AN EXPLORATION OF THE ECOLOGY OF NON-CAUCASIAN MOTHERS' BREASTFEEDING PRACTICES

A Thesis

Presented to the faculty of the

Department of Graduate and Professional Studies in Education

California State University, Sacramento

Submitted in partial satisfaction of
the requirements for the degree of

MASTER OF ARTS

in

Child Development

by

Jagdish Kaur Majju

SUMMER
2019

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by

Jagdish Kaur Majju

Approved by:

__________________________________, Committee Chair
Sheri E. Hembree, Ph.D.

__________________________________, Second Reader
Kristen Alexander, Ph.D.

____
Date

Student: Jagdish Kaur Majju

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Elisabeth Liles-Lourick, Ph.D. Date

Department of Graduate and Professional Studies in Education

Abstract

of

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Breastfeeding is considered to be the most intimate practice that a mother can provide for her child. However, in the United States many mothers do not meet the World Health Organization's recommendation for breastfeeding past 6 months, and this is particularly prevalent in non-Caucasian mothers. In this qualitative study the researcher used a semi-structured design to interview 10 non-Caucasian mothers in the Northern California region and used thematic content analysis to explore the data using Bronfenbrenner's bio-ecological model (Bronfenbrenner & Morris, 2007). This study found themes of challenges and rewards, support, work context, and culture were reoccurring in the mother's experiences and interactions while breastfeeding. The results found that the bio-ecological model could help explain how contexts can influence non-Caucasian mothers' support during breastfeeding. Overall, the findings show that non-Caucasian mothers find more support within their microsystems, rather than in their mesosystems or macrosystems in the U.S.

____________________________________, Committee Chair
Sheri E. Hembree, Ph.D.

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Date

ACKNOWLEDGEMENTS

I would like to thank my friends and family who supported me through this process and recognized the significance of my research. I would like to thank the professors in the Child Development Department at Sacramento State who helped me create a strong foundation to make this study possible. Lastly, I would like to thank the mothers in the study who shared their intimate experiences in the hopes that it would help other mothers and others understand their journey. I hope this research will emphasize the importance of breastfeeding mothers' experiences and highlight that breastfeeding for mothers can be unique, challenging, and rewarding, but more importantly that breastfeeding *will always be the mother's experience*.

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Chapter 1

INTRODUCTION

Breastfeeding is viewed by many as giving infants optimal physical and emotional care (Godfrey & Meyers, 2009; Jones et al., 2015), and is associated with positive outcomes for the child and mother (Godfrey & Meyers, 2009). The World Health Organization (WHO) and the American Pediatric Society (APS) recommend that healthy mothers feed only breast milk to infants for at least six months (Godfrey & Meyers, 2009).

Although breastfeeding is acknowledged as one of the most beneficial forms of nourishment and interaction between mother and child, breastfeeding rates remain low in the United States (Godfrey & Meyers, 2009). Four out of five mothers do initiate breastfeeding in the U.S.; however, continuous breastfeeding until 6 months remains low. This can indicate a lack of support for mothers to continue to breastfeed in the U.S. (National Immunization Survey, 2018). Furthermore, previous research indicates that mothers' breastfeeding practices are not constant across women of different backgrounds (Jones et al., 2015). The purpose of the current study is to use a bio-ecological lens to explore contextual factors that serve as barriers or facilitators to breastfeeding experience by these mothers.

Rates of Breastfeeding

In 2015, 83.2 % of infants of U.S. infants were breastfed initially, 46.9% infant received only breast milk at 3 months, and 54.9% of mothers were breastfeeding but only 24.9 % infants received only breast milk at 6 months (National Immunization Survey, 2016-2017). Moreover, 17.2 % of infants receive formula milk before they are two days old (National Immunization Survey, 2016- 2017) The United States federal government, in collaboration with agencies such as the Centers for Disease Control (CDC), the National Center for Health Statistics, and the public have developed national surveys to help understand disparities in health, differences in access to health services, to explore social factors, and provide the public with health information. In order to help create a national focus on health issues and threats in the United States the Department of Health and Human Services sets forth Healthy People goals every decade. Healthy People goals include initiatives about breastfeeding practices based on data from 3 decades of initiatives, baseline measures, and specific targets (Objective Development and Selection Process, 2016). For example, one Healthy People 2010 goal was to increase mothers' initial breastfeeding to 75%, and this goal was met. However, other goals of exclusive breastfeeding for the first 6 months and another 6 months of continuous breastfeeding along with the introduction of solid foods have not been met. Currently, the Healthy People 2020 goals include increasing the percentage of infants who are ever breastfed (at least once) to 81.9 percent and infants who are continuously breastfed for six months up to 60.6 percent (Committee Opinion No. 570, 2013). However, continued exclusive breastfeeding goals have not been met, especially for non-Caucasian mothers. According

to the Healthy People 2020 goals the target rate for breastfeeding at 6 months is 60.6 percent and has not been met, nor has the goal to exclusively breastfeed of 25.5 percent until 6 months been met.

Explaining Breastfeeding Practices

Research suggests that within the U.S. there are various factors that make breastfeeding difficult for mothers. Studies focusing on mothers of different ethnic backgrounds such as Asian American, Hispanic, and African American, indicate differences and patterns exist in initiation and duration of breastfeeding, but the studies do not delve into why these patterns exist (Purdy, 2010). Through a prospective survey, Purdy (2010) went further to explain patterns and found that White mothers exclusively breastfeed the first week, but Hispanic and African American mothers were more likely to give formula to the infant the first week because family culture finds formula to be acceptable if they are not producing sufficient milk; this contradicts medical advice to exclusively breastfeed for the first six months (Purdy, 2010).

Other factors such as socioeconomic status, relationship status, and education are associated with the mother's capacity to breastfeed. For instance, mothers who have less than a high school diploma may lack knowledge about the benefits of breastfeeding or proper techniques for breastfeeding (Committee Opinion No.570, 2013; Purdy, 2010). NIS data show a correlation between the amount of education a mother has and the initiation and duration for breastfeeding. Approximately 69.3 % of mothers who have less than a high school education initiate breastfeeding, whereas 92.2% of mothers who have graduated college tend to initiate breastfeeding 92.2 %. Similarly, only 14.9% of mothers

without a high school education continue to breastfeed for six months, whereas approximately 31% of mothers who are college graduates, do so (CDC, 2013).

Nationally, rates for exclusive breastfeeding and continuous breastfeeding are below public health recommendations, despite efforts to increase rates among all mothers for the infants' first 6 months (Godfrey & Meyers, 2009). Previous research indicates that U.S. non-Caucasian mothers have lower rates of breastfeeding compared to Caucasian mothers in the U.S. (Godfrey & Meyers, 2009; Jones et al., 2015). Studies have not yet specifically focused on factors that can uniquely affect non-Caucasian mothers' breastfeeding rates or why non-Caucasian mothers' breastfeeding rates are lower than Caucasian mothers breastfeeding rates. Studies that only consider socio-demographic factors, such as race/ethnicity in the United States are insufficient to explain the disparities in breastfeeding practices for women of different backgrounds and examine non-Caucasian mothers' experiences in the U.S. because the socio-demographic factors do not show the mothers' experiences. Thus, it is imperative to explore factors within non-Caucasian mothers' context and whether these factors can positively or negatively influence breastfeeding practices for non-Caucasian mothers to see if there are unique factors influence their breastfeeding practices. Using a qualitative approach, this current study draws from previous literature to explore factors that influence non-Caucasian mothers' breastfeeding practices through a bio-ecological lens.

Theoretical Framework

Urie Bronfenbrenner's bio-ecological systems theory provides a framework for understanding psychological and contextual factors that influence behaviors, and serves as the basis for the current study. Bronfenbrenner's bio-ecological model has four defining components, the process, person, context, and time. The process includes interactions of the person with the environment which influence development. The person is characterized by dispositions, resources, and demands over the life course. (Bronfenbrenner & Morris, 2007). Furthermore, the characteristics of a person depending on the interactions with the context can shape proximal processes. Bronfenbrenner examines the person, process of development, context, and time through systems (Bronfenbrenner, 1977; Bronfenbrenner & Morris, 2007; Tudge et al., 2009). Bronfenbrenner acknowledged that a person brings his/her genetics and biological aspect into the social situation, as well as personal characteristics. Bronfenbrenner argued that a multi-person systems approach is necessary to analyze phenomena in human development and go beyond a behavioral setting (Tudge et al. 2009).

In Bronfenbrenner's bio-ecological model the person- context interrelatedness is described as the connection between the context (i.e., culture) and an aspect of an individual (e.g., race). Person-context interrelation is extended to then include *proximal processes.* Proximal processes can be defined as the connection between the context and outcome of interest of an individual (Bronfenbrenner & Morris, 2007; Tudge et. al, 2009). In the PPCT model, the person brings their genetic and social dispositions into a context; these dispositions are labeled as demand, resource, and force characteristics.

