Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

11-14-2023

Phenomenology of Workplace Breastfeeding Support Among Working Mothers in California

Kevin David Cooper
Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Walden University

College of Education and Human Sciences

This is to certify that the doctoral dissertation by

Kevin D. Cooper

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

Review Committee
Dr. John Saindon, Committee Chairperson, Health Education and Promotion Faculty
Dr. Cheri Langley, Committee Member, Health Education and Promotion Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2023

Abstract

Phenomenology of Workplace Breastfeeding Support Among Working Mothers in

California

by

Kevin D. Cooper

MAS, University of California, Davis, 2007

BS, University of California, Davis, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Education and Promotion

Walden University

November 2023

Abstract

Breastfeeding has been shown to have numerous health and other benefits. In the United States, only 58.3% of women reach the 6-month goal for any breastfeeding. The purpose of this qualitative phenomenological study was to discover how a Californian working mother's perception of workplace breastfeeding support influences attitude towards breastfeeding and explore how health education and promotion (HEP) influences a mother's knowledge of workplace breastfeeding and if this knowledge impacts her perception, attitude, and experience. The theoretical framework used to guide this study was the theory of reasoned action. Eight participants were recruited who had been working while breastfeeding within the state of California. Semi-structured interviewing was utilized. Analysis was done using coding and theming. Key findings include workplaces not providing sufficient breastfeeding-support HEP material, working from home caused a positive attitude towards breastfeeding, and when workplaces provided sufficient breastfeeding support for mothers, their beliefs and perceptions were positive toward workplace breastfeeding. Key suggestions are that workplaces should provide breastfeeding support HEP resources to employees before maternity leave and offer more options for home-based work after maternity leave, and employers should ensure a positive support environment for breastfeeding exists in their workplace. These findings can have a positive impact on social change because a positive attitude and perception of the work environment being supportive could improve breastfeeding duration, increase job satisfaction, induce less absenteeism, and improve retention, all of which could impact public health outcomes, the workplace, and economy.

Phenomenology of Workplace Breastfeeding Support Among Working Mothers in

California

by

Kevin David Cooper

MAS, University of California, Davis, 2007

BS, University of California, Davis, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Education and Promotion

Walden University

November 2023

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Breastfeeding includes numerous benefits for the mother, the infant who receives breastmilk, and for the economy, the workplace, and environment (Bartick et al., 2017; Brahm & Valdés, 2017). Due to the importance of breastfeeding for the population and its correlation to improving certain health outcomes, the United States has set specific goals and recommendations for mothers to strive for in their breastfeeding duration periods (Office of Disease Health and Promotion [ODPHP], n.d.-a). These goals and recommendations are influenced by and align with several international organization's goals, such as the World Health Organization (WHO) and United Nations Children's Fund (UNICEF), the Global Breastfeeding Directive, and with key U.S. organizations; namely, the ODPHP, the American Academy of Pediatrics (AAP, n.d.-a), and the U.S. Department of Health and Human Services (HHS; Centers for Disease Control and Prevention [CDC], 2019-c). These goals and recommendations are designed to help mothers, healthcare professionals, and key government organizations establish specific breastfeeding guidelines to follow.

Per the Healthy People 2020 objectives and the WHO, optimal rates of breastfeeding up to 6 months of age would be any breastfeeding at 60% (ODPHP, n.d.-a; Pounds et al., 2017; WHO & UNICEF, 2019). This duration of time is linked to research indicating that when an infant consumes breastmilk up to at least 6 months of age, the benefits are more extensive and have a longer potential impact on health outcomes later in life (Amiel Castro et al., 2017; Bartick et al., 2017). Likewise, there are added health

benefits for the mother to breastfeed up to 6 months or longer ("The Public Health Benefits of Breastfeeding," 2017; Sánchez et al., 2021).

Currently in the United States, the statistics show that only 58.3% of women reach the 6-month mark for any breastfeeding modality (CDC, 2020-a). As mentioned, the WHO and Healthy People 2020 have established the goal that urges for any breastfeeding up to 6 months at 60%. The United States breastfeeding metrics have continued to improve steadily over the past several decades, with various research studies undertaken to identify and determine what barriers might be hindering mothers from achieving the 6-month mark (CDC, n.d.-a).

Returning to or starting new employment after maternity leave has been shown to be a major barrier for mothers in reaching the 6-month breastfeeding goal (CDC, 2019-c). To protect breastfeeding employees and enhance workplace amenities to help improve duration rates, laws and legislation have been enacted across the United States and within individual States (CDC, 2019-c; National Conference of State Legislatures [NCSL], n.d.; HHS, n.d.). Such legislation has been shown to offer motivation in developing workplace policy changes, which can offer more incentive and support to breastfeeding employees (Jantzer et al., 2018; Winegar & Johnson, 2017). Per the most recent 2018 data, the state of California accounted for 67.1% of mothers reaching the 6-month goal for any breastfeeding (CDC, 2020-a). Though this metric exceeds the WHO goal set at 60% and the United States national average, which is 58.3%, there is still room for improvement (CDC, 2020-a). The laws and workplace policies specific to the state of California warrant closer scrutiny to determine what is effectively maintaining high breastfeeding

rates and what barriers are still hindering working mothers from meeting even higher duration goals; not to mention, what implications breastfeeding rates can have on social change.

Implications for social change from this study could be accounted for through the improved health outcomes of both infants and breastfeeding women within the United States workforce, and through the potential long-term benefits for women in the workforce who choose to breastfeed; namely, protection and time to express breastmilk during working hours, private space and hygienic conditions within which to express milk, a lactation program and policies in place with facility leadership support to sustain optimal protocols, and an atmosphere of positive attitudes from coworkers and the organization ("The Public Health Benefits of Breastfeeding," 2017; Valizadeh et al., 2017).

This chapter outlines the purpose for this study related to the meaningful gap in literature and field. The relevant and most recent literature will be reviewed and discussed in establishing the background. The remaining portions of this chapter will introduce the problem statement, research questions, conceptual framework, nature of the study, key definitions that are important to breastfeeding and attitude, assumptions in context to the purpose of this study, scope and delimitations, limitations, and finally, the significance.

Background

Current and relevant research has been conducted which supported the primary scope of this study—positive or negative attitude of workplace support influences

breastfeeding experience. Attitude within this study was measured using perception and constructs of attitude. The literature connecting the use of a qualitative research approach to phenomenology and to workplace breastfeeding attitude and perception was previewed. Other literature supporting this study related the research topics regarding the correlation between workplace support and breastfeeding outcomes, breastfeeding initiation, duration, and practice with infant and maternal health, how the perception a mother has of her workplace breastfeeding support can influence her attitude, intention, and behavior to breastfeed while at work, and the current United States and California State-specific laws and workplace breastfeeding policies.

The qualitative research approach has been shown to be aligned with investigating the influence behind why an individual or group undergoes a phenomenon and looking at how that shared experience can be understood (Polit & Hungler, 1999; Porter, 2000). This study utilized the *hermeneutic phenomenological* approach because this approach is focused on discovering how the perception an individual has of a lived experience can lead to an interpretation of that event (Jarrett, 2017). Equally important was how a hermeneutic approach can reduce outside influences that the researcher brings, focusing the findings on the participants' interpretation of how the phenomena was experienced (Patton, 2015; Ravitch & Carl, 2016). Finally, hermeneutic phenomenology can be used effectively for exploring the relationships that can develop within a workplace (Loftus & Higgs, 2010).

The correlation between workplace support to breastfeeding behavior has been studied and corresponds to certain barriers and facilitators, which influence outcomes.

