatal lactation consultant intervention on

duration and intensity of breastfeeding up to 12 months. *Pediatrics, 116*(6), 1413-1426. doi:10.1542/peds.2005-0435

Brinkmann, S., & Kvale, S. (2005). Confronting the ethics of qualitative research. *Journal of Constructivist Psychology, 18*(2), 157-181. doi:10.1080/10720530590914789

Brownell, K., Hutton, L., Hartman, J., & Dabrow, S. (2002). Barriers to breastfeeding among african american adolescent mothers. *Clinical Pediatrics, 41*(9), 669-673. doi:10.1177/000992280204100905

Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods, 2*(2), 1-13. doi:10.1177/160940690300200201

Cameron, A. J., Hesketh, K., Ball, K., Crawford, D., & Campbell, K. J. (2010). Influence of peers on breastfeeding discontinuation among new parents: The melbourne infant program. *Pediatrics, 126*(3), e601-e607. doi:10.1542/peds.2010-0771

Centers for Disease Control and Prevention (U.S.), & National Center for Chronic Disease Prevention and Health Promotion (U.S.). Division of Nutrition, Physical Activity, and Obesity. (2013). *The CDC guide to strategies to support breastfeeding mothers and babies*. Atlanta, [Ga.]: U.S. Department of Health and Human Services,Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Nutritioon, Physical Activity, and Obesity

Centers for Disease Control and Prevention. (2017). Breastfeeding rates and data. Retrieved from: www.cdc.gov/breastfeeding www.cdc.gov/breastfeeding/data/nis_data/rates-anyexclusive-bf-socio-dem-2014. www.cdc.gov/vitalsigns/breastfeeding2015/index.html cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-socio-dem-2013.htm cdc.gov/breastfeeding/data/NIS_data/index.htm

Chambers, J. A., McInnes, R. J., Hoddinott, P., & Alder, E. M. (2007). A systematic review of measures assessing mothers' knowledge, attitudes, confidence and satisfaction towards breastfeeding. *Breastfeeding Review : Professional Publication of the Nursing Mothers' Association of Australia, 15*(3), 17-25. *Retrieved from: www.ncbi.nlm.nih.gov*

Cottrell, B. H., & Detman, L. A. (2013). Breastfeeding concerns and experiences of African American mothers. *MCN American Journal of Maternal/Child Nursing, 38*(5), 297-304. doi:10.1097/NMC.0b013e31829a5606

Collins, P. H. (2002). Defining Black Feminist thought. In P. Essed and D. T. Goldberg (Eds.), *Race Critical Theroies*, 152-175.

Collins, P. H. (2002). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment* (2nd ed.). New York, NY: Routledge.

Collins, J. W., Soskolne, G., Rankin, K., & Bennett, A. (2013). Differing First Year Mortality Rates of Term Births to White, African American, and Mexican American US Born and Foreign Born Mothers. *Maternal and Child Health Journal, 17*(10), 1776-1783. doi: 10.1007/s10995-012-1197-2

Connelly, L. M. (2016). Trustworthiness in qualitative research.(understanding research). *Medical Surgical Nursing, 25*(6), 435. Retrieved from http://www.ncbi.nlm.nih/gov/pubmed30304614

Creswell, J. W., & Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: SAGE Publications

Dennis, C. (2002). Breastfeeding initiation and duration: A 1990-2000 literature review. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 31*(1), 12-32. doi:10.1111/j.1552-6909.2002.tb00019.x

Dennis, C.L. (1999). Theoretical underpinnings of breastfeeding confidence: self-efficacy framework. *Journal of Human Lactation, 75*, 195-201. doi:10.1177/089033449901500303

Donath, S. M., Amir, L. H., & ALSPAC Study Team. (2003). Relationship between prenatal infant feeding intention and inititation and duration of breastfeeding: a cohort study. *Acta Pediatrics, 93*(11), 1514-1518. doi:10.1080/08035250310009293

Eglash, Anne, MD, FABM, IBCLC, Montgomery, Anne, MD, FAAFP, FABM, IBCLC, & Wood, Julie, MD, FAAFP, FABM, IBCLC. (2008). breastfeeding. *Disease-a-Month, 54*(6), 343-411. doi:10.1016/j.disamonth.2008.03.001