For Bronfenbrenner, context is characterized by five interrelated systems that are based on an individual's relationships within and between settings. The person is situated in the *context;* Bronfenbrenner labels contexts as the micro, meso, exo, macro, and chrono systems. The microsystem consists of the direct interrelationship between a person and his/her immediate setting. Conventionally, a child can be seen at the center of the microsystem, because the caregiver directly influences the child (Algood et al., 2011). However, in this current study the mother will be at the center of the microsystem and the researcher will focus on how interactions with the mother through the systems can influence the mothers' breastfeeding practices. The mesosystem consists of the interaction of multiple systems, more specifically, the relationships between two or more microsystems (e.g., parent and teacher). The exosystem expands the model by encompassing structures that could indirectly influence a microsystem for an individual (i.e., parent's workplace, parental supports; Bronfenbrenner & Morris, 2007). The macrosystem encompasses all the other systems in a subculture or cultural context (e.g., political attitudes). This entails situating the systems within cultural ideology that can affect the social and psychological factors for an individual (Algood et al., 2011). For example, historically with the creation of infant formula and advertising infant formula to be as good as breastmilk many women may not see breastfeeding as natural or instinctive and culturally wean children off around a year (Purdy, 2010). The chronosystem was added to the four first systems to consider the changes that happen over time to an individual, as an aspect in development for the individual (Vélez-Agosto et al., 2017).

These systems are nested within each other and have bidirectional relationships and can have indirect or direct effects on the developing individual.

Breastfeeding practices can be understood as influenced by process, person, context, and time (PPCT). In the case of breastfeeding practices, a process can be considered the practice of breastfeeding; the person(individual) is the mother; the context as workplace, public, home, etc.; and time can be when the baby was born, where the mother fed breast milk, or how long she is able to breastfeed (Johnston & Esposito, 2006; Leeming et al., 2013). Moreover, time includes the effect of when the mother is breastfeeding in a historical sense.

The current study applies these bio-ecological ideas to an examination of breastfeeding practices, that is, how a transition in a mother's life interacts with context to affect the mothers' behaviors and experiences within the process of breastfeeding. If mothers are considered as the individual in the microsystem, then mothers' beliefs, way of being, and self-view can be studied as an element that influences breastfeeding contexts. For example, a mother's belief, way of being, and view of herself have been associated with her success of breastfeeding when she returns to work (Johnston & Esposito, 2006). This can show how the mothers' breastfeeding decisions and behaviors in the microsystem (mother's immediate environment) can be connected to the workplace exosystem. A bio-ecological framework can allow a contextual viewpoint of mothers' breastfeeding practices along with an exploration of how others affect mothers' breastfeeding practices as well. This study explores the contextual factors within the mothers' community and family that impact non-Caucasian mothers' breastfeeding

practices and specifically by how bio-ecological settings relate to mothers' beliefs, ways of being and self-view within family and community contexts.

The Current Study

Studies have examined non-Caucasian women's rates or habits of breastfeeding, but there is a paucity of specific research on why non-Caucasian women's breastfeeding rates are lower. There is not a coherent model to understand the variability in infant breastfeeding behaviors across the United States. In order to understand the findings and disparities in literature, the researcher utilizes the bio-ecological model framework to examine influential factors that support or hinder the occurrence and continuation of infant breastfeeding. The bio-ecological model framework helps explore the following research questions:

(a) What are non-Caucasian mothers' perceptions of their breastfeeding experiences in their bio-ecological settings?

(b) What are non-Caucasian mothers' perceptions of the influence of contextual support factors on their breastfeeding practices and how is this related to mothers' breastfeeding experiences?

Methods

Design

This qualitative study included a semi-structured interview in order to explore factors within the participant's bio-ecological settings. The participants completed a demographic survey and answered open-ended questions. The qualitative design allowed

the researcher to probe for further information when needed in order to gather more information.

Participants

Participants included 10 volunteers recruited through online Facebook breastfeeding groups and bulletin boards on the Sacramento State University campus, and via email on Master's Linked email. The researcher asked the campus for permission to post recruitment fliers in their office lobby and as the site administrators of the Facebook groups to post the flyer (see Appendix), others could repost the flyers on the site as well. The fliers asked potential participants to contact (via phone, text, or email) the researcher to set up an interview date and location. The fliers displayed that a participant will receive 10 dollars for their help in the study. Participants were selected for an interview if they self-identified as non-Caucasian and their ages ranged from 18 to 40 years. All participants had given birth to at least one child in the United States in the last two years.

Data Collection

Data were gathered through in-person and on the phone audio-recorded interviews on the researcher's locked cell phone. The phone calls were recorded through an application called Tape A Call. Participants were able to choose when and where the interview took place in hopes that this made them feel comfortable with the sensitive topic. After a pseudonym was selected, the audio recording began and informed verbal consent was obtained. The interview started with a demographic questionnaire about age, education, work status, and the mothers' marital status. After the participant completed the questionnaire the verbal interview began. The interviews were semi-structured and

lasted about 30-60 minutes depending on the interviewees' responses (See Appendix A). The participants were reminded that they were free to skip any questions. Participants were debriefed and received a $10 gift card for any amount of participation they provided during the study (See Appendix A).

After collecting the recorded interviews, the researcher transcribed the interviews and then read the interviews to note commonalities. The interviews were read again and themes were identified to begin the thematic analysis process (Braun & Clark, 2013).

The researcher then found excerpts from all interviews that related to the themes. Then the researcher used the bio-ecological systems theory to categorize the themes from the interview data and develop a coherent understanding of the mothers' breastfeeding experiences. Finally, the researcher was able to use the excerpts to show evidence for microsystem, mesosystem, macrosystem, and exosystem supports or contexts in the mothers' breastfeeding experiences using thematic analysis.

Definitions of Terms

Several breastfeeding terms are used in the current study. *Breastfeeding* is the process of feeding an infant directly from the breast. *Colostrum* refers to the creamy yellow initial breastmilk that a mother produces in the first two weeks of her pregnancy often referred to as "liquid gold" (Walker, 2010). Further, exclusive breastfeeding is when the mother is only feeding her child breastmilk (Labbok, 2000), and predominant breastfeeding is when a mother is feeding a child breastmilk more than fifty percent of the time (Labbok, 2000). In some cases, mothers will to choose to do complementary breastfeeding which describes the scenario when a child drinks breastmilk half the time

along with formula milk (Labbok, 2000). Lastly bottle-feeding is simply feeding a child breastmilk or infant formula milk or both with a bottle (Labbok, 2000).

In this study, *context* refers to the environmental systems in the bio-ecological systems model, which involves the nested systems in an individual's environment that influence an individual development throughout the lifespan. The four interrelated systems include: (a) the *microsystem*, the complex relations between developing persons and their immediate environments, (b) the *mesosystem*, the interrelations among major settings at particular point in an individual life (i.e. school, family, friends, church), (c) the *exosystem*, a larger system containing social structures, that the individual is not situated in but influenced by such as government agencies, mass media, transportation systems and, (d) the *macrosystem*, the overarching patterns of culture/subculture pertaining to economic, social, educational, legal, political systems that explicitly or implicitly influence micro, meso, and exo systems, by carrying information and ideology (Bronfenbrenner 1977; Tudge, 2009). These systems are interrelated and the individual is situated in these systems.

Limitations

The limitations of this study are that the sample size is small because only ten women participated in study and this is sample was not representative of the general population in the United States. The interviews were conducted with two mechanisms (on the phone and in person) thus the type of responses the researcher received could have been different or less descriptive. The study only takes a snapshot of the mothers' own experiences and there is nobody to validate her responses, thus her interviews have

bias. The variety of culture in the sample is a limitation because the mothers' cultures were not representative of the general population.

Overview of the Thesis

The thesis was introduced in the current chapter. Chapter Two provides a review of literature relevant to the current study, the contexts for breastfeeding, socio-cultural factors and an application of the bio-ecological model. Chapter Three describes the methods and procedures used in the current study. Chapters Four and Five provide the results and discussion along with limitations and questions for future studies.

Chapter 2

REVIEW OF THE LITERATURE

Breastfeeding practices are complex, intimate, and occur in family and community contexts. In order to study the complexity of breastfeeding processes it is important to use a model that can holistically explore breastfeeding practices throughout a mother's contexts while considering the mother's interactions in these contexts. Bronfenbrenner's (2007) bio-ecological model has four defining components: process, person, context, and time. Regarding context and time, the bio-ecological model includes the systems that surround an individual, which have interrelationships that can be complex and affect an individual's development in a process, such as breastfeeding. The different settings include the microsystem (the environment where the individual is situated), the mesosystem (the relationships between microsystems), the exosystem (contexts that indirectly affect an individual), the macrosystem (the larger institutions of culture and social structures), and the chronosystem (two elements of time including individual development and the time at which contexts and events occur as well as politico-historical time and the way larger events change context over time).

In addition to context and time, the bio-ecological model places importance on the person and process. The process includes interactions of the person with the environment, which influence development. The person is characterized by dispositions, resources, and demands over the life course, including genetics and biological aspects (Bronfenbrenner & Morris, 2007). Person- context interrelatedness is central to the model and is described

as the connection between the context (i.e., culture) and an aspect of an individual (e.g., race). Person-context interrelation includes *proximal processes,* or the person's connections with another individual, object, or symbol (Bronfenbrenner & Morris, 2007; Tudge et al., 2009).

The current study uses a bio-ecological lens with the mother at the center of the model, focusing on factors pertaining to breastfeeding practices, including the mother's family, work, and cultural context. The following review provides overview of the theoretical framework for the study. Then the review turns to a discussion of the breastfeeding in the context of the mother's family and work settings, and larger social-cultural context.