Some of the more prominent workplace breastfeeding barriers include the lack of adequate space to express milk and inconsistent breaktimes at the workplace (McCardel & Padilla, 2020; Spitzmueller et al., 2018; World Alliance for Breastfeeding Action [WABA], n.d.); a maternity leave time that is relatively short compared to the optimal breastfeeding duration of 3 to 6 months (Fernández-Cañadas Morillo et al., 2017; Steurer, 2017); a negative or poor attitude of support from supervisors and managers in the workplace (Vilar-Compte et al., 2021); and certain demographics, such as age, education level, employment status, parity, low-income, and living in a rural location (Hamada et al., 2017; Hardison-Moody et al., 2018; Whipps, 2017).

Facilitators that have been identified in the research to have a positive impact on workplace breastfeeding outcomes may include a positive perception and attitude of a mother's own self-efficacy in her milk supply, capabilities to meet her infant's needs, and form social connections at work (Schafer et al., 2017; Zhuang et al., 2018); when the workplace has a lactation support program of some kind that facilitates protections and amenities to support a working mother's efforts (Lee, 2017; Rimes et al., 2019; Zilanawala, 2017); and a positive perception and attitude of support from female coworkers, managers, and peers (Dinour et al., 2017; Gebrekidan et al., 2020).

Of facilitators and barriers to workplace breastfeeding, the research indicated that perception of workplace support, which can lead to attitude development, can have an influence on a mother's intentions, behaviors, and practice of breastfeeding continuation (Angeletti & Llossas, 2018; Bandura, 2000; Lennon & Willis, 2017; McCardel & Padilla, 2020). Moreover, determining what barriers influence breastfeeding and what facilitators

improve has been the focus of many research studies. A primary reason for this focus is related to the health and other benefits breastfeeding offers. As mentioned, the primary focus of this research study examined how the perception of workplace breastfeeding support leads to the mother's attitude towards her breastfeeding experience.

Breastfeeding has been shown to have numerous health and other benefits stress an importance on the health of the infant, mother, economy, workplace, and the environment (Blake et al., 2016; WHO & UNICEF, 2019). In view of these important benefits, breastfeeding has been deemed a public health issue within the United States (Bartick et al., 2017; "The Public Health Benefits of Breastfeeding," 2017). Brahm and Valdés (2017) and Hossain and Mihrshahi (2022) reported that breastfeeding, and more significantly exclusive breastfeeding (EBF), has a dose–response relationship on the health benefits for the infant and the mother. Considering this research, identifying the barriers that hinder breastfeeding is imperative; not to mention how perception of workplace support as a barrier or facilitator has an impact on the mother's attitude towards breastfeeding behavior.

Laws and policies that dictate certain protections and improvements towards workplace breastfeeding support have been implemented in the United States, which were aimed specifically at improving breastfeeding metrics for mothers who want to breastfeed at work (CDC, 2019-c; NCSL, n.d.; HHS, n.d.). Examples of policy-driven legislation and actions that have propelled breastfeeding improvements in the United States include the *Break Time for Nursing Mothers* provision under the Patient Protection and Affordable Care Act (ACA; DOL & WHD, n.d.; OPM, n.d.); the *Surgeon General's*

Call to Action to Support Breastfeeding, which set forth goals for breastfeeding metrics and supporting research (CDC, 2019-c); national encouragement to implement the Baby-friendly Hospital Initiative (BFHI) - *Ten Steps to Successful Breastfeeding* standards in all medical facilities where prenatal care is provided (see Appendix A; NCSL, 2019); the *Supporting Working Moms Act* of 2017 (SWMA), which was designed to address several of the gaps left by the exemptions in the Fair Labor Standards Act's (FLSA) Section 7 provisions of 2010 and 2012 (U.S. Breastfeeding Committee [USBC], n.d.); and the *Business Case for Breastfeeding* (BCB), which was developed to provide education materials to employers regarding the benefits of workplace breastfeeding, setting up a workplace lactation support program, and to successfully guide employees who breastfeed (Office on Women's Health's [OWH], 2017-a).

The state of California has implemented and upheld the federal laws protecting and encouraging workplace breastfeeding (CDC, 2019-b). In addition to compliance with federal laws, California has implemented more legislation, which has led to improved breastfeeding outcomes when compared to national averages (CDC, 2020-a; NCSL, 2019). The adherence to existing laws and steady implementation to improve upon those laws has propelled breastfeeding metrics within the state; yet, due to the important benefits breastfeeding offers, until the metrics reach 100% of all goals, there is still improvement to be made.

Due to numerous health benefits to the mother and infant for continued breastfeeding and the evidence that indicated that returning to work for the breastfeeding mother is a major barrier to reach optimal goals for breastfeeding duration, this study was

needed to help uncover the barriers that influence this early cessation to breastfeeding for working mothers. As some evidence is pointing to workplace breastfeeding support being a hindering barrier to breastfeeding duration, it was critical to determine how the perception of this support influenced a working mother's overall attitude towards her breastfeeding experience.

Problem Statement

Within the United States and per the current objectives of the WHO, the optimal goal for any type of breastfeeding up to 6 months is 60% (ODPHP, n.d.-a; Pounds et al., 2017; WHO & UNICEF, 2019). The specific time frame of 6 months is linked to research showing added benefits for the infant now and later in its life, as well as for the mother's health outcomes (Amiel Castro et al., 2017; Bartick et al., 2017; Sánchez et al., 2021). Current statistics in the United States indicated that only 58.3% of women reach the 6-month optimal goal for any breastfeeding (CDC, 2020-a). As of 2020, the state of California reached 67.1% of mothers achieving the 6-month goal for any breastfeeding (CDC, 2020-a). Though both the United States and state of California have shown steady upward improvement in breastfeeding rates over the past several years, there is still room for improvement. Likewise, identifying what strategies, policies, and specific facilitators California was practicing in helping mothers achieve higher rates of any breastfeeding warranted close investigation.

The existing and current research suggested that perception of workplace breastfeeding support correlates to the intention to continue breastfeeding once a woman has returned to work (CDC, 2019-c; Leon et al., 2019). It remained unclear, however,

whether perception of workplace support impacts in any way a working mother's experience in reaching the 6-month breastfeeding goal length and beyond (ODPHP, n.d.-a; WHO & UNICEF, 2019). Moreover, it was unclear whether a working mother in the state of California, under improved breastfeeding laws and legislation, was influenced by her perception of workplace support, and whether her perception changes her attitude towards breastfeeding behavior and practice (Albarracín & Wyer, 2000; Bradford et al., 2017). Considering these unknown factors about workplace breastfeeding support and perception, a meaningful gap existed in the field. As such, there was a need to determine whether perception of workplace breastfeeding support leads to attitudinal changes and has any significant influence on a mother's breastfeeding lived experience.

Additionally, the provision and reception of health education and promotion (HEP) of breastfeeding, whether in relation to the health benefits for the mother and infant or regarding the policies governing workplace breastfeeding support, has not been well-studied, and the relationship of reception of education to intention to breastfeed after returning to work is understudied (Jeihooni et al., 2019; Whipps, 2017). Moreover, it is not known whether, if a mother receives breastfeeding HEP, this has any influence on her perception of workplace breastfeeding support, which could then impact her attitude toward breastfeeding behavior and duration (Jeihooni et al., 2019; McCardel & Padilla, 2020)? The gained knowledge from this study can aid in the development of workplace interventions aimed at improving breastfeeding behavior, with the overarching goal to increase breastfeeding rates associated with a duration of at least 6 months.

Purpose of Study

The purpose of this qualitative phenomenological study was to discover how a Californian working mother's perception of workplace breastfeeding support influences attitude towards her breastfeeding experience (ODPHP, n.d.-a; Schafer et al., 2017). Additionally, this study explored how HEP of workplace breastfeeding support influences a mother's knowledge of workplace breastfeeding accommodations and benefits and if this knowledge impacts her perception, attitude, and experience (Monteiro et al., 2017).