Evans, K., Labbok, M., & Abrahams, S. W. (2011). WIC and breastfeeding support services: does the mix of services offered vary with race and ethnicity? *Breastfeeding Medicine, 6*(6), 401-406. doi:10.1089/bfm.2010.0086

Fischer, T. P., & Olson, B. H. (2014). A qualitative study to understand cultural factors affecting a mother's decision to breast or formula feed. *Journal of Human Lactation, 30*(2), 209-216. doi:10.1177/0890334413508338

Freed, G. L., Fraley, K. & Schanler, R. J. (1992). Attitudes of expectant fathers regarding breast-feeding. *Pediatrics*, *90*(2), 224-227. Retrieved from http://ncbi.nlm.nih.gov/pubmed/1641286

Furman, L. M., Banks, E. C., & North, A. B. (2013). Breastfeeding among high-risk inner-city African-American mothers: a risky choice? *Breastfeeding Medicine, 8*(1), 58-67. doi:10.1089/bfm.2012.0012

Forster, D., McLachlan, H. & Lumley, J. Factors associated with breastfeeding at six months postpartum in a group of Australian women. *International Breastfeeding Journal, 1*(1), 18-18. doi:10.1186/1746-4358-1-18

Glanz, K., Lewis, F. M., & Rimer, B. (1997). *Health behavior and health education. Theory, research, and practice* (2nd ed.). San Francisco, CA: Jossey-Bass.

Glanz,K., Rimer, B. K., & Viswanath, K. (2008). *Health behavior and health education. Theory, research and practice* (4th ed.). San Francisco, CA: Jossey-Bass

Gross, T. T., Powell, R., Anderson, A. K., Hall, J., Davis, M., & Hilyard, K. (2015). WIC peer counselors' perceptions of breastfeeding in African American women with lower incomes. *Journal of Human Lactation, 31*(1), 99-110. doi:10.1177/0890334414561061

Healthy People 2020. (2018). Maternal and infant health objectives. Retrieved from http://www.healthypeople.gov/2020-MICH-21.13

Hilal, H. H,& Alabri, S. S. (2013). Using Nvivo for data analysis in qualitative research. *International Interdisciplinary Journal of Education, 2*(2), 181-186. doi:10.12816/0002914

Hill, G. J., Arnett, D. B., & Mauk, E. (2008). Breast-feeding intentions among low-income pregnant and lactating women. *American Journal of Health Behavior, 32*(2), 125-136. doi:10.5993/AJHB.32.2.2

Hoddinott, P., Kroll, T., Raja, A., & Lee, A. J. (2010;2009;). Seeing other women breastfeed: How vicarious experience relates to breastfeeding intention and behaviour. *Maternal and Child Nutrition, 6*(2), 134-146. doi:10.1111/j.1740-8709.2009.00189.x

Hundalani, S. G., Irigoyen, M., Braitman, L. E., Matam, R., & Mandakovic-Falconi, S. (2013). Breastfeeding among inner-city women: from intention before delivery to breastfeeding at hospital discharge. *Breastfeeding Medicine, 8*(1), 68-72. doi:10.1089/bfm.2012.0004

Hurley, K. M., Black, M. M., Papas, M. A., & Quigg, A. M. (2008). Variation in breastfeeding behaviours, perceptions, and experiences by race/ethnicity among a low-income statewide sample of special supplemental nutrition program for women, infants, and children (WIC) participants in the united states. *Maternal and Child Nutrition, 4*(2), 95-105. doi:10.1111/j.1740-8709.2007.00105.x

Jefferson, U. T. (2014). Infant feeding attitudes and breastfeeding intentions of black college students. *Western Journal of Nursing Research, 36*(10), 1338-1356. doi:10.1177/0193945913514638

Katsaras, E., Brown, L. & Colchamiro, R. (2015). Maternal WIC participation improves breastfeeding rates: A statewide analysis of WIC participants. *Maternal and Child Health Journal, 19*(1), 136-143. doi:10.1007/s10995-014-1504-1

Kessler, L., Gielen, A., West, M., Paige, D. (1995). The effects of a woman's significant other on her breastfeeding decision. .*Journal of Human Lactation, 11*(2), 103-109. doi:10.1177/089033449501100214