Applying Bio-ecological Theory to Breastfeeding Contexts

The current study takes a bio-ecological approach to understand breastfeeding practices as a phenomenon embedded within different contexts. This current study investigated non-Caucasian mothers' bio-ecological settings to explore how their contexts relate to the way she carries out breastfeeding in her life; that is, how a transition in a mother's life interacts with context to affect the mothers' behaviors and experiences within the process of breastfeeding. Breastfeeding practices can be understood as influenced by characteristics of the mother's process, person, context, and time (PPCT). If mothers are considered as the individual in the microsystem, then mothers' beliefs, way of being, and self-view can be studied as an element that influences breastfeeding. In the case of breastfeeding practices, a process can be considered the practice of breastfeeding; the person(individual) is the mother; the context as workplace, public,

home, etc.; and time can be when the baby was born, where the mother fed breast milk, or how long she is able to breastfeed (Johnston & Esposito, 2006; Leeming et al., 2013).

In one study that applied the bio-ecological model in breastfeeding contexts, Tiejde et al. (2002) interviewed postpartum mothers about infant feeding experiences. The sample included 95 women who participated in phone interviews. Transcribed interviews were organized into five contextual levels for analysis to test the goodness of fit of the bio-ecological model. The contexts mirrored Bronfenbrenner and Morris' (2007) model to include multiple levels of context: the mother-infant dyad, family, healthcare delivery system, community, and society/culture experiences that influence breastfeeding contexts.

The first larger categorical theme *the mother-child infant dyad*. Tiejde et al. (2002) identified four subcategories related to breastfeeding: information, baby's or mother's illness/medical conditions, is baby getting enough milk, and maternal characteristics. The researchers described that most of the women in the study were self-educated through websites and library resources and felt that reading helped them find information they needed about breastfeeding (Tiejde et al., 2002). The illness/medical conditions described how the illness for the child (jaundice, NICU, colic, etc.) and or mother (sore nipples, a virus, etc.) disrupted milk flow and breastfeeding. The study reported 3 postpartum hospitalizations for the mothers, 7 extended stay in the hospital for infants and 3 infant rehospitalizations. A third of the mothers were concerned about the baby getting enough milk. The last category about maternal characteristics describes how

mothers' confidence, coping skills, problem solving, could be related to mothers' breastfeeding habits.

The second categorical theme Tiejde et al. (2002) found was family/ partner/significant other. The *emotional support* for mothers from a partner, or mother can play a role in breastfeeding duration (Tiejde et al., 2002). In this study the researchers found results similar to previous studies, that social support is a needed for women who were breastfeeding 6 weeks after birth (Tiejde et al. 2002). Support from friends, mothers, husbands, sisters, was helpful for the mothers in this study.

The third theme identified was *healthcare delivery systems*, with inconsistencies reported in support (positive or negative) from healthcare systems. For example, individuals within the same hospital showed different capacities of care; some mothers had individuals who "really worked" with them, whereas others said they were "expected to know" about breastfeeding. The researchers also found that the presence of a lactation consultant did not necessarily result in women breastfeeding, nor did the absence of a lactation consultant result in the women not breastfeeding. However, most of the women who were breastfeeding after 6 weeks were still in contact with the healthcare system in a way, whether the contact was via telephone, pamphlets, or a pediatric group.

A fourth theme identified by Tiejde et al. (2002) was community influences that mothers drew support from for breastfeeding (e.g., support groups, consultants, community and community influences). Only 10 women within the study mentioned community resources for direct support. Others mentioned difficulties with balancing jobs, school, and breastfeeding, or how to manage combining work and breastfeeding.

The comments from women that they were trying to continue breastfeeding revealed inconsistencies in support (Tiejde et al. 2002).

Lastly, the fifth theme of culture/society was less dominant, however the researchers did not directly interview mothers about culture/society. The researchers found that women's changes to their bodies in this study were mentioned as a cultural issue. Feeling uncomfortable with or unprepared for body changes was a theme that the researchers found. Overall Tiejde et al. (2002) found that the bio-ecological model can be a good fit for collecting rich data about breastfeeding practices because the model allows a detailed collection from the mother about personal, social, and cultural factors that influence breastfeeding contexts for mothers.

Tiejde et al. (2002) provide a new outlook on how the bio-ecological model can be applied to examine different contexts that influence mothers' infant feeding behaviors and how these contexts are interrelated, however the sample in this study mostly consisted of white women. Tiejde et al. (2002) also did not examine all the components of the PPCT model, specifically time. This current study is exploring how factors in non-Caucasian mother's contexts may influence their breastfeeding practices. Similar to Tiejde et al. (2002) mothers in this study were interviewed about their breastfeeding experiences based on a set of open-ended questions, transcribed, then the interview content was analyzed and categorized. However, the current study is not based on women who were in a hospital or child education classes but aimed to find a diversity of mothers a population in a local area in Northern California, where context and practices may differ. Further the current study aimed to explore how culture may or may not be a part of

family and community contexts for non-Caucasian mothers' breastfeeding. Following is a detailed review of research showing application of the PPCT model; each section focuses on person or context, with process (e.g., direct and indirect interactions related to breastfeeding practices) and time (e.g., mother's developmental time, duration of breastfeeding) embedded within each section.

Person: Mother as the Center of the Bio-ecological Model

Few studies have focused on the mother as a developing individual and how contexts affect her while she is engaging in the activity of breastfeeding while considering all aspects of the bio-ecological model. Those that have done so have included primarily homogeneous samples and do not represent current attitudes about breastfeeding while considering culture in the U.S. Considering a mother individually in the context of breastfeeding may be informative because proximal processes are bi-directional and the mothers' breastfeeding outcomes are related to the support or lack of support she receives within the micro, meso, exo, and macro systems. The bio-ecological systems theory places an individual (usually a child) in the center of the systems along with others in the environment; however, focusing on the breastfeeding mother as the center of the bio- ecological systems theory provides a unique view on maternal development and how the mother's breastfeeding practices are affected by various systems, including the addition of a child to her bio-ecological system. Moreover, if mothers are considered as the person center of the bio-ecological model, then mothers' beliefs, way of being, and self-view can be studied as an element that influences breastfeeding contexts. For example, a mother's belief, way of being, and view of herself

have been associated with her success of breastfeeding when she returns to work (Johnston & Esposito, 2007). This can show how the person (individual characteristics and resources), microsystem (mother's immediate environment), and chronosystem (individual developmental time) are connected to other systems (work environment) in supporting mothers' success or failure at breastfeeding. For example, women who work salaried job may have more flexibility in their schedules whereas women who are hourly may not (Johnson & Esposito, 2007). Moreover, Johnson & Esposito (2007) found that systems directly or indirectly through the mothers' interactions in these systems and that the workplaces did not have policies in place for breastfeeding.

Focusing on the mothers' adjustment to pregnancy aligns with Bronfenbrenner's model in that individuals (i.e., person) bring their own characteristics and dispositions into proximal processes. Mothers' bring their own characteristics to a context that affects the processes or relationships in their development and these can change over time. For example, Isabella and Isabella (1994) studied how mothers' social and personal characteristics prenatally and after birth related to their fulfillment of breastfeeding plans and terms of nursing (Isabella & Isabella, 1994). The study focused individual characteristics (social and personal) could relate to mothers' breastfeeding plans and fulfillment of breastfeeding. The sample included 32 Caucasian mothers who were studied over a 15-month period. The researchers used interviews and questionnaires to gather information about mothers' personal characteristics, interpersonal relationships, feeding intentions and problems, and feeding related problems. The mothers were surveyed at 1, 4, and 9 months postpartum to see how personal characteristics could

relate to exclusive breastfeeding practices over time. The study found that in the long term the success in exclusively breastfeeding was related to mothers' adjustment to pregnancy and motherhood, and satisfactions with emotional support from her partner and mother (Isabella &Isabella, 1994). Overall, results indicated that mothers' success in breastfeeding related to her personal characteristics as well as the interrelationships she had within her social settings (marriage, support systems), and the success in lactation related to certain types of help in her social settings (mother, health professionals, etc.). This study shows evidence of systems in the mothers' immediate contexts playing a role in her breastfeeding practices along with her characteristics as an individual. Moreover, the interactions the mother has with others such as her partner, mother, mother in-law, baby, or coworkers, can affect her breastfeeding practices and outcomes. Furthermore, mothers who most exclusively breastfed at 1 month reported better adjustment to motherhood over time, indicating that continued breastfeeding can help mothers validate their new roles and adjust because of the increased interactions with the child (Isabella & Isabella, 1994). Thus, one can examine breastfeeding practices with a person, process, context, and time model to assess how a new developmental activity in a mother's life affects her development as an individual who is breastfeeding. The current study is an exploration of the mother's experiences and behaviors related to breastfeeding within the context of family, community and culture.

Context: The Context for Breastfeeding

Research needs to focus on how and why non-Caucasian mothers may take different approaches to breastfeeding or what influential factors may affect non-Caucasian mothers' experiences. Contexts including direct interactions with family and healthcare experiences, as well as indirect interactions with the socio-cultural environment are important to consider. For example, studying direct interactions between mothers and their immediate contexts, Linares (2015) found that Hispanic mothers are more likely to bottle feed, which leads to lower rates of exclusive breastfeeding and duration of breastfeeding. Although most women in this study intended to breastfeed, about half opted to supplement with formula upon leaving the hospital. This can be due to many factors such as the acceptance of the pregnancy, type of delivery, age of the mother, and whether or not it was her first child (Linares, 2015).