By identifying the impact perception and attitude have on breastfeeding lived experiences among working women in California, interventions and workplace policies can be developed to improve breastfeeding behavior within all types of workplaces. Health professionals can use the information from this study to develop improved policies, regulations, and HEP materials designed to provide enhanced breastfeeding support in the workplace. Additionally, evidence indicating the impact of a mother's perception of workplace support can help employers understand how instrumental the degree and assessment quality of support is in the success of breastfeeding outcomes (Jantzer et al., 2018). With improved understanding of the relationship between workplace support, a mother's perception and attitude, and breastfeeding experience, expectations of how to support workplace breastfeeding efforts can be better developed, and most importantly adhered too (Jantzer et al., 2018). Furthermore, the results of this study can help develop new measurement tools, assessment protocols, and health education curriculum, which can be implemented at some future point.

Research Questions

Two research questions guided the development of this study and are the focal point of the process to discovering the impact of the shared phenomenon regarding breastfeeding perception and experience among working mothers in California. Research Question 1 (RQ1) was the primary driving force behind this study and incorporated the aim. The research questions were as follows:

- RQ1: How does HEP about workplace breastfeeding support impact a working mother's attitude towards breastfeeding behavior?

- RQ2: How does a working mother's attitude towards her workplace's breastfeeding support and her experienced subjective norms influence her breastfeeding experience towards reaching the 6-month breastfeeding goal?

Theoretical Foundation

The theoretical framework that was used to guide this study was based on Fishbein and Ajzen's (1975) theory of reasoned action (TRA). Ajzen (1991) remarked that a person's sense of control and perception of that control over a behavior can be used as a framework to predict behavioral outcomes. The TRA was useful for this study because a person's intention to engage in a particular behavior is a direct determinant of that behavior (Dhauvadel et al., 2019). Furthermore, as behavior is a function of a person's intention, it also correlated to an individual's belief in their own ability to perform the behavior successfully (Ajzen, 2012). Coreil (2010) explained that the perception an individual has of their own self-efficacy to perform the intended behavior is correlated to a positive or negative attitude, or the ease or difficulty, they believe they

have in accomplishing the behavior. This belief in oneself to perform a behavior can be linked to personal lived experiences (Sulaeman et al., 2018). The TRA focused on the constructs influencing a person's behavior, which were related to attitude, intention to perform the behavior, the subjective and social norms around them (Lau et al., 2018).

The focus of the TRA on intention to perform a behavior based on attitudinal influence aligned with the research objective of this study, which was to determine whether a mother's attitude towards workplace breastfeeding support influences her decision to continue to breastfeed. The interview questions and research questions were guided by the TRA. The interview questions were designed to probe the two constructs of the TRA and use primarily beliefs and perceptions to measure subjective norms and attitudes. The manual developed by Francis et al. (2004) for researchers using theory of planned behavior (TPB) frameworks guided the development of this study interview questions. The principles and constructs within the TPB were developed from the concepts of the TRA (Charles-Williams, 2018). Thus, this manual specifically instructs researchers on how to develop questionnaires, surveys, and analysis tools using the TPB framework, with explanations on incorporating the constructs of the theory, which are applicable to use with the TRA constructs (Francis et al., 2004). Further details regarding the TRA will be discussed in Chapter 2.

Conceptual Framework

This research was guided by a qualitative phenomenological research design and the hermeneutic approach, because each can be used to describe certain lived experiences of a group of participants regarding a shared phenomenon (Creswell & Creswell, 2018).

The shared phenomenon that this study focused on related the attitude towards workplace breastfeeding support among working women who breastfed (Lauer et al., 2019; Schafer et al., 2017; Smith et al., 2017). The aim of this research study was to discover whether a working mother's attitude of workplace breastfeeding support or the administration of health promotion and education about workplace support influenced her lived experience of breastfeeding. Moreover, hermeneutic phenomenology is useful for describing a person's lived experience with emphasis on their perceptive views of their dynamic surroundings, while reducing the influences and bias the researcher possesses (Jarrett, 2017; Rosfort, 2019).

With this study's focus on attitudes and experiences as phenomena, it was necessary to engage the working mothers in conversation to discover what barriers and facilitators they perceived in the workplace towards continued breastfeeding. The constructs of the TRA guided the objectives within the interview questions, with the aim to discover the link between perception, attitude, intention, and behavioral action. To accomplish this, I recruited participants that have been working while breastfeeding or those planning to return to employment post maternity leave. Working within the state of California was a requisite also to ensure commonality between participants and the laws and policies dictating workplace breastfeeding practice. Semi-structured interviewing was utilized to ascertain the experience of attitude each participant has had and discover the supporting meanings underpinning the research questions. Through the process of recruitment, interviewing, and follow-up questions, guiding each participant through

identifying and deciphering their self-reflection of the lived experience was a primary reason for using a qualitative phenomenological research study (Miller et al., 2003).

In Chapter 2, a thorough description of phenomenology and its use in qualitative research will be outlined and discussed. The relevant literature to support the use of this conceptual framework and a hermeneutic approach will also be brought forth. How I uncovered using thematic analysis the underlying themes behind why the participants perceived what they did and what meanings were at the core of their breastfeeding behavior will also be outlined in Chapter 2.

Nature of the Study

In this qualitative phenomenological study, the primary purpose was to discover if a mother received or was influenced by HEP prior to returning to work, which may have influenced her attitude and thus intention to breastfeed. The participant mothers for this study resided specifically in the state of California during their breastfeeding experience, where state and federal laws protecting workplace breastfeeding were among the highest in the United States (California Department of Public Health [CDPH], n.d.; NCSL, 2019). The secondary purpose was to explore the influence on breastfeeding experience based on a working mother's attitude towards workplace breastfeeding support.

The study was of a qualitative approach, using primarily semi-structured interviewing for data collection, which was appropriate for this research because of the sensitive and private nature of the topic of breastfeeding and to discover meanings experienced by each mother related to the phenomenon (Åkerlind, 2018; Rubin & Rubin, 2012). Interview questions focused on ideals of perception to help measure attitude.

Breastfeeding is a behavioral choice, and one that can be fraught with multiple influences and pressures from various sources in a mother's life (Amiel Castro et al., 2017). The locations of the interviews were a private setting for just the participant mother and the interviewer, which setting offered a more conducive opportunity for sharing of experiences, while also yielding options for probing questions (Creswell & Creswell, 2018). Stringent interview methods were enforced to help reveal the significance of the phenomenon correlating the noticed variables in a phenomenological theoretical framework (Ravitch & Carl, 2016). Moreover, the qualitative method helped determine the significance of the perception to the breastfeeding experience associated with workplace support.

Data collected were coded and analyzed using the qualitative analysis software program ATLAS.ti. Coding was primarily used for organizing the results in categories for the initial first-cycle interpretation and analysis (Patton, 2015). From these categories, the themes were determined, which revealed the patterns and implications behind the experienced attitude and the intention to breastfeed while at work (Rudestam & Newton, 2015). Any potential ethical issues or personal biases were addressed by establishing my role as the researcher. To achieve data accuracy and validity, the emergence of themes was promoted and analyzed to ensure the credibility, authenticity, transferability, and confirmability of the findings.

Definitions

For reader clarity, the following terms are defined as they are used within this study.

Any or ever breastfeeding: Providing breastmilk to the infant by any means necessary, including by natural suckling or latching at the mother's breast, or by expression and the provision through a bottle (ODPHP, n.d.-a).

Breastfeeding: The practice of feeding an infant breastmilk by latching and suckling at the mother's breast (AAP, n.d.-a; CDC, 2020-b).

Breastfeeding duration: The length of time an infant receives breastmilk typically begins at initiation after birth and ends with cessation of breastmilk provision (AAP, n.d.-b; CDC, 2020-b; ODPHP, n.d.-a).

Breastmilk: A semiliquid substance produced within the mammary glands of the mother's breasts, which is the primary source of nutrition for the infant, containing all the essential nutrients required for infant needs (AAP, n.d.-b; OWH, 2017-d).