Kitzinger, J. (1995). Qualitative research: Introducing focus groups. *Bmj, 311*(7000), 299-302. 10.1136/bmj.311.7000.299

Kulka, T. R., Jensen, E., McLaurin, S., Woods, E., Kotch, J., Labbok, M., & Baker, S. (2011). Community based participatory research of breastfeeding disparities in African American women. *Infant Child Adolescent Nutrition, 3*(4), 233-239. doi:10.1177/1941406411413918

Lathrop, B., & Pritham, U. A. (2014). A pilot study of prentatal care visits blended group and individual for women with low income. *Nursing Women's Health*, Dec *18*(6), 462-74. doi: 10.1111/1751-486X.12159.

Lawrence, R. A. & Lawrence, R. M. (2016). *Breastfeeding:A guide for the medical profession.* 8th edition. Philadelphia, PA: Elsevier.

Leruth, C., Goodman, J., Bragg, B., & Gray, D. (2017). A multilevel approach to breastfeeding promotion: Using healthy start to deliver individual support and drive collective impact. *Maternal and Child Health Journal, 21*(S1), 4-10. doi:10.1007/s10995-017-2371-3

Lewallen, L. P., & Street, D. J. (2010). Initiating and sustaining breastfeeding in african american women. *Journal Obstetric, Gynecologic Neonatal Nursing, 39*(6), 667-674. doi:10.1111/j.1552-6909.2010.01196.x

Lok, K. Y. W., Bai, D. L., & Tarrant, M. (2017). Family members' infant feeding preferences, maternal breastfeeding exposures and exclusive breastfeeding intentions. *Midwifery, 53,* 49-54. doi:10.1016/j.midw.2017.07.003

Lutenbacher, M., Karp, S. M., & Moore, E.,R. (2016). Reflections of black women who choose to breastfeed: Influences, challenges and supports. *Maternal Child Health J, 20*(2), 231-239. doi:10.1007/s10995-015-1822-y

Manstead, A. S. R, Proffitt, C., & Smart, J.L.(1983). Predicting and Understanding Mothers' Infant-Feeding Intentions and Behavior: Testing the Theory of Reasoned Action. *Journal of Personality and Social Psychology*, 44:, 657-671. doi:10.1037/0022-3514.44.4.657;10.1037//0022-3514.44.4.657

McCarter-Spaulding, D. (2007). Black women's experience of breastfeeding: A focus group's perspective. *Journal of Multicultural Nursing and Health, 13*(1), 18-27. Retrieved from http://Journal of Multicultural Nursing.org

McCann, M. F., Baydar, N., & Williams, R. L. (2007). Breastfeeding attitudes and reported problems in a national sample of WIC participants. *Journal of Human Lactation, 23*(4), 314-324. doi:10.1177/0890334407307882

Mickens, A. D., Modeste, N., Montgomery, S., & Taylor, (2009). Peer Support and Breastfeeding Intentions Among Black WIC Participants. *Journal of Human Lactation, 25*(2), 157-162. doi: 10.1177/0890334409332438

Morse, J. M., Field, P., & Field, P. (1995). *Qualitative research methods for health professionals* (2nd ed.). Thousand Oaks, CA: Sage Publications

Moustakas, C. E. (1994). *Phenomenological research methods*. Thousand Oaks, Calif;London;: SAGE

Nommsen-Rivers, L. A., Cohen, R. J., Chantry, C. J., & Dewey, K. G. (2010). The InfantFeeding Intentions scale demonstrates construct validity and comparabilityinquantifying maternal breastfeeding intentions across multiple ethnic groups. *Maternal and Child Nutrition, 6*(3), 220-227. doi:10.1111/j.1740-8709.2009.00213.x

Nommsen-Rivers, L. A., & Dewey, K. G. (2009). Development and validation of the infant feeding intentions scale. *Maternal and Child Health Journal, 13*(3), 334-342. doi:10.1007/s10995-008-0356-y

Obeng, C. S., Emetu, R. E., & Curtis, T. J. (2015). African-American Women's Perceptions and Experiences About Breastfeeding. *Front Public Health, 3,* 273. doi:10.3389/fpubh.2015.00273

Ohio Department of Health, Bureau of Vital Statistics (2016). Ohio Infant Mortality Rates. Retrieved from http:// https://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/cfhs/OEI/2016-Ohio-Infant-Mortality-Report-FINAL.pdf?la=en