Further, studying indirect interactions with the larger cultural context, Leeming et al. (2013) sampled in the UK and used symbolic interactionism as a tool to explore how mothers' immediate contexts and others' perceptions affect their breastfeeding practices. Leeming et al. (2013) examined contexts that can be categorized as Bronfenbrenner's microsystems and mesosystems in which women practiced breastfeeding. Leeming et al. (2013) lacks an exploration of how breastfeeding practices can change the family and social networks within first-time mothers' immediate contexts. The researchers recorded audio- diaries from mothers from semi-structured interviews to explore mothers' perceptions of immediate and larger social contexts pertaining to breastfeeding (Leeming et al., 2013). In some cases, mothers use breastfeeding as a way to bond whereas in other

cases mothers practice breastfeeding while being cognizant of others' perceptions and comfort levels depending on the context.

Family Context

Some studies have focused on relationships that surround the breastfeeding mother within her microsystems including, spouses, maternal mothers, friends, and the mother's family context. For example, Lemming et al. (2013) mentioned that infant feeding practices take place in social structures such as the microsystem of a family. Mothers need to balances all of their roles along with breastfeeding practices within these microsystems. Leeming et al. (2013) were interested in how breastfeeding fit or challenged the relationships or microsystems, and the mothers' perceptions about how family and social networks affected their breastfeeding practices. The roles within these social structures can include being a partner/wife, daughter, daughter-in-law, employee and so forth. For example, some mothers preferred having a bottle to feed their child because then the mothers felt their partners were able to bond with the baby, whereas other mothers did not see bottle feeding as important because the act of being able to breastfeed the baby was s meaningful to both the mother and father (Leeming et al., 2013). This shows how the microsystem and interactions the mother has with the father can affect specific choices mothers make while breastfeeding. In some cases, mothers felt that breastfeeding was a way for the child and the mother to be uninterrupted with bonding with their child when their own mothers or mothers-in-law wanted to help. Thus, previous relationships play a part in how the mother navigates breastfeeding practices. More specifically interactions mothers had while breastfeeding within their proximal

processes could affect the outcomes of breastfeeding. Moreover, these processes are bi-directional thus the mothers' individual characteristics are influenced by the interactions she has with those in her environment in respect to her breastfeeding practices.

Additionally, Cisco (2017) states that kinship can differ in their supports for breastfeeding mothers. Through data collected in a survey and event analyses, Cisco (2017) found that within 594 surveys that women who were receiving support from friends or family were 31% less likely to stop breastfeeding and 29% less likely to stop breastfeeding if they had a higher degree of frequency speaking to the father about breastfeeding. Overall, this study found that partners can provide different types of support (emotional, child care, informational, financial), as well maternal grandmothers. In particular, a mothers' own kin provide more support than her non-kin do, showing there are differences in microsystem supports and the proximal processes mothers receive in these microsystems. This indicates that the interactions mothers receive from their own kin can affect her breastfeeding practices and duration. Within mothers' proximal processes different types of support or lack of support from their microsystems can facilitate or hinder breastfeeding.

However, the sample in Cisco (2017) mostly included women who were White, educated, and married. There is a need to diversify the sample to see how their proximal processes can affect women of all backgrounds. Moreover, mothers, mother in- law sisters, and other family members may provide different types of support to the mother (Leeming et al., 2013). In particular, the approval, support, beliefs, and expectations of the mother's mother and spouse can relate to breastfeeding practices. Previous studies

show a connection between the relationships a mother has while she is breastfeeding and the current study explores how the mothers' relationships in her bio-ecological settings can relate to her breastfeeding experiences. Cisco (2017) help indicate that mothers' supports are embedded into her bio-ecological model but do not show how non-Caucasian mothers could have different types of interactions within these systems. This study intends to explore how non-Caucasian mothers; interaction within the bio-ecological model could differ.

The Work Context

Workplace context creates a bi-directional relationship that can affect the mother's breastfeeding practices. Mothers who are breastfeeding need to navigate interactions within their proximal processes in after returning to work. For example, if the mother has to return back to work sooner than expected she needs adjust her breastfeeding practice and navigate the work place context to make sure she has enough breastmilk supply for her child. Additionally, the workplace is influenced by society's larger structures or laws affect a mother's ability to navigate the system. For example, the space or time to breastfeed is dictated by a workplace policy that is determined by the mother's employer, and she does not have control over these policies. According to Robyn (2018), breastfeeding challenges the private versus public hemispheres for those still breastfeeding in the workplace. Women who breastfeed require a pump, refrigeration, space, and time to pump. Women who choose to pump in the workplace usually have a higher social economic status than those who cannot pump at work (Robyn, 2018). Thus, the mother's workplace is complex and requires a mother to adjust

if she is returning to work and planning to breastfeed. Mothers need resources and time in the workplace in order to feel supported in breastfeeding. However, previous studies do not address the mothers' interactions within the workplace context and how her interactions can affect her pumping schedules and choices to continue to breastfeed. Nor do previous studies indicate how mothers of diverse backgrounds can have unique perceptions or experiences in the workplace._ These unique challenges that have not been explored from non-Caucasian mothers' experiences.

Previous research conducted by Rojjanasrirat (2004) included 50 Caucasian working mothers with open ended questionnaires with 16 weeks postpartum and through content analysis found that women who returned to work needed attitudes that were conducive to breastfeeding, a strategic plan to breastfeed at work, and would have psychological distress. These women in the workplace identified barriers such as limited access to breast pumps, no place available to pump, a lack of a refrigerator/ milk storage, and no flexible time to pump breast milk (Rojjanasrirat, 2004). Rojjanasrirat (2004) also found three types of support within mothers' workplace experiences (emotional, instrumental, and informational). Interestingly, women who spoke to their employers and co-workers were more likely to stop breastfeeding (Cisco, 2017). Much of the research conducted on breastfeeding has focused on White women and there is a sparsity of research focused on non-Caucasian mothers. Although this research demonstrates that the workplace creates challenges for mothers it is not diverse enough to explain non-Caucasian mothers' experiences. Non-Caucasian mothers may need or require specific

resources, however there has not been enough exploration into their workplace context and breastfeeding practices together.

In another study, Johnson et al. (2015) explored current perspectives on way to support African American mothers who were returning back to work. Studies show that African American mothers' breastfeeding practices are at the lowest rate. The researchers used thematic analysis for 6 focus groups of women in Detroit to explore their perspectives. Participants were mothers, lactation professional, and expectant mothers who planned on breastfeeding. Mothers in the study who breastfed reported a lack of resources and support that were barriers to breastfeeding (Johnson et al., 2015). Some mothers mentioned that they were frustrated with appropriate support to breastfeed in the workplace. The researchers found: African American mothers find work non-supportive, paid maternity leave would be beneficial to decrease stress, more interventions and trained physicians on communication skills for breastfeeding would be helpful, and that the workplace needs more protections to better support breastfeeding mothers (Johnston et al., 2015).

Additionally, previous research has found that work place policies are intertwined within intercommunication between employers and employees. Within focus groups Anderson et al. (2015) found that participants in focus groups expressed that intercommunication about breastfeeding can be non-existent, difficult to begin, and difficult to maintain. Some factors that make this communication difficult is age, sex, and workplace position. This indicates that the workplaces pose different challenges for

mothers' who want to continue to breastfeed and that these challenges can be specific to a person.

Overall, previous research studies pose the question of what are mothers' perception and experiences in the workplace place context, and how are these experiences unique or related to their breastfeeding practices for non-Caucasian mothers? Moreover, how do different components in a mother workplace affect her ability to continue to breastfeed. This relates to the current study, where the researcher explored non- Caucasian mothers' perceptions in the workplace and the influential factors in the workplace context that affected mothers' breastfeeding experiences.

Socio-Cultural Factors

In addition to direct interactions, mothers are navigating breastfeeding within a larger societal and cultural context that are within the macrosystem. The macrosystem, according to the bio-ecological setting, includes the overall patterns within culture or subcultures that influence other systems within the model. These patterns can be within economic, social, legal, or political systems that influence a mothers' breastfeeding practices. In order to see overall patterns or factors that affect women from different socio-cultural factors it is important to explore a diverse sample of mothers' experiences.

Moreover, socio-demographic factors such as race, ethnicity, and education show differences in breastfeeding patterns. Singh et al. (2007) argue that looking at immigrant/nativity status can allow for a better understanding of breastfeeding practices. Singh et al. (2007) found that Asian American women and Hispanic women had the highest rate of breastfeeding initiation in their sample. Higher income was associated

with lower breastfeeding rates for immigrants. Although immigrant women have more initiation and duration of breastfeeding, however as they become acculturated and move into higher income levels their breastfeeding rates become lower. The current study intends to explore how non-Caucasian mothers' contexts could be unique and help inform work policy, health care providers, and others who are in the mothers' bio-ecological system about her experiences and needs in regards to breastfeeding.

Moreover, through a postpartum survey, Purdy (2010) found that White mothers exclusively breastfeed the first week, but Hispanic and African American mothers breastfeed and give formula to the infant, which is not recommended. Purdy (2010) brings to light issues that may not make breastfeeding as natural for mothers. In the U.S. there may be many factors such as social economic status and cultural factors that make breastfeeding difficult for mothers on the macrosystem level. Many factors such as breastfeeding in public, pumping at work, mother's opinion and family's opinion of breastfeeding, beliefs about breastfeeding, ideas about formula feeding and others can influence breast-feeding practices. Family culture could play a role as well. This current study intends to explore the mothers' actual experiences in the U.S. and what influences socio-cultural factors can have on her breastfeeding practices.