Exclusive breastfeeding: The exclusive use of only human breastmilk to feed an infant (CDC, 2020-b; WHO, n.d.-b).

Full-time work: Work hours that typically are a minimum of 8 hours per workday but may be subject to modification based on the organization and can exceed this amount per week (U.S. Department of Labor [DOL], n.d.-a).

Hermeneutic phenomenology: A research approach that reduces outside influences or nuances the researcher brings and focuses the results on the participants' interpretation of how the phenomena was experienced, why it was, and how to make sense of it (Ravitch & Carl, 2016; Thayer-Bacon, 2003; van Manen, 1990).

Lived experience: The experience as an individual lives through it and recognizes it (Patton, 2015; van Manen, 1990).

Maternity leave: The period off from employment granted to a mother before and after giving birth to her child (American College of Obstetricians and Gynecologists [ACOG], n.d.; Employment Development Department – California, n.d.).

Part-time work: Work hours that typically are anything less than an 8-hour workday but may be subject to modification based on the organization (DOL, n.d.-a).

Phenomenology: A research design inquiry and philosophy utilized to understand and describe the lived experiences of an individual and perception of those experiences about a phenomenon (Creswell & Creswell, 2018; Miller et al., 2003).

Rooming in: When the newborn infant and mother can remain together at all times post-delivery (HHS, 2013).

Assumptions

The assumptions that framed this phenomenological study were as follows. First, it was assumed that the hermeneutic approach would reduce the influences and nuances that I as the researcher might bring to the study, which would focus the results on the participants' interpretations regarding the phenomenon, and most importantly, how they perceived it (Patton, 2015; Ravitch & Carl, 2016). It was assumed that working mothers in California who had experienced positive or negative workplace breastfeeding endeavors would share openly in the planned face-to-face interview format using videoconferencing technology. It was assumed that workplace support of breastfeeding had an impactful influence on a working mother's breastfeeding behavior. It was assumed that a working mother's attitude towards workplace breastfeeding support had a significant role in the overall success rate of breastfeeding duration and outcomes.

Likewise, it was assumed that perception led to beliefs then to attitude, and then to intention, which affected decision making and influenced behavior to some degree. It was assumed that a positive attitude towards workplace support, regardless of the quality of that organization's support, would have a positive influence on breastfeeding behavior and lead to increased chances of meeting the 6-month breastfeeding goal. Finally, it was assumed that HEP, which focuses on the policies and amenities workplaces can offer to support a breastfeeding mother at work, would improve her attitude and ultimately breastfeeding duration.

Scope and Delimitations

This study focused on the shared, lived experience of working mothers in the state of California who developed an attitude towards breastfeeding from some level of workplace breastfeeding support or reception of HEP. The aim of this study was to determine whether this attitude potentially influenced their breastfeeding experience. The objective was to uncover whether attitude toward workplace breastfeeding support had any influence on intention and behavior, results of which could help improve the situation of breastfeeding duration for working mothers. This related to the public health problem identified in the United States of underachieving in breastfeeding metrics, with specific mention of reaching a duration of at least 6 months for any kind of breastfeeding modality (AAP, n.d.-a; CDC, 2019-c). The participants for this study consisted of mothers 18 years and older who had delivered a baby within 7 years of the study participation. Inclusion criteria required that they worked in the state of California at the

time, returned to part-time or full-time employment after maternity leave, or had the intention to return to their workplace but for whatever reason did not.

Recruitment occurred by random purposeful sampling primarily through social media outlets such as Facebook and LinkedIn using a recruitment flyer. No secondary data were collected or used for this study, but certain demographics were collected from the participants to elucidate working environment, length of breastfeeding practices around the workplace experience, age category, and employment status, among other things. The recruitment goal was to have between six and 10 participants. The recruitment process was to send any interested woman a written consent, which was used to establish if she met inclusion criteria and provide a detailed explanation of what the participant would be asked to do. This process was conducted primarily by email, though a mailed letter could have been sent if the participant preferred to accompany an email. I then scheduled the video or teleconference interview with each participant via email or phone. This study utilized open-ended, semi-structured interviewing, wherein the audio was digitally recorded for data collection purposes. A demographic survey (see Appendix B), which elicited the demographic information, was distributed and collected during the interview. The recruitment process lasted 4 weeks to complete and gain responses. The interview process overall depended on each mother's availability, with the interview duration planned to be between 45 to 75 minutes per session. Once a participant met selection criteria, interview scheduling and completion commenced as soon as possible.

The research design for this study was qualitative hermeneutic phenomenology, which was analyzed for coding and for thematic determination. The software program which was used for this study was ATLAS.ti.

This study did not investigate the degree or level of breastfeeding support provided and sustained by a workplace where any of the participants worked or had worked while breastfeeding. The objective of this study was not to determine the effectiveness of any breastfeeding support materials or education, or policies which an organization might have provided to any of the participants. Likewise, this study did not interview employees, coworkers, or managers of any of the participants, or collect any statistical data of the organizations within which a participant worked or works. The objective of this study was to discover how attitude towards workplace breastfeeding support influenced practices and behaviors in the mother.

Other delimitations set for this study included the following. The state of California was chosen due to its high metric achievements in breastfeeding outcomes combined with a high degree of workplace legislative support, which had enhanced the potentiality of mothers choosing to breastfeed. The entire United States was not used as a source of the participant population because there were too many variations on local state policies and legislation compared to federal mandates. The age group parameter ensured that no participants were minors. This delimitation was set to avoid any influences or factors associated with pregnancy before the age of 18 years. The phenomenological hermeneutic research strategy was selected to provide a deep understanding of the shared experience of perception of specifically working mothers, where breastfeeding support

could have altered their behavior. Other qualitative research strategies were considered but rejected because the objective was to explore the meanings and themes behind the phenomenon, which this qualitative method utilized.

The results of this study revealed insights behind the research question as to whether attitude towards workplace support and health promotion and education within the workplace related to improving breastfeeding support, had any impact on the breastfeeding intention and behavior of working mothers. The results therefore can have great transferability into other aspects of healthcare and wellness, specifically in programs and interventions to improve infant health outcomes and reduce health indicators related to lack of adequate breastfeeding duration. Furthermore, the knowledge gained from this study can bring to light the importance organizations have in ensuring that breastfeeding support is adhered to and followed per local and federal laws and mandates, not to mention making sure the attitude their working mothers have towards that support is positive. Finally, the knowledge gained can help incentivize new programs and focused efforts on breastfeeding support amenities within organizations to improve attitude.

Limitations

A challenge and limitation to this study was that there were limited federal or state organizations or departments that were known to be evaluating or assessing the level of adherence to the mandatory workplace breastfeeding laws among organizations (CDC, 2019-b; Dinour et al., 2017; Lennon & Willis, 2017). If little to no federal or state department was evaluating adherence, then progress and improvement, not to mention

comparative analysis against goals, would be difficult to determine the effectiveness of current support policies. Likewise, without assessing the degree of compliance and adherence, the consequences for failure and below-standard achievement would be difficult to enforce.

The TRA was a proven theory and model for predicting behavior and helping researchers understand the reasons behind an intention that leads to behavior. Yet, despite the usefulness of the TRA it did have limitations. Lau et al. (2018) and Rogelberg (2007) outlined some of the limitations to the TRA, which included that there could be other variables influencing a person's intentions, like fear, mood, and threats; it does account for environmental constraints, personal control factors, or facilitating factors that might influence a person's ability to perform the behavior; and, the theory assumes that if the person is positively motivated towards behavioral action, the person will carry it out.

Additional limitations to this study included the phenomenological research design, which limits population diversity and randomization, owing to the conceptual framework underpinning this approach to be generic and generalized (Patton, 2015). The participants were selected by purposeful selection and included narrow inclusion criteria to foster the shared experience of returning to employment while striving to continue breastfeeding. The participants also had worked within the state of California during their experience. This criterion limited the representation of all mothers across the United States affected by the breastfeeding challenges.