Pattison, K. L., Kraschnewski, J. L., Lehman, E., Savage, J. S., Downs, D. S., Leonard, K. S.,Kjerulff, K. H. (2019). Breastfeeding initiation and duration and child health

outcomes in the first baby study. *Preventive Medicine, 118*, 1-6. doi:10.1016/j.ypmed.2018.09.020

Persad, M. D., & Mensinger, J. L. (2008). Maternal breastfeeding attitudes: Association with breastfeeding intent and socio-demographics among urban primiparas. *Journal of Community Health*, 33(2), 53-60. doi:10.1007/s10900-007-9068-2

Pollock, C. A., Bustamante-Forest, R., & Giarratano, G. (2002). Men of diverse cultures: Knowledge and attitudes about breastfeeding. *Jounral of Obstetrics Gynecologic Neonatal Nursing, 31,* 673-679. doi:10.1177/0884217502239210

Polit, D. F., & Beck, C. T. (2014). *Essentials of nursing research: Appraising evidence for nursing practice* (8 Eighth ed.). Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins

Purposeful sampling. (2013). In Emmel, N. *Sampling and choosing cases in qualitative research: A realist approach* (pp. 33-44). London: SAGE Publications Ltd doi: 10.4135/9781473913882

Robinson, K. M., & VandeVusse, L. (2011). African American women's infant feeding choices: prenatal breast-feeding self-efficacy and narratives from a black feminist perspective. *Journal Perinatal Neonatal Nursing, 25*(4), 320-328; quiz 329-330. doi:10.1097/JPN.0b013e31821072fb

Ross-Cowdery, M., Lewis, C. A., Papic, M., Corbelli, J., & Schwarz, E. B. (2017). Counseling about the maternal health benefits of breastfeeding and mothers' intentions to breastfeed. *Maternal and Child Health Journal, 21*(2), 234-241. doi:10.1007/s10995-016-2130-x

Saunders-Goldson, S., & Edwards, Q. T. (2004). Factors associated breastfeeding intentions of african-american women at military health care facilities. *Military Medicine, 169*(2), 111-116. doi:10.7205/MILMED.169.2.111

Spencer, B., Wambach, K., & Domain, E. W. (2015). African American Women's Breastfeeding Experiences: Cultural, Personal, and Political Voices. *Qualitative Health Research, 25*(7), 974-987. doi:10.1177/1049732314554097

Stuebe, A. M., & Bonuck, K. (2011). What predicts intent to breastfeed exclusively? Breastfeeding knowledge, attitudes, and beliefs in a diverse urban population. *Breastfeeding Medicine, 6*(6), 413-420. doi:10.1089/bfm.2010.0088

Tenfelde, S., Finnegan, L., & Hill, P. D. (2011). Predictors of breastfeeding exclusivity in a WIC sample. *Jounral of Obstetric Gynecological Neonatal Nursing, 40*(2), 179-189. doi:10.1111/j.1552-6909.2011.01224.x

Thompson-Bagley, C. & Walker, B.L., (1998). Basics of Research (Part 12): Qualitative Research. *Air Medical Journal*,17(2), 65-70.doi 10.1016/S1067-991X(98)90022-0

U.S. Department of Health and Human Services. Office on Women's Health (2000). *Breastfeeding: HHS Blueprint for Action on Breastfeeding*. Retrieved from http://www.pnmc-hsr.org/wp-ontent/uploads/2011/01/BreastfeedingBlueprint.pdf

U.S. Department of Health and Human Services. (2005). Theory at a Glance: A guide for Health Promotion Practice. Retrieved from http://www.sbccimplementationkits.org

U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau. (2008). *The Business Case for Breastfeeding: Steps for Creating a Breastfeeding Friendly Worksite.* Retrieved from http://www.mchb.hrsa.gov/pregnancyandbeyond

U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. (2007). *Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries* (AHRQ Publication No. 07-E007). Retrieved from http://www.archive.ahrq.gov/downloads/pub/evidence/pdf/brfout/brout.pdf

Vahlquist, B. Introducation. Contemporary patterns of breast-feeding Report of the WHO Collaborative Study on Breast-feeding. Geneva: World Health Organization, 1981. Retrieved from https://dx.doi.org/10.1001/archpedi.1982.03970450109034