The Current Study

Previous research shows that a mothers' breastfeeding experiences connected to the contexts she is present within, such as family, work, and society at large. These contexts can pose their own challenges and rewards. In the current qualitative study non-Caucasian mothers were interviewed about their breastfeeding experiences in order to

explore how these experiences relate to their contexts and the bio-ecological settings. Specifically, the research questions posed were:

(a) What are non-Caucasian mothers' perceptions of their breastfeeding experiences in their bio- ecological settings?

(b) What are non-Caucasian mothers' perceptions of the influence of contextual support factors on their breastfeeding practices and how is this related to mothers' breastfeeding experiences?

Chapter 3

METHODS

Study Design and Research Questions

The current study was based on a qualitative semi-structured interview that explored the factors within the participants' bio-ecological settings. Ten mothers completed a demographic survey and answered open-ended questions during the interview. The qualitative design allowed the researcher to probe for further information when needed. The transcribed interviews were then thematically analyzed to find similarities with a focus on the interplay between mothers' breastfeeding in family, work, and cultural context.

The research questions were:

(a) What are non-Caucasian mothers' perceptions of their breastfeeding experiences in their bio-ecological settings?

(b) What are non-Caucasian mothers' perceptions of the influence of contextual support factors on their breastfeeding practiced, and how is this related to mothers' breastfeeding experiences?

Participants

Participants included 10 volunteers recruited through different mediums such as online Facebook Breastfeeding Groups, and a student group email. The researcher asked the site administrators of the Facebook groups to post a flyer, and others reposted the flyer on the site as well. The fliers were also shared by colleagues and asked potential

participants to call the researcher to set up an interview date and location. The fliers displayed that a participant will receive 10 dollars for their help in the study.

Participants self-identified as non-Caucasian. The mothers self-identified their race as the following: four Asian, three Hispanic, one American/Asian/Hispanic, one Asian American/East Indian, and one Middle Eastern/Yemeni/American. All mothers reported completing more than a high school education; four had a BA/BS, two had Masters, one was a MA student, and one chose the higher than an MA option on the survey. Eight mothers were married, one single, and one with a partner. Incomes ranged broadly from $10,000 to $200,000 amongst those that reported income. All participants had given birth to at least one child in the United States in the last two years.

Data Collection Procedures

Data were gathered in-person or over the phone. After consent was obtained (See Appendix A), mothers were asked to complete a demographic survey (See Appendix B), then a semi-structured interview was conducted. During the interview the researcher asked questions in five different parts: experiences, support, influences, challenges/rewards, and closing comments (See Appendix C). The open-ended interview consisted of 17 main questions and follow up questions when needed. Participants were able to choose if they wanted an in-person or phone interview, in hopes that the interviewee chose what was most comfortable. Six of the ten mothers participated in-person interviews and four participated in interviews over the phone. Interviews were recorded on the researcher's locked cellular phone. After a pseudonym was selected, the recording started.

The interviews were semi-structured and lasted between 20 to 80 minutes. The participants were told that they were free to skip any questions before each section of the interview (See Appendix C). The participants reported experiences that related to medical issues, support, community, mother-child interactions, influential relationships, culture, milk supply, issues, and breastfeeding knowledge. Participants were debriefed and received a $10 gift card through email or in person.

Data Analysis Procedures

After all the interviews were conducted and transcribed, the researcher used the method of thematic analysis to give detailed interpretation of the non-Caucasian mothers' breastfeeding experiences in their bio-ecological setting (Braun & Clark, 2013). The data focused on mothers' perceptions of contextual influences and interactions on breastfeeding practices. Using Excel to record the data, the researcher first located broader themes and the coded the data using categories.

From the initial coding, the researcher created subthemes to further refine the codes. Initial codes were challenges/ rewards, community, culture, medical issues, mother-child interaction, knowledge/information and support. The research then coded a second time in order to find which codes were more significantly related to the bio-ecological settings model. After coding a second time the researcher looked for overarching themes that could be specifically related to the mothers' bio- ecological settings.

Chapter 4

RESULTS

The purpose of this qualitative study was to explore Non-Caucasian mothers' breastfeeding practices in the Northern California area. More specifically, the aim was to examine contextual factors and interactions that served as barriers or facilitators to breastfeeding experiences by these mothers. Based on thematic coding, initial codes that the researcher found reoccurring were challenges/ rewards, community, culture, medical issues, mother-child interaction, knowledge/information and support. The researcher then coded a second time in order to find which codes were more clearly related to the bio-ecological settings model. After coding a second time, the researcher found that the codes could be consolidated into three main overarching themes: challenges/rewards and sources of support. What follows is a discussion of these overarching themes related to the mothers' responses, related to challenges/rewards and support.

Challenges and Rewards

During the interview mothers identified many aspects of breastfeeding that were challenging and rewarding. The challenges ranged from work context, milk supply/latching issues, milk supply, mother-child interactions during breastfeeding, child's characteristics medical issues during or after pregnancy. Rewards mentioned throughout the interviews by the mothers were close interactions with the child, bond with the child, and meeting the child's needs.

Work Context

Work context in this study included mothers' experiences with support in the work place and how women navigated the workplace to meet their own needs and was substantial challenge for the mothers in this study. Many of the mothers took maternity leaves during their pregnancy and were not working when they initiated breastfeeding. In their responses to questions about breastfeeding at work, many mothers reported feeling unsupported at work and wanted and needed more accommodation. Very few felt that the work place tried their to best accommodate breastfeeding needs. Two mothers left their jobs because they wanted to focus on breastfeeding, and one participant worked for a family business and had flexibility in her schedule.

Mothers reported that their work environment was a barrier to breastfeeding. When asked about to what extent the workplace helped or did not help with the process of breastfeeding, many participants shared that the work place did not have a specific area designated for them to breastfeed. Most mothers were given makeshift rooms to breastfeed in when they returned back to work. Mother 6 responded that the work environment, "kind of and kinda not [supported her] because they didn't really have a room for breastfeeding. So, it's always like you always have to go find available room so that's the hassle." Mother 6 also said she had to carry a cooler to store her breastmilk at work after she pumped and she felt that was the most challenging. Other participants shared similar experiences, Mother 8 responded "Yeah there wasn't like a designated space for moms and you know to kind of have some intimacy." Mother 10 said, "my work environment didn't really help me they gave me a little closet to pump in. I'm a

therapist so it was a little supply room all the equipment so they put a little chair with a table and I was there for ten hours and I had to clock out every time I had to pump so I was just at work more than I was at home so it wasn't really supportive. They did give me the time I had to clock out to do it anyways so it didn't really affect them but um I guess it was not as accommodating as I wish it was." Mother 9 commented that it was,

> "more of a nuisance in the end just cuz it's like okay I have to leave my desk I have to go pump I have to clean out my like pump um so you just I guess when you're at home you don't realize how much time that takes away but when you're at work and you have a 100 things going on your just like oh my gosh and I think by the time you know I took six months off and I think like by the end of the 7 like the mid seventh month I kind of already checked out um and it was like just the starting to wean off sort of thing just trying to push myself to hold it a little longer if I could."

The mothers' experiences indicate that the type of job they had affected how well they could navigate the workplace environment to breastfeed, however; the workplace was not able to support these mothers' needs. Workplaces did not have designated comfortable areas for mothers to pump when they returned to work again. Again, indicating that the workplace was a barrier in the American society for women to continue to breastfeed because although "breast is best" working mothers were not supported in the process.

Milk Supply/Latching

Among the mothers interviewed, milk supply issues (high or low) or latching issues were found to be the most challenging in response to the "most challenging" part of their breastfeeding experiences. Mother 5 mentioned that the oversupply of milk in the beginning deterred her daughter from breastfeeding because the milk came out too fast during feeding. Mothers also showed a pattern of reporting that scheduling when to pump milk, accepting the mother could not produce milk anymore or the dip in supply when the mother returned back to work were challenges. Mother 9 said that the entire experience was challenging for her,

> "it was a lot harder than I ever thought it was nobody tells you how hard breastfeeding is um and I had a lot of challenges with it um my daughter was tongue tied so she wasn't latching very well so that was a very big issue umm and um I had a lot nerve pain I guess cuz I had a lot of milk um and so that was very uncomfortable to just like wear a top or bra was really painful um so it was uncomfortable and painful experience at the beginning um and then in the middle it was really good and then near the end it kind of became like okay I'm kind of done with it." Generally, mothers would mention more than one part of breastfeeding to be challenging.

Child's Characteristics

Mothers also mentioned their child's characteristics played a role in breastfeeding practices because the mothers had to adjust to the child's need. This included considering the child's needs and wants during breastfeeding and how the mother

responded to these needs. For example, some challenging characteristics were if the child was being “stubborn, active, fussy,”. This could be confounding with if while breastfeeding the mother felt comfortable with breastfeeding in a particular setting. Mother 5 shared that she felt her baby was “particular” and “to some extent um she I’m not gonna say she was the easiest baby to breastfeed but um I guess she was she was latching correctly after a while so it made it easier to breastfeed and then she was kind of addicted to it, she wasn’t refusing it so it was easier”. Mother 2 said her child needed “quiet, dark place, not an active space” to breastfeed. Some mothers commented on how the children’s preferences influenced whether the child had breastmilk from a bottle or from a directly from the breast. For example, one mother commented that, “it comes out the fastest tastes the best and that’s the way she likes it so she does act like it’s a treat when she gets breast milk in a bottle”. Some participants knew that the process of breastfeeding would help soothe their child. Therefore, mothers had to be in tune to their child’s needs in the moment in order to have successful breastfeeding experiences, and that was rewarding for these mothers.