The data collection method was via open-ended, face-to-face interviewing using videoconferencing technology, which improves trustworthiness and authenticity, but

because I was conducting the interviews, it increased the chances for personal bias and reduced validity (McDonald, 2019; Ravitch & Carl, 2016; Rubin & Rubin, 2012; Wienclaw, 2019). Likewise, because I am a male, this might have caused discomfort or certain personal bias amongst the mother participants. To improve these potential biases and increase validity, bracketing and reduction methods were incorporated during the collection and analysis portions (Jarrett, 2017).

Significance

The objective of this study was to investigate the relationship of attitude to breastfeeding experience. Minimal research had been conducted to establish whether a mother's attitude about her workplace's level of breastfeeding support impacted her decision to continue breastfeeding while working or at the same time she might have worked (Bradford et al., 2017). Therefore, a meaningful gap existed in the field. The impact of this knowledge can aid in the development of effective workplace interventions and policies to improve breastfeeding experiences within all types of workplaces, with the minimum goal to meet the 6-month breastfeeding duration metric. Moreover, government officials and healthcare professionals could utilize the knowledge gained from this study to identify more effectively barriers to breastfeeding among working populations. The results of this study could also enhance working mothers' self-efficacy in their own breastfeeding efforts and improve perception of workplace support as their understanding of its impact increases. Self-efficacy and empowerment from increasing knowledge about workplace breastfeeding support improvements could aid in

overcoming barriers that are hindering the duration and persistence in breastfeeding practices.

Positive social change was described as a need or discrepancy within a population or group which affects health, happiness, equal opportunity, or its socioeconomic growth (Laureate Education, 2015). The substandard breastfeeding rates in the United States represented a public health concern to social change for several key reasons (Bartick et al., 2017; CDC, 2019-c; Walters et al., 2019). These reasons included that (a) breastmilk is optimal nutrition for the infant, so increasing the rates of all breastfeeding categories will impact population health; (b) female employees who stop breastfeeding and correlate the causal factor to their workplace support could respond negatively and leave their job, experience job-dissatisfaction, or lose productivity; and (c) supportive literature revealed that highly influential barriers and demotivating factors to workplace breastfeeding are negative social norms, beliefs, and attitudes towards the practice from coworkers (Dinour et al., 2017; Hardison-Moody et al., 2018; Zhuang et al., 2018).

Results of this study could influence positive social change through improved health outcomes of both infants and breastfeeding women within the United States workforce, and through the potential long-term benefits for women in the workforce who choose to breastfeed; namely, protection and time to express breastmilk during working hours, private space and hygienic conditions within which to express milk, a lactation program and policies in place backed by facility leadership to sustain optimal protocols, and an atmosphere of positive perceptions and attitudes from coworkers and

organizational leadership ("The Public Health Benefits of Breastfeeding," 2017; Valizadeh et al., 2017).

Summary

Breastfeeding is vital for the numerous benefits afforded to the infant, mother, environment, workplace, and economy, and for its implications for positive social change (Bartick et al., 2017; Brahm & Valdés, 2017; Hardison-Moody et al., 2018). To focus on the importance of breastfeeding, the United States has set certain goals for breastfeeding outcomes, including reaching certain durations, such as 3 months and 6 months any breastfeeding (ODPHP, n.d.; WHO & UNICEF, 2019). These timeframes are linked to evidence that indicates infant and maternal health parameters are enhanced the longer breastfeeding practice continues (Amiel et al., 2017; Bartick et al., 2017; Sánchez et al., 2021). Currently, metrics in the United States are below goal levels for breastfeeding objectives in most states, though improvements have been trending up due in part to a multitude of efforts in workplace breastfeeding amenities and policies designed to protect breastfeeding endeavors (CDC, n.d.-a, 2020-a). California is one such state where breastfeeding outcomes and legislation had shown increasing improvement (CDC, 2020-a; NCSL, n.d.). One major barrier hindering breastfeeding duration was attributed to mothers returning to work (CDC, 2019-c; Jantzer et al., 2018). Determining what interventions or practices can help mothers overcome barriers to breastfeeding was therefore paramount as a public health concern ("The Public Health Benefits of Breastfeeding," 2017).

The aim of this study was to determine whether a working mother's attitude towards and experience of workplace breastfeeding support influenced her willingness and efforts to continue breastfeeding after returning to work. A review of the current literature and evidence indicated there was a connection between attitude towards breastfeeding support and breastfeeding duration (Crepe, 2017; Tangsuksan et al., 2020). In this qualitative study, the shared experience of this phenomenon among working mothers striving to breastfeed after returning to work was explored. The study focused on participant mothers within the state of California, where breastfeeding policies and legislation had helped breastfeeding outcomes exceed standards across the rest of the United States.

In Chapter 2, the current literature related to workplace breastfeeding, perception, attitude, and health benefits of breastfeeding practices will be reviewed and discussed. Furthermore, in Chapter 2 the search strategies set forth for finding the supporting literature, the theoretical and conceptual frameworks utilized in this study and the key concepts throughout the literature assessed, and the conclusion as to what themes and gaps within the current literature existed are explained.

Chapter 2: Literature Review

Of significance within the United States and the WHO were the accomplishment of breastfeeding metrics and goals set to help improve the health of infants, women, and populations (ODPHP, n.d.-a; WHO & UNICEF, 2019). All breastfeeding outcomes are important with special emphasis placed on the overall achievement of any type of breastfeeding for as long a duration as the mother and infant can (Pounds et al., 2017). The goal for breastfeeding of any sort or delivery was set at 60% for at least 6 months (WHO & UNICEF, 2019). The duration of 6 months or longer had been linked to research indicating increasing benefits for the infant, mother, and surrounding economy (Amiel Castro et al., 2017; Bartick et al., 2017; Sánchez et al., 2021). Current statistics in the United States indicated that only 58.3% of women were even reaching this 6-month optimal goal (CDC, 2020-a). Conversely, the state of California in 2018 reached 67.1% of mothers achieving the 6-month goal for breastfeeding, which indicated that some of the changes in laws and policies towards breastfeeding in the state were effectively helping improvement (CDC, 2020-a). Despite the consistent upward trending rates in the state of California and the United States, there was still room for improvement. Identifying what barriers and facilitators are influencing these changes or lack thereof was paramount in achieving similar improvements across the United States.

Research has indicated that employment was a barrier whether the mother is full-time or part-time (Hamada et al., 2017; Hardison-Moody et al., 2018). The industry and type of employment status, meaning nonexempt or exempt, manager or subordinate, brings differing levels of hinderance to the working mother, but regardless of the type or

status, the act of returning to work hindered breastfeeding duration (Lauer et al., 2019; Smith et al., 2017). Furthermore, breastfeeding cessation rates were directly correlated to the length of maternity leave time before returning to work and the level of support manifest in the workplace (Rimes et al., 2019; Steurer, 2017; WHO, 2017). The actual degree of breastfeeding workplace support or the experienced perception of this support from the manager and coworkers had been indicated as a barrier to breastfeeding duration and a mother's self-efficacy to continue breastfeeding upon returning to work (Cripe 2017; Zhuang et al., 2018).

To date, the overall impact workplace breastfeeding support has had on a working mother's perception of that support, and how this perception leads to attitudinal changes, has been primarily understudied (Bradford et al., 2017; Wallenborn et al., 2019). The purpose of this qualitative phenomenological study was to explore whether the mother received any HEP on workplace breastfeeding support and if this influenced her attitude and breastfeeding experience. Additionally, the other purpose of this study was to discover how a California working mother's attitude towards workplace breastfeeding support influenced her breastfeeding experience in striving towards the 6-month goal for breastfeeding (ODPHP, n.d.-a; Schafer et al., 2017). The knowledge gained from this study could be utilized to develop new workplace interventions and policies.