Vari, P., Vogeltanz-Holm, N., Olsen, G., Anderson, C., Holm, J., Peterson, H., & Henly, S. (2013). Community Breastfeeding Attitudes and Beliefs. *Health Care for Women Internaional, 34*(7), 592-606. doi.10.1080/07399332.2012.655391

Victoria, C.G., Bahl, R., Barros, A.J.D., Franca, G.V.A, Horton, S., Krasevec, J. & Rollins, N.C. (2016). Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. *The Lancet*, 387(10017), 475-490. doi: 10.1016/S0140-6736(15)01024-7

Wambach, K. A. (1997). Breastfeeding intention and outcome: A test of the theory of planned behavior. *Research in Nursing and Health, 20*(1), 51-59. doi:10.1002/(SICI)1098-240X(199702)20:1<51::AID-NUR6>3.0.CO;2-T

Ware, J. L., Webb, L., & Levy, M. (2014). Barriers to breastfeeding in the african american population of shelby county, tennessee. *Breastfeeding Medicine, 9*(8), 385-392. doi:10.1089/bfm.2014.0006

West, E., & Knight, R. J. (2017). Mothers' milk: Slavery, wet-nursing, and black and white women in the antebellum south. *Journal of Southern History, 83*(1), 37-68. doi:10.1353/soh.2017.

World Health Organization Collaborative Study Team on the Role of Breastfeeding and the Prevention of Infant Mortality. (2000). Effect of Breastfeeding on infant and child mortality due to infectious diseases in less developed countries: A pooled analysis. Lancent, 355(9202), 451-455.

Appendix A: Zip Codes

Appendix A

2011-2015 Hamilton County Infant Mortality Rate (Provisional)

Zip		Rate (per 1,000)
45203	Queensgate, West End	29.2
45214	Fairmount, West End	21.1
45225	Cumminsville, Millvale, Fairmount, Westwood, Villages of Roll Hill	18.9
45232	Winton Place, Winton Hills, Northside	17.1
45223	Mt. Airy, Northside, Millvale	16.2
45237	Golf Manor, Bond Hill, Roselawn, Amberly Village	14.7
45207	Evanston	13.5
45224	College Hill	13.4
45240	Forest Park, Pleasant Run, Parkdale	13.4
45204	Price Hill	13.0
45202	Over the Rhine, Mt. Auburn	13.0
45229	Avondale, North Avondale	12.3
45002	Cleves, Addyston, NorthBend, Grandview	12.0
45211	Westwood, Cheviot	11.6
45231	Mt. Healthy, Pleasant Run	11.6
45215	Woodlawn, Lincoln Heights, Wyoming, Reading, Arlington Heights	11.4
45219	Mt. Auburn, Clifton Heights	11.3
45205	Price Hill	11.2
45206	Walnut Hills	11.1
45251	Colerain	10.9
45233	Saylor Park, Delhi	10.6
45213	Pleasant Ridge	10.3
45140	Loveland	9.3
45244	Newtown, Mt. Carmel, Anderson	9.3

Zip		Rate (per 1,000)
45249	Montgomery, Symmes	8.3
45216	Hartwell, Elmwood	8.2
45239	White Oak, Monfort Heights	6.8
45238	Covedale, Delhi	6.6
45227	Fairfax, Madisonville, Mariemont	6.4
45248	Green Township	6.4
45209	Oakley	6.4
45212	Norwood	5.8
45030	Harrison	5.7
45242	Montgomery, Blue Ash	5.4
45247	Colerain, White Oak	5.4
45241	Sharonville, Evendale	5.2
45226	Mt. Washington, California	5.1
45246	Glendale, Forest Park	5.0
45220	Clifton, CUF	4.8
45230	Mt. Washington, Anderson	4.1
45208	Hyde Park	4.0
45255	Forestville	3.8
45243	Indian Hill, Madeira	2.8
45236	Dillonvale, Kenwood, Deer Park, Silverton	2.5
45217	St. Bernard	2.5
45052	North Bend	0.0
45218	Greenhills	0.0
45252	Colerain	0.0

Hamilton County's 2011-2014 provisional infant mortality rate is 9.3/1,000.