Medical Issues

Medical issues were another factor mentioned by participants. Medical issues could include anything health/physical issues that influenced the mothers’ ability to breastfeed or the child’s ability to be breastfed. For example, overall the most commonly mentioned medical issues were for the child were jaundice and lip or tongue ties that prevented the child from being exclusively breastfed in the first few weeks. Mother 10 explained that, “okay so when she was born she had jaundice so I had to use um formula

for about 2 days until my milk came in" if the child was jaundicing the child was recommended by the doctor to take formula. Mother 7 had a similar experience, "She had jaundice so she had to go back and the doctor that that was um cuz she was in the NICU and the doctor that was watching her told me that she was dehydrated."

Mothers for themselves mentioned medical issues such as engorgement of breasts, nerve pain, mastitis, and preeclampsia which induced early birth. Mother 9 said when asked about medical issues that, "yeah I actually did I had a lot of nerve pain and I actually ended up in the emergency from the pain (in her breasts)." Some also mentioned that health during pregnancy was a factor because of the risks for labor. Two participants mentioned C-section as a medical issue because they were not able to breastfeed their child immediately, or that it was painful to breastfeed because of the surgery. Mother 3 explained that preeclampsia caused baby to be born nine weeks early via a C-section; because her baby was born prematurely, the baby was not old enough to breastfeed.

Interaction with Child

Mothers mentioned their closeness, ability to be available to breastfeed, or help soothe the baby as a rewarding factor for breastfeeding, and mother-child interaction during breastfeeding was a reoccurring theme in the participants' experiences. The mother-child interaction or how the mother had to accommodate their breastfeeding practices for the child also influenced the mother's breastfeeding practices. This included if or how the child latched to the breast, if the latch was good or poor, the child's preferences of the environment while breastfeeding, the child's interest in breastfeeding,

and the mother's emotional state. Mother-child interaction could be positive or negative depending on the context.

Meeting the Child's Needs

Mothers spoke of meeting their baby's needs as a reward. They often mentioned that the bond with their baby, being able to directly nourish or soothe their baby, and having another way to connect with their baby was the most rewarding part of breastfeeding. A mother with low supply mentioned that meeting the 6-month goal of breastfeeding and then going on to breastfeed for a year was the most rewarding for her. Overall, mothers felt that meeting their child's needs surpassed all challenges.

Support

Support for mothers in the study was informational, emotional, or functional and could be positive or negative for the mother. Mothers' challenges and rewards were often discussed in the context of support, and support was commonly mentioned throughout the interview. Within support, participants mentioned their partner, intermediate family, friends, colleagues, breastfeeding groups and lactation consultants. Support was also dependent on the context and at times was sought, naturally occurred, and sometimes unwelcome. The following section includes informational support, sources of emotional and functional support, and cultural support.

Informational

Information was a theme that was integrated into different types of support the mother encountered. Knowledge about breastfeeding before and during the breastfeeding process was mentioned by mothers as an influential part of their breastfeeding choices.

Informational support could include what knowledge mothers had before, during or after breastfeeding. The knowledge could pertain to breastmilk, how to breastfeed, or other information mothers acquired that influenced their breastfeeding choices. For example, many mothers mentioned that they felt that breastmilk was the healthiest choice for their baby, that “breast was best”. Along with this, some mothers mentioned that breastmilk had antibodies to help their child’s immune system which they felt was important for their child’s health. Most commonly mothers mentioned that they wished they had more knowledge about breastfeeding and how difficult it would be to breastfeed. Mothers either felt they needed to acquire more information by asking questions or researching. Or on the opposite end one mother felt she was overwhelmed by all of the information. Another Mother (5) mentioned, “unsolicited advice, advice from friends and family that had no medical background” was not helpful. Mothers also mentioned that the hospitals and nurses did not have as much information about breastfeeding, that lactation consultant who were available or hired were more helpful.

Emotional/Functional

Generally, participants mentioned their partner being a positive or neutral support providing functional or emotional support for their breastfeeding choice. Mother 4 commented that “my husband noticed my [breastmilk] supply dipping and helped by making lactation cookies and teas” to help her keep producing milk. Some partners/spouses also attended classes with the mothers or helped find information about breastfeeding to support the mothers before the baby was born. This indicates that the partner was generally a source of functional support because most partners informed

themselves about breastfeeding. Some partners helped by washing breastfeeding supplies, gave reassuring comments or compliments. Participants mentioned specific things that partners would do such as Mother 7 said, “he was supportive of it and he and he tells me oh she looks like oh she’s fussy is she hungry yeah she’s hungry okay go feed her you know I’ll take care of whatever it is that we were doing at the time”. Mother 9 shared, “I think it comes back to again having the support of my family but more importantly having my husband’s support.” Overall, mothers reported that partners tried to support the mother on a daily basis, by not only being available to help with tasks but also by being empathetic towards the mother’s needs.

Mothers also mentioned intermediate family members as support providers (i.e., mothers, mother-in laws, sisters, and/or sisters-in-law), although they served to be more emotional rather than daily functional support. Some mothers reached out to intermediate family and reached out to them when they were feeling emotional or because these specific family members had the experience and education to support the mother emotionally. For example, Mother 10 shared,

> “I had one of my sisters-in-laws tell me before um when I was pregnant I think my third trimester and she told me not to give up. I think she said no matter what you think and if you think your milk isn’t gonna come in and even if it’s hard just don’t give up you have the first two weeks that it will be okay after the first two weeks and you know that’s the biggest thing the first two weeks were hard.”

From this experience the mother received emotional and education support because the sister-in -law was able to tell the mother to push through the first two weeks because

from her the sister in law's lived experience that was the most challenging time. In this type of support the mother sought outside support because her partner may not be able to provide this support if the partner does not have any experiences with breastfeeding.

Cultural Support

Cultural influences can include practices, advice, information, and ways of being about breastfeeding that affected mothers breastfeeding choices by providing informational, emotional, and functional support. Participants in this study varied in cultural backgrounds and considered the culture they lived in "America" or the culture they were raised in. These mothers were in a unique position to share their own perspectives of how culture affected their breastfeeding practices. What emerged consistently in the interviews was that when asked about how their culture viewed breastfeeding, many mothers viewed the culture they were raised in to be positive albeit conservative, influence on breastfeeding. Most mothers said they believed, "Breast is best." Some considered their own culture influential in their breastfeeding choices because for their culture breastfeeding was considered natural and was more open to women breastfeeding. Many mothers compared their own cultural background to U.S. culture, even if they were born in the U.S. Mother 8 who identified with a Hindu cultural background said, "I think they [people in culture] value breastfeeding as well it's just I feel like they Indian culture just doesn't talk about it the way the American culture does." Mother 3 said that, "Asian cultures, the Chinese culture is pro breastfeeding." Mother 1 also mentioned "Mixed culture identifies more with breastfeeding, and that American culture was a negative influence." These mothers' experiences show a pattern that

mothers from a non-Caucasian background in this study identified with their own culture as being pro-breastfeeding for them and drew from their own cultural beliefs and practices rather than U.S. culture.

During the interview mothers were asked about the environment in which they would choose or would not choose to breastfeed. Overall, there was a pattern in that mothers mentioned that they were hesitant or did not feel comfortable to breastfeed in public and preferred privacy or their own homes. Mothers are repetitively encouraged to breastfeed through "Breast is best.", however they reported feeling uncomfortable breastfeeding in public. This is in contradiction to the information and advice mother receive from United States culture, because if breastfeeding is best then mothers should feel comfortable doing what is best in all contexts of their lives. Mother 5 commented,

> "well here's the thing if there if society actually um had a facility or facilities or like designated area or room where moms could go and breastfeed their babies maybe I would feel more safe to do that but I think safety has a lot to do with it with that um the choice to make sure that you aren't gonna get any dirty stares or what is she doing with her breast popped out or not that my boob would be popped out I would be covered but you know the mom needs to be relaxed that just so you know affects the flow like if mom is anxious and the mom is uncomfortable babies gonna be anxious babies gonna be uncomfortable so I think I think that's why I was just like always at home you know and even pumping too like I couldn't pump in public."

Along with this a few mothers commented that they tried to breastfeed in their cars. Thus, these mothers' experiences show that although mothers want to breastfeed, and culturally are told to breastfeed, yet they are not given the space in society to safely or comfortably breastfeed. The overwhelming pattern was that women felt breast was best in our society but chose the privacy of their own homes to breastfeed because their needs as breastfeeding mothers were not accommodated in public.

Summary

In the current study the general themes of challenges and rewards, support, and work context. Challenges and rewards included mothers' experiences with milk supply/latching issues, milk supply, mother-child interactions during breastfeeding, child's characteristics medical issues during or after pregnancy. Support included subthemes of the partner, family, and culture. The partner engaged in daily support that was mostly functional, the family engaged in support that was emotional, and the culture provided support that was informational. Work context included mothers' experiences with efforts to continue their breastfeeding practices in the workplace through navigating space and time according to their positions. Using these themes in conjunction can describe the mothers' overall experiences within their individual contexts, while simultaneous providing a general perspective of non-Caucasian mothers' experiences within the larger society in the U.S.