Within this chapter, the search mechanisms and strategies will be outlined, which were utilized to collect and analyze pertinent research on the topic related to perception, belief, attitude, and breastfeeding experience in the workplace. The TRA theoretical framework for this study and its appropriate use aligning the research questions with the

study objectives, will be discussed. Following this discussion, the use of hermeneutic phenomenology as the conceptual framework best suited for the purpose of this study will be discussed. Finally, any key concepts discovered from the literature review for this study design and purpose will be detailed and explained.

Literature Search Strategy

An extensive search for current literature related to breastfeeding in the workplace and attitude towards support was conducted using the time frame of 2015 to 2020. I identified the cited research from databases including primarily the National Library of Medicine's PubMed search platform, as well as the Walden University Library, with access to ProQuest, Thoreau, and EBSCO resources. Key search terms mainly included *breastfeeding, workplace, attitude, belief, perception, phenomenology*, *breastfeeding policies* and *legislation*, *influence on healthy behavior, workplace breastfeeding support measurement tools* and *devices,* and *qualitative research*.

Once a research article or study was identified as meeting the search parameters, filters were added to ensure quality and legitimacy, such as whether it was peer-reviewed and what type(s) of design was used, along with the identification of the theoretical or conceptual framework chosen. The purpose and research questions for each study reviewed were examined for alignment with search identifiers.

Studies fitting these standards were also examined for geographical location and time frame. Those relevant studies from countries outside the United States were collected and analyzed but highlighted to be kept separate. The need to keep these studies separate was to clearly denote that their results fall under and were possibly influenced by

differing breastfeeding laws and levels of support, which could differ greatly from those found within the United States. The need for a specific date range going back 7 years was critical to include only studies that would have been conducted under the current United States breastfeeding laws and conditions, thus ensuring results reflected the most current working situations.

Theoretical Foundation

The TRA was appropriate and suitable as the framework for this study because it could be used effectively to predict behavior and discover if intention was linked to attitude (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975; Wood & Qureshi, 2017). As the name suggested, the purpose of the theory can be to understand why or why not a person undergoes a behavior, and whether there was a plan (in other words intention) to perform it. In this study, the aim was to discover if health promotion and education of workplace breastfeeding support or attitude and subjective norms towards that support influenced a working mother's intention to perform the behavior of breastfeeding her infant.

The TRA was proposed by Fishbein and Azjen, with the underlying presumption that a person's intention to conduct a behavior is a precursor for action and is compelled by their perceived attitude and subjective norms (Ajzen & Fishbein, 1980; Humphreys et al., 1998). The TRA includes two primary constructs behind a person's intention to perform behavior, which guide its framework. These constructs are (a) attitude towards the behavior and (b) subjective norms. Influences of each construct include behavioral beliefs for attitude and normative beliefs for subjective norms (see Figure 1; Blatz et al.,

2020). A look within each of the constructs revealed the application and the preluding

circumstances or concepts that lead to the development of each.

Figure 1

Theory of Reasoned Action
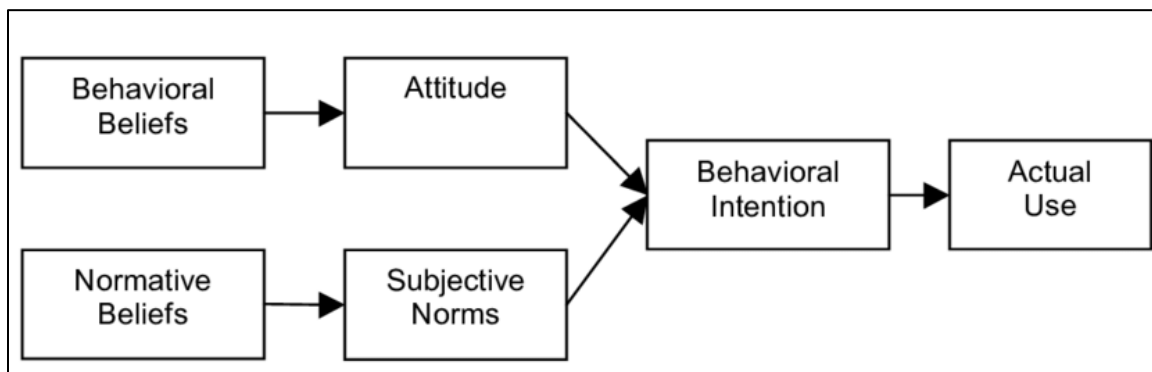
Note. From *Understanding Attitudes and Predicting Social Behaviour*, by I. Ajzen & M.

Fishbein, 1980, Prentice-Hall.

Bandura (2000) and Francis et al. (2004) explained that attitude includes whether

a person is in favor of conducting the behavior, and subjective norm is how much or little

a person is pressured socially to perform it, where perception of one's self-efficacy

accounts for whether the person feels in control of the action. Fishbein and Ajzen (2010)

and LaMorte (2019) explained that a person's *attitude* refers to the favorable or

unfavorable assessment the person has of the desired behavior, and if the outcomes of the

behavior are worth the risk, the likelihood increases towards the *behavioral intention,*

which refers to the factors of motivation that influence the behavior. When this concept is

more specifically applied, it can be interpreted as the stronger a person's intention to

perform a behavior, the more likely they will engage in it (Hahn & Popan, 2020;

Rogelberg, 2007; Wood & Qureshi, 2017). The construct *subjective norms* refers to a

person's beliefs about whether others approve or disprove of the behavior in question, which is compounded in severity of influence if the others are acquainted with or important to the person (Blatz et al., 2020; Lau et al., 2018).

In the context of this study, Lau et al. (2018) and Wood and Qureshi (2017) proposed that the TRA could be used effectively to predict, explain, and understand a variety of health-related behaviors, such as breastfeeding initiation and duration. Moreover, the TRA framework could be used to help predict behavioral outcomes related to a mother's intention to breastfeed, why she might or might not feel confident (self-efficacy) in doing so, for how long of a duration she feels able to breastfeed, and how her perceptions and beliefs of outside influences, like workplace support, impact her behavioral action (Humphreys et al., 1998). A literature review conducted by Lau et al. (2018), indicated that the TRA predicts that the primary driving force behind behavior is *intention*, and that the results of the studies showed that intention to breastfeed and the self-efficacy to perform the behavior successfully, were direct determinants of EBF.

As for this study, the subjective norms a mother might feel to perform the breastfeeding behavior would have influence on her decision to breastfeed after returning to work (Fishbein & Ajzen, 2010; Humphreys et al., 1998). Subjective norms are described as the particular behaviors a person perceives others will agree they should engage in or not (Ajzen & Fishbein, 1980). The others referred to are usually significant to the individual in some sort of relationship, to where their opinion and belief about the behavior matters. Lau et al. (2018) found that subjective norms along with attitude were direct predictors of mother's intention to breastfeed. Hahn and Popan (2020) explained

that normative beliefs revolve around a person's motivation to comply with what is perceived to be normal or acceptable to their peers, society, or others in their environment that matters. Rogelberg (2007) reported that when others indicate approval for a behavior and motivation to comply with their wishes (normative beliefs), subjective norms increase and the person's intention to engage in the behavior improves.

These reviews supported the underlying fundamental pathway within the constructs of the TRA, which followed that a mother's intention to breastfeed while at work is heavily influenced by the normative beliefs she perceives from those around her she cares about, the subjective norms she is motivated by based on her perception, the attitude she develops based on her beliefs regarding the benefits and advantages of the behavior, and how she perceives her self-efficacy to carry it out successfully (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975; Wood & Qureshi, 2017). Likewise, the perception she has to accomplish it successfully once returned to work, if workplace support she perceives is not positive, could influence her intentions and outcomes (Albarracín & Wyer, 2000; Gebrekidan et al., 2021).