cradle cincinnati
every baby every day

Appendix B: Recruitment Flier

Appendix B

Pregnant moms we want to hear from you! We are looking for pregnant African American moms who are Head Start eligible

- Your input on best infant feeding practices is important
- Please come and share your thoughts, ideas and experiences with other moms

WHEN: TBD

WHERE: Room 234
Community Action Agency

Registration required:
https://goo.gl/forms/cPkcuFPnbyE9kDtD2 (click on link or copy and paste in your browser) limited spaces

CONTACT/RSVP by phone:

Email:

Event brought to you by:

Breastfeeding Outreach for Our Beautiful Sisters - BOOBS

Appendix C: Focus Group Questions 1-15

Location _____ Date _____

Question 1: Do you plan to formula feed or breastfeed your baby and why?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 2: What are your feeding plans for your baby after delivery?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 3:What are your feeding plans when your baby is one month old?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 4: What are your feeding plans when your baby is three months old?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 5: What are your feeding plans when your baby is 6 months?

A	F
B	G
C	H
D	I
E	J

Appendix C: Focus Group Questions 1 – 15

Location _____ Date _____

Question 6: Do you think breastfeeding is the best feeding for infants?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 7: What do you know about the reasons that breastfeeding is important for babies?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 8: What do you know about the reasons that breastfeeding is important for mothers?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 9: Who or what has encouraged you to breastfeed?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 10: Who or what has discouraged you to breastfeed?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 11: What or who was the most important influence on you in making your feeding decision for your baby?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 12: What are some of the reasons you know that women START breastfeeding after they start?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 13: What are some of the reasons you know that women STOP breastfeeding after they start?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 14: What do you think is the biggest barrier to breastfeeding?

A	F
B	G
C	H
D	I
E	J

Location _____ Date _____

Question 15: If there is one thing that could be done to help more mothers breastfeed successfully what do you think that would be?

A	F
B	G
C	H
D	I
E	J

Appendix D: Interview Protocol

Set Up	Equipment to be used: • Tape Recorder (tested twice for functioning) • Batteries for taper recorder • Template for recording participants responses • Ink Pens • Post it notes Arrive at the interview 1.5 prior to start of session Test audio equipment to make sure it works Set up table tents at each seat. Table tents will have respondents' letters on front and back of table tent. Will set up for healthy snacks and soft drinks
Introduction and Start of Session: 5 – 10 minutes	Welcome and Thank you – * will give mothers a 5–7 minute grace period being that they are expecting • Introduce myself and the what the project is about • Go over some housekeeping items Bathroom location Food /snacks available Confidentiality of responses and voluntary participation • Inform women that the session is being recorded and why • Give information on how long they will be in session and how the questions and conversation will flow • Encourage everyone to speak and to

	be respectful and nonjudgmental, no right or wrong answers • Explain options to ask questions after the focus group session
Interview Questions Time – 60 minutes	Questions as described in Focus group questions Appendix C
Closing 5 -10 minutes	Thank women for their time Distribute in-kind donated baby items and gifts

Appendix E: Record Responses

Location _____Date _____

A	F
B	G
C	H
D	I
E	J

Appendix F: Organization Research Approval

Appendix F: CAA Approval

From: [redacted]
Subject: RE: Data collection persmission request - Doctorial candidate [redacted]
Date: Sep 28, 2017, 4:19:36 PM
To: [redacted]

Janelle,
Congratulations and thank you for you dedication and commitment to the lack of attention to this matter among African American women. I am in full support of your efforts to collect data needed to gain an understanding of information about breastfeeding impact moms decisions to breastfeed.

Please ensure that parents will sign an acknowledgment that their information will be shared for research.

Thank you and if you need additional assistance, please don't hesitate to contact me.

[redacted]

Community Action Agency
CINCINNATI | HAMILTON COUNTY

HEAD START
Graduation Starts Here
EARLY EDUCATION SCHOOLS

Inspiring Dreams, Improving Lives

From: [redacted]
Sent: Wednesday, September 27, 2017 8:25 AM
To: [redacted]
Subject: Data collection persmission request - Doctorial candidate Janelle McClain

[redacted]

Thank you for the opportunity to help further advance our communities dedication to better health outcomes for our African American moms and infants.