Chapter 5

DISCUSSION

This qualitative study explored the breastfeeding practices of non-Caucasian mothers, specifically using bio-ecological ideas to examine breastfeeding practices, that is, how a transition in a mother's life interacts with context to affect the mothers' behaviors and experiences within the proximal processes of breastfeeding. The analysis of the interviews showed themes related to challenges and rewards, support, and work context were reoccurring themes in the participants' experiences.

All mothers' experienced challenges or rewards while breastfeeding. For most the benefits for rewards were for significant than the challenges. When it came to the challenges many mothers were able to over the challenges by seeking support. The support served as a buffer or motivator to continue to breastfeed. For mothers in the current study, support was a recurring theme in different aspects of mothers' interactions while engaging in breastfeeding practices, within in relationships (partner, family, culture, and work context). Mothers would seek support dependent on their contexts and in some cases the support was dependent on the environment present around the mother (work, home). This is consistent with previous research that describes mothers' experiences with breastfeeding while balancing other roles and continuing their breastfeeding practices in more than one context.

Mothers' comments revealed that they felt the most supported through their interactions within their immediate microsystem (family) context. For example, Mother

1 said she would feel more comfortable breastfeeding at home, and Mother 3 said she was conscience about other in public but was comfortable breastfeeding at home. Partners and spouses were identified as neutral or helpful with breastfeeding practice. Mothers' further reported that their own culture was supportive (Chinese, Mexican, Hindu etc.). However, U.S. culture was not experienced as being supportive for their breastfeeding. These themes showed a pattern of experiences and interactions that the participants mentioned in their environment or contexts that influenced their breastfeeding practices. Bronfenbrenner's bio-ecological model incorporates different systems as well as proximal processes that can affect an outcome for a particular behavior. In this study, the mother's proximal processes in her immediate environment affected her breastfeeding choices, moreover the influence of other systems influenced her interactions in different contexts and how she viewed the context around her.

Support and Influences Within the Microsystem Context

In Bronfenbrenner's bio-ecological model the microsystem is considered to be the individual's experiences from interactions within activities, social setting, relationships in a developmental setting. The mother-child interaction during breastfeeding was a reoccurring theme in the participants experiences. In this case the mother can be the individual in the context of breastfeeding her child who brings her own unique beliefs, characteristics, and self-view to the microsystem. For example, many mothers in this study believed that "breast was best" and that breastfeeding was the healthiest choice for their baby's immune system. The mothers wanted to do what was best for their baby. This included the child's needs and wants during breastfeeding and how the mother

responded to these needs. This could have been a factor in breastfeeding process because mothers many times had to accommodate for their child's needs within the process of breastfeeding, thus changing interactions. Although all these participants were attempting to breastfeed the context of breastfeeding was unique for each mother-child dyad because of the individual characteristics the mother had (postpartum, medical issues, mastitis) and the individual characteristics the child had (temperament, preferences, needs). Participants abilities to read their child's needs was a part of the mother-child interaction and the process of breastfeeding (Purdy, 2009).

Additionally, support from partners/ spouse can be considered an integral part of the microsystem because mothers lived with their partners and the partners were a part of their daily lives. Moreover, the partner/spouse was an essential part of the mothers' breastfeeding experiences because the partner provided the functional support the mother needed and mothers saw the partner to be positive. Partners were viewed as non-judgmental and supported mothers with their breastfeeding choices. In many cases the partners being indifferent to the mother's choice to breastfeed helped the mother because it was a buffer against other pressures to continue to breastfeed. The partners/spouses generally told the mothers to do what was best for her and supported her. This is consistent with previous research where the partner provides significant emotional support for the mothers in her microsystem (Cisco, 2013; Leeming et al., 2013; Tiejde 2002).

Mesosystem and Exosystem Supports

Mesosystem influences are relevant in the current study. In a bio- ecological model, mesosystems refer to the connections between microsystems (Tudge et al., 2009). Support from extended family/family of origin, friends, and colleagues was a reoccurring theme in the experience's participants shared and was a positive part of mothers' breastfeeding experiences. For example, during a focus group study with 30 women Grassley & Eschiti (2008) found that within a diverse group of mothers five themes described what mother wanted from grandmothers (maternal mothers) in respect to breastfeeding: valuing and loving encouragement for breastfeeding, acknowledging barriers, confronting myths, and current breastfeeding knowledge. Mothers sought different types of advocacy from their mother-in-law's and mothers. Mothers' perceptions of the grandmothers' support did affect their experiences (Grassley & Eschiti, 2008). Previous research focuses on the partner, or mother being an influential source of support for a breastfeeding mother.

Extended Family

For the mothers interviewed in this study, extended family relationships played an integral role in supporting them emotionally and instrumentally in the process of breastfeeding. Extended family could include people such as mother in-laws or sister in-laws. Isabella and Isabella (1994) found that women who continued to breastfeed drew support from their own personal characteristics as well interrelationships similar to mothers in this current study. Isabella and Isabella (1994) had 32 Caucasian mothers in their study and used a previous longitudinal investigation with prenatal information,

interviews, and questionnaires to inform their study. The researchers found that success in breastfeeding can come from mothers' characteristics, her social situation, and different types of help. Moreover, the satisfaction of emotional support from the husband or mother related to breastfeeding in the long term. Similarly, in this current study data was found that mothers' who sought help needed support for different purposes and mothers sought support from different sources for different types of needs depending on the context. Mothers who had supportive interactions within these contexts felt supported and able to continue breastfeeding. Thus, help and support the mothers in the current study receive from family may relate to extended breastfeeding practices.

The current study shows how mothers drew support from their immediate relationships in their microsystems to provide the emotional, functional, and daily support mothers needed. Similarly, Leeming et al. (2013) indicated that socially sensitive breastfeeding practices required women to manage breastfeeding within their relationships. This indicates that mothers needed to have these interactions between bonding, feeding, and caring, and to manage tension within and between their microsystems. Most mothers received this support from their spouse, mother-in law, and then mother. These relationships can be seen as a microsystem influence on the mothers' breastfeeding practices.

Similar to Tiejde et. al (2002), the current study found that women did draw from their social support specifically microsystems with their partner and family members to continue breastfeeding. However, in this current study it was found that partners provided more of the daily functional support whereas mothers, sisters, sister-in laws provided the

emotional support because of their own experiences with breastfeeding. Within their communities many women mentioned breastfeeding support groups. One mother mentioned the La Leche League. Many of the participants relied on information they received from interactions with others who had breastfeeding experiences and lactation consultants. Some of this information was positive while other information for the mothers was negative. Many of the mothers wanted more support from the hospital, nurses, and doctors. Thus, the current study shows that mothers in this study draw from support from different relationships within their bio-ecological systems; however, their microsystems provide more support than do the other mesosystem, macrosystem, or exosystem in the U.S.

Work Context

Additionally, mothers' work environment and supports could be considered an exosystem because it represents a connection between an outside system (work) and the home microsystem. To the extent that workplace supports are missing, mothers may stop breastfeeding earlier than they might like. The breastfeeding working mothers' proximal processes are interrupted by the work place. Similarly, in this current study there were different types of support found and non-Caucasian mothers expressed that their work environment was not supportive because there was not a designated breastfeeding/ pumping area, thus the issue of space and accepting that the working environment would not be as accommodating was a part of the mothers' experiences when returning back to work if she was able to (Rojjanasrirat, 2004). Therefore, mothers' experiences of breastfeeding in the work context is that they are able to do it with minimal support from

their employer if the mother is willing to accommodate to the workplace -not if the workplace will accommodate to her needs. This is in juxtaposition to how the microsystems supported the mother when she is breastfeeding.

In the current study, mothers persisted in finding another place or way to ensure they could still pump, but many still did not feel supported. Thus, mothers' own individualistic characteristics and attitudes for breastfeeding helped them navigate the work context to continue. Mothers' challenges existed in psychological distress for mothers if there is insufficient break time, storage issues for milk, and lack of support from co-workers/employer. In the current study a few mothers did mention colleagues who were breastfeeding as supportive if they were breastfeeding or had breastfeeding experiences. Overall, however, workplace support was minimal in the current study and consistent with previous research. For example, Johnston & Esposito (2006) found that aspects of the workplace, mothers, employer, coworkers, are important issues regarding the duration of breastfeeding for non-Caucasian working women. The current study indicates that the workplace was a barrier for women to continue to breastfeed and the challenges influenced their daily lives and ability to feel comfortable in the workplace as a breastfeeding working mother because of the demand and resources mothers experienced.

Cultural Influences of the Macrosystem

A macrosystem can be defined as a context includes any groups shared value or beliefs systems such as a culture or subculture (Tudge et al., 2009). The macrosystem includes the culture(s) the mothers identify with and the breastfeeding beliefs that emerged from their own families, the cultures surrounding them, and the influences of the American society. Moreover, in the larger sense mothers in the current study stated that the U.S. values breastfeeding and that breastfeeding was best for their child, but felt judged for breastfeeding in public, even if the mothers' values aligned with the U.S. culture values. Generally, mothers are receiving the message that breastfeeding should happen, but not within the public sphere. Thus, mothers experience a bidirectional relationship with the macrosystems (culture) between the breastfeeding mother, who has to situate herself with the breastfeeding process in society (Tudge et al. 2009).