The TRA has shown through various studies that when a person's attitude was positive towards the behavior, or when the person perceived a positive expectation from others (subjective norms), they were more likely to undergo the behavior (Karimi et al., 2019). The person's intention to perform the behavior was also improved under positive perceptive influences (Blatz et al., 2020; Leon et al., 2019).

Research studies that were conducted using the TRA as a framework indicated its usefulness in predicting breastfeeding behavior and intention. A study done by

Humphreys et al. (1998) looked at low-income minority women who were pregnant and discovered the TRA was effective for identifying attitudinal and normative beliefs that can predict which women intend to breastfeed or not. Lau et al. (2018) performed a review of over 30 studies with the intent to examine the usefulness and utilization of the TRA to predict breastfeeding duration. They found that the TRA was useful in predicting breastfeeding intention and initiation, but not well at predicting duration. Research done by Wood and Qureshi (2017) of Chuukese immigrant women living in Guam revealed that the TRA was useful in examining the facilitators and barriers to breastfeeding. The following study of note was conducted utilizing the TRA but not specifically regarding breastfeeding. Blatz et al. (2020) used the TRA to examine the attitudes, social pressures, perceptions, and intention to support lactation efforts among NICU nurses. These constructs were all measured before and after the administration of educational material on lactation. Blatz et al. concluded that attitudes and subjective norms can be used to predict intention and behavior. These research conclusions provided support for the utilization of the TRA in studying the influence of beliefs on subjective norms and perception on attitude towards workplace breastfeeding support on breastfeeding behavior.

The interview questions designed for this study incorporated the two constructs behind the TRA, with the objective to uncover themes related to a working mother's intentions to breastfeed after returning to work, whether those intentions are influenced by her attitude towards support, and if the administration of health promotion and

education prior to perceiving work support, had any influence on her plan to conduct breastfeeding.

Conceptual Framework

This research was guided by the phenomenological research design because it can be used to describe the lived experiences of a group of participants regarding a shared phenomenon (Creswell & Creswell, 2018). As explained by Jarrett (2017), *phenomenology* is a philosophical and research strategy, which can be used by the researcher to understand an individual's perception of a life event. Sathyanarayana Rao et al. (2009) explained that a person's beliefs are the presets to perception. Fishbein and Ajzen (2010) revealed that attitude is formed from spontaneous and unconscious beliefs about a particular behavior, which is influenced by their perception of the outcomes. The real purpose, therefore, was to grasp the essential meaning of some experience an individual or group reflected upon, which was influenced by a person's beliefs, perceptions, and attitudes (van Manen, 1990). Adding to the purpose of using phenomenology, Rosfort (2019) described the aim as to clarify, describe, and make sense of the dynamic structure of the reflective experience a person goes through. Moreover, identifying and deciphering the self-reflection process a person struggles through to understand some lived experience, is at the heart of discovery within a phenomenological research study (Miller et al., 2003).

The original discussion of phenomenology started from German mathematician, Edmund Husserl, who proposed that experience is the starting point to science wherein a person comes to understand the world around them (Husserl, 1931). Essential to

Husserl's views of phenomenology was the ideal that a person must break down their

ordinary, or natural attitude*,* and see things as they really are—not as a conceived notion

or experiential presumption, but as an out-of-the-ordinary phenomena (Thayer-Bacon,

2003). One integral method of accomplishing this practice was termed *bracketing* or

phenomenological reduction, which requires the movement of a person's understanding

from a *natural attitude* to a more *transcendental attitude* (Creswell, 2007; Thayer-Bacon,

2003). As Creswell (2007) pointed out, the reduction process aids a person in discovering

the real hidden meanings within their experience. Husserl was thus proposing that

through the process of bracketing, a person comes to truly understand the phenomenon

experienced for what it is, and not what it might have been expected, presumed, or

influenced to be by preconceived notions or pre-reflections (Chan et al., 2013).

The phenomenological reduction process of bracketing can also be utilized by the

qualitative researcher, who is seeking to determine the underlying meaning of shared or

individual experiences (Creswell, 2018). By utilizing the principle of bracketing, the

qualitative researcher can reduce bias within the study by eliminating personal feelings,

emotions, values, knowledge, or assumptions, which might influence study results (Chan

et al., 2013).

As time elapsed, other philosophers added to the concepts of phenomenology,

proposing that within the research is the determination of and use of *themes* (van Manen,

1990). *Thematic analysis* thus proceeds by a similar methodology of reduction, which can

help the researcher discover underlying meanings behind an individual's experiences

(Miller et al., 2003). As van Manen (1990) concluded, the process of discovering themes

within an experience is the method of bringing to light the hidden meanings, and potentially the shared phenomena, of the group. This study utilized thematic analysis to uncover what working breastfeeding women were experiencing and what shared influences were driving these similar phenomena within the workplace.

The Hermeneutic Phenomenological Approach

The approach to be utilized is hermeneutic phenomenology, because in this study it was posited to discover how the perception and thus developed attitude a mother has of her lived experience, led to a specific interpretation of that event (Jarrett, 2017). The hermeneutic approach effectively reduces outside influences or nuances the researcher brings and focuses the results on the participants' interpretation of how the phenomena was experienced, why it was, and how to make sense of it (Patton, 2015; Ravitch & Carl, 2016). Researchers posited that hermeneutics can be used to explain behaviors and actions, which are inseparable from an individual's experiences (Thayer-Bacon, 2003). Added to the purpose of phenomenological research, which is to clarify, describe, and bracket the lived experience, hermeneutics is about including an individual's presuppositions; it is the starting point of inquiry, and the process of describing how a person understands their lived experience (Thayer-Bacon, 2003).

Using the Hermeneutic Phenomenological Approach With Breastfeeding

Loftus and Higgs (2010) described hermeneutic phenomenology as an ideal approach for exploring the complex relationships that a person can develop within the workplace, and how the workplace experience in turn affects them. Spencer (2008) concluded that a hermeneutic approach aligns with researching mothers in their views

and experiences surrounding breastfeeding. Because hermeneutic phenomenological research examines the conscious experience in the subjective first-person point of view, in this case breastfeeding experience and the influences motivating its practice or cessation, it was ideally set up to study a working mother's lived experience behind workplace breastfeeding and what phenomenon she understood her experience to be (van Manen, 1990).

The use of hermeneutic phenomenology was well suited for studying behaviors such as breastfeeding and the lived experiences behind what and why a woman chooses to practice it (Jarrett, 2017). The hermeneutic approach also aligned with the TRA, which combined, could be used to predict why a mother chooses to breastfeed or stop, and to uncover the factors that could lead to the behavior and shared phenomenon. The hermeneutic approach further improves qualitative research outcomes by reducing bias and helping the researcher set aside prejudgments and presumptions to then rely on gaining a clearer picture of the meanings of an experience the participant lives through (Miller et al., 2003).

The application of the hermeneutic phenomenological approach with this study was utilized using semi-structured interviews. These in-depth interviews allowed for thorough and probing inquiries into the meanings underlying a working mother's experience in continual breastfeeding at work or not. The method of using open-ended interview questions helps generate textual data, which can be interpreted for its correlation to breastfeeding support and attitude (Creswell, 2007). By analyzing the texts from interview responses from each participant, thematic analysis was conducted to

discover what themes describe the shared experiences surrounding the phenomenon of workplace breastfeeding (Polit & Hungler, 1999; van Manen, 1990).

<div align="center">**Literature Review Related to Key Concepts**</div>

The following articles supported the correlation between breastfeeding initiation, duration, and practice with infant and maternal health, and how HEP impact these relationships, how the perception a mother has of her workplace breastfeeding support can influence her attitude, intention, and behavior to breastfeed while at work, and the current United States and California State-specific laws and workplace breastfeeding policies. Studies have been conducted to aid the discovery of qualitative variables related to breastfeeding cessation and workplace support; yet there has been a gap in determining any connection between a mother's experience and attitude towards workplace breastfeeding support and achieving any breastfeeding up to a minimum of 6-months.

In this literature review, studies related to workplace breastfeeding and qualitative research methodology will be outlined. Recent research revealing the relevant practices and approaches to the workplace breastfeeding problem and which interventions or solutions have shown to effect change positively or negatively will be outlined. The following topics will then be reviewed to indicate justification and rationale for this research: (a) Benefits of Breastfeeding: benefits for the infant, benefits for the mother, benefits for the public health, economy, and workplace; (b) Breastfeeding Goals and Recommendations in the United States and Abroad; (c) The U.S. Breastfeeding Rates are a Public Health Concern; (d) Barriers to Breastfeeding; (e) Beliefs, Perceptions, and Attitude toward Workplace Support for Breastfeeding; (f) Current Workplace

Breastfeeding Policies, Legislation, and Protective Laws within the United States; and (g)

Applicable Measurement and Assessment Tools for Workplace Breastfeeding Support.

Workplace Breastfeeding and Qualitative Research

As explained by Porter (2000) and Polit and Hungler (1999), the qualitative

research approach is effective for uncovering the influence behind why an individual or

group undergo a phenomenon, for which experience can be most likely understood by

determining how the person effected understands the context of the world surrounding

them. The following studies utilized a qualitative research design to examine facilitators

and barriers to workplace breastfeeding duration, and if attitude towards workplace

support, developed from perception or otherwise, has any influence of breastfeeding

behaviors. Findings and limitations will be reviewed when appropriate.

Pounds et al. (2017) conducted a qualitative study in the United States to

understand the relationship between the maternal support system during the post-partum

period, and its effects on full-time employment and EBF. The primary aim of the study

was to determine how low-income, full-time, working mothers were able to exclusively

breastfeed, and what influences helped in this accomplishment. Findings from this study

report that the timing of maternal support, specifically right after birth to aid in any

breastfeeding problems, was pivotal in the success rates. Also gained from this study was

that trained healthcare providers and professionals who also have breastfed, including

lactation consultants, included into the maternal support system, along with a supportive

family, were key factors associated with increased exclusive breastfeeding duration

among these mothers.

Hardison-Moody et al. (2018) aimed to identify what factors inhibited or facilitated breastfeeding practices among low-income women, and if any influence could be contributed to by social, cultural, or economic environmental factors. Of the mothers, 16.7% breastfed for up to 6 months, and only 11.5% exclusively breastfed for up to 6 months. Inhibiting factors revealed by the participants and study included concerns about breastmilk supply, living situations with family support lacking, medical provider interactions, and workplace policies.

Crepe (2017) conducted research of breastfeeding women from two support groups; namely, a hospital group and a breastfeeding store, with the intent to complete observational research and qualitative interviews. From the findings, predominant concerns among the participants surrounded the choice between returning to work and breastfeeding, which leads to the assumption that these mothers did not feel confident both choices could be completed simultaneously. The association between this decision to remain at home and not work, and organizational turnover, was mentioned as a revealed factor. Another key factor in influencing each woman's decision to breastfeed and stay working was coworker support, whether from a manager or peers. The women expressed the concern that their coworkers had a perception that workplace breastfeeding would negatively compromise the working mother's productivity and morale. Crepe (2017) concluded that this study identifies important steps in improvement interventions for workplace breastfeeding, which relate to increasing the support from managers, coworkers, and policies, all of which can be urged by organizational action.

The combination of a case study and qualitative research design was incorporated by Johnson and Salpini (2017) to review the sociological influence on workplace breastfeeding practices among working women. The research aim was to uncover what challenges breastfeeding women face during the workday and what factors lead to an increased success rate. Findings from the study revealed that scheduling adequate time within the workday was the main barrier the women faced, and that these women spent on average 27 minutes expressing breastmilk during pumping sessions. Conclusive analysis by the researchers pointed out that scheduling control was a primary concern by these women and the main area of needed improvement.

A mixed-methods study was conducted by McCardel and Padilla (2020) with the objective to examine the access working mothers had to breastfeeding workplace resources, the barriers and facilitators in the workplace to breastfeeding, and what recommendations these working mothers offer to improve access to these resources. The main barriers among the participant group were reported as inflexible work schedules to allow for pumping breaks, and inadequate or no space for pumping. The researchers offer several recommendations for employers to incorporate to improve workplace breastfeeding practices, such as providing lactation consultants or access to and having support groups both with the primary purpose to aid in the transition of working mothers returning to work and continuing to breastfeed. Limitations of this study are the data was self-reported through an online survey, where validity and trustworthiness are difficult to measure or verify (Rudestam & Newton, 2015).

The following study by Alianmoghaddam et al. (2018) was conducted outside of the United States yet also utilized a qualitative research design and was based off similar objectives to those aforementioned; specifically, to understand the barriers and facilitators to workplace breastfeeding practices, and if perception of workplace support influenced attitudes towards that support is one of the two. Though the country of origin does not have identical laws or policies concerning workplace breastfeeding support, the results and findings can be useful here to collaborate effective solutions to breastfeeding improvement intentions within the United States.

Alianmoghaddam et al. (2018) conducted a qualitative study in New Zealand with the purpose to determine why exclusive breastfeeding rates dropped significantly between 3 to 6 months after birth. The study identified through thematic analysis several key themes which relate to cessation of continued breastfeeding. The four themes are (a) the good employee/ good mother dilemma, (b) breastfeeding is lovely, but 6 months exclusively is demanding, (c) exclusive breastfeeding recommendations should be individualized, and (d) introducing solids early as a cultural practice. Conclusion analysis of this study reveals that exclusive breastfeeding to 6 months is challenging despite having multiple advantages, which could be presumed to increase the potential for longer breastfeeding durations.

There have been several qualitative studies conducted with the aim to examine the effects of barriers and facilitators on workplace breastfed outcomes, and whether any significant interventions have been identified which have shown to help improve breastfeeding durations up to 6 months or longer despite returning to employment. But as

shown in this literature review, little research has been done that correlates perception of workplace support to breastfeeding behaviors or intentions, and if the developed attitude based on these perceptions influences breastfeeding (BF) behavioral intention or action.

Current Approaches and Interventions for Workplace Breastfeeding Support

Breastfeeding metrics had been measured in relation to health outcomes and goals within the United States for many decades (Bartick et al., 2017). As a result of increasing scrutiny on overall breastfeeding rates and the correlation to positive health variances along with rates meeting suboptimal standards, numerous studies, interventions, and improvement mechanisms have been attempted (Bartick et al., 2017; Center for WorkLife Law, n.d.; CDC, 2019-b). The following relevant studies are reviewed here to outline some of the more recent research approaches and interventions, which have been attempted or are ongoing within the United States to improve breastfed metrics.

Amiel Castro et al. (2017) investigated the impact of antenatal, or prenatal, depressive symptoms among pregnant women with the underlying aim to gauge if behavioral issues had a positive or negative impact on breastfeeding outcomes after delivery. They found that prenatal depression at both 18 and 32 weeks was associated with decreased breastfeeding initiation and duration later. They also discovered that a positive attitude towards breastfeeding during the prenatal period was a strong predictor of breastfeeding with a 20%–30% increase in initiation and overall duration.

Anstey et al. (2017) looked at the lower rates of breastfeeding among Black women in the United States and sought to investigate the correlation between breastfeeding and breast cancer risk, which Black women tend to show having higher

incidence rates. As a result of this study, Anstey et al. (2017) evaluated the effective use of using a comprehensive approach within the workplace across multiple-levels and settings. They posited that such an approach would improve breastfeeding rates in the workplace and reduce the risk associated with health disparities among women.

Additional research conducted to investigate breastfeeding improvement approaches that are of a unique nature will also be reviewed in this section. For example, Lee (2017) proposed providing mothers returning to work, a *doctor's note* to attempt to produce improved support within the workplace for lactation accommodations. de Jersey et al. (2017) conducted a prospective study to determine if a pre-