The current study intended to explore mothers' unique perspectives about breastfeeding in the U.S. culture, along with their own cultures. In the current study mothers often described their own home culture as being influential in breastfeeding experiences and practices. Many expressed "It's what you do.", or that is was natural within their families to breastfeed, or their own maternal mothers breastfed them so the participants felt the practice was something they should do with their own children. When describing others in society mothers in this study generally spoke of the U.S. culture. Mothers needed to integrate breastfeeding into their social contexts and negotiate their breastfeeding practices with their immediate contexts and community (Leeming et. al, 2013).

Many participants shared their perspectives or experiences with breastfeeding in public versus private contexts. These mothers had to make sense of the world based on the interactions they were having in U.S. society. Even if mothers had not attempted to breastfeed in public, mothers felt that it would be a negative/uncomfortable experience or knew someone who had a negative experience in public through a close relationship or an online forum. This shows how larger systems within the bio-ecological model can influence mothers' behaviors.

Most mothers felt that the privacy of their own home or room was the most comfortable for breastfeeding. This is similar to Leeming et. al (2013) finding that mothers would resort to finding a private place to breastfeed if they had a concern about breastfeeding in public. Just as mothers did in the current study, mothers in previous studies study shared how in public the experience felt rushed or that it is was not comfortable (Leeming et al., 2013). This can be explained by the context and that participants own homes were a part of their microsystem and the larger society or macrosystem did not necessary match their own needs. This indicates that society needs to be able to accommodate breastfeeding mothers' needs on a larger to be a basic need in society and create facilities that are readily available for these mothers.

Limitations and Future Research

This qualitative study provides rich data about mother's experiences and shows that there is a need for change in policy that is informed by mothers' perspectives. Additionally, this current study does show that support, cultural context, and work

context are areas that need further exploration. Other contexts such as colleges and public spaces need to be explored further.

The data in this study is limited because they are focused solely on non-Caucasian mothers' experiences only, and was exploratory. Also, the study included only the mothers' perspectives about her experiences and did not survey others in her environment. It would be beneficial to know other perspectives surrounding the mother in order to see how support emerged from the individuals in the mothers' contexts. This could also provide validation for the mothers' experiences and recollection, as well as show how people around the mothers viewed breastfeeding experiences. Moreover, the interviews were conducted by the researcher and as the researcher continued to interview the interviews could show researcher biases towards breastfeeding practices.

Future studies can aim to focus on mothers from a specific background to explore pattern in a specific population of women in the United States. Future research needs to delve into cultural experiences and influences on women around breastfeeding in public. Future research also needs to focus on the work experiences women have to help create a space for women of all backgrounds to be able to meet their basic breastfeeding needs for their children. Future research could include on a wider population with Caucasian mothers' in these interviews as well to compare and contrast the experiences. Future research could focus on how different socioeconomic statuses affect support the mothers receive. Moreover, because the current data indicate the work context is challenging and unsupportive for breastfeeding mothers, further research on breastfeeding in the work environment help elucidate which interventions can help increase mothers breastfeeding

practices at work. Furthermore, research can focus on which polices are effective in helping support breastfeeding mothers in all ecological contexts.

APPENDIX A

Consent Form
Breastfeeding Perceptions among Non-Caucasian Mothers

You are invited to participate in an IRB approved research study which will involve participants's being interviewed about their breastfeeding practices. My name is Jagdish Majju and I am a graduate student at California State University, Sacramento, Child Development Program in the College of Education.

Your participation in this project is voluntary. Even after you agree to participate, you may skip any interview questions without penalty and you may decide to leave the study at any time.

The purpose of this research is to explore non-Caucasian mother's breastfeeding practices in the United States. If you decide to participate, you will be asked about your breastfeeding practices.Your participation in this study will last 30-60 minutes in an interview with Ms.Majju. Risks associated with this study are not anticipated to be greater than those risks encountered in daily life. If you have any questions about your rights as a participant in a research project please call the Office of Research Affairs, California State University, Sacramento, (916) 278-5674, or email irb@csus.edu. For any additional questions about the study, you can contact the graduate researcher, Jagdish Majju, at (XXX) XXX-XXXX (email) or Dr. Sheri Hembree (email hembrees@csus.edu).

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Measures to insure your confidentiality are encrypted files and pseudonyms.The data obtained will be maintained in a safe, locked location, and will be destroyed after a period of three years after the study is completed.

Your participation in this study indicates that you have read and understand the information provided above.

APPENDIX B

Demographic Questions

Demographic Survey

1.) What is your age?

2.) What race/ethnicity do you consider yourself?
____ American Indian/ Alaska Native
____ Asian
____ Black or African American
____ Hawaiian/ Pacific Islander
____Hispanic
____________Other

3.) What is the highest level of education you have completed?

_____ Less than an High School Diploma/G.E.
_____ High School
_____Bachelor's Level
_____Higher
_____Other

What is your household income?
____ Less than $10,000
____ $10,000- $20,000
____ $20,000-$30,000
____ $ 30,000- $40,000
________Other

What is your relationship status?
___Single
___With a Partner
___Married
___Divorced
_____Other

APPENDIX C

Interview Questions

Thank you for participating and for completing the demographic survey. I am conducting this study because I am interested in mothers' breastfeeding practices. If you feel uncomfortable with any of the questions we can come back to them later or skip them. **You do not need to answer all of the questions, only the questions you feel comfortable with**. You can also ask for more information if you need help. Is it okay if I start the interview now?

Part I: Experiences

1. **Can you describe your breastfeeding experiences?**

   Probes/Clarifications:
   How long do you think you actually fed your child (ren) only breast milk?

   Did you use a bottle to feed your child? When did you start bottle feeding (breastmilk or formula milk)?

   What month did you introduce milk formula? When did you introduce solid food to your child (ren)?

   How long did you want to breastfeed for your child(ren)?

   Why do you think you were able to /not able to breastfeed?

   Can you tell me a little about why you wanted to breastfeed?

2. **Can you tell me a little about what you know about breastfeeding in general?**

   Probes/Clarifications:

   Where do you think you have learned about breastfeeding practices?
   Can you describe any education or training you have in regards to breastfeeding?

*Part II: Support *Reminder (If you do not feel comfortable answering any of these questions, you can choose to skip the questions.)*

1. **Can you describe any support you had in regards to breastfeeding?**

   Probes/Clarifications:
   Is there anything that you think was really helpful?
   Is there anything that you think was very unhelpful for you?
   Who are the people that support(ed) you? How did they support you?
   How do you feel about the support you had?

2. **Can you tell me about any support you received from the hospital, your doctor, or nurse, in regards to breastfeeding?**

   Probes/Clarifications:
   Did you receive guidance to breastfeed in the hospital?
   Did you feel comfortable with the level of support from the doctor or nurse?
   Were there any barriers or challenges you faced while receiving support? If so can you describe what they were?
   Do you wish there was anything different about the support, or anything that would make the support better?
   Did anyone follow up with you about your breastfeeding choices or to help?

3. **If you choose/chose to breastfeed what kind of environment did/do you choose to breastfeed in?**
   Probe/Clarification:
   You mentioned …why did you choose to breastfeed in this environment?
   What environment do you think you would not choose to breastfeed in?

4. **Where do you think you felt the most comfortable? Or uncomfortable? And why?**

5. **To what extent do you think your home environment affected your breastfeeding practices? Why?**

6. **If you worked, to what extent do you think your work environment helped you or didn't help you in the process?** Why?

   Probes/ Clarifications:
   You mentioned (work, school) …. Can you tell me a little more about this?

*Part III: Influences *Reminder (If you do not feel comfortable answering any of these questions, you can choose to skip the questions.)*

1. **What do you think were some things that influenced whether you did/ did not breastfeed?**

   Probes/Clarifications:
   You mentioned that….was influential, can you tell me a little more?
   Is there anything that you think was really helpful? Tips? Resources? Information? Financial? Family?

2. **Were or are there any individuals in your life who influence(d) your breastfeeding practices? How did they influence you?**

Probe/Clarification:
You mentioned ….did you feel this was a positive or negative influence?

3. **How do your family members view breastfeeding?**
   How do you think this affected your breastfeeding choices?

   Probes/Clarifications:
   Did your own mother have any influence on your breastfeeding choices?
   What are your spouse/partner's attitudes about breastfeeding?
   To what extent do you think your child (ren) have influenced your breastfeeding practices?

4. **What culture do you identify with? How do you think your culture views breastfeeding practices?**

   Probe /Clarification:
   Do you think this had an effect on your breastfeeding practices, if so why, if not why not?

5. **If you had any health complications or physical concerns, did they affect your breastfeeding choices in any way?**

   Probe/Clarification: You mentioned … how did you decide what was best after learning about this?

   Overall, what did you feel was the most positive influence on you breastfeeding practices, what do you feel was the most negative influence?

<u>*Part IV: Challenges and Rewards *Reminder (If you do not feel comfortable answering any of these questions, you can choose to skip the question.)*</u>

1. **What do you think was the most challenging part of your breastfeeding experience? Why?**
   Probes:
   Were you able to overcome these challenges? How?
   Were you able to find any resources to help you with these challenges? What were they?

2. **What do you think was the least challenging? Why?**

3. **What is/was most rewarding? Why?**

<u>*Part V: Closing Comments*</u>

1. **Are there any other factors that you would like to mention that were important to you?**

2. **Are there any other comments or questions you would like to add?**

Thank participant and give gift card.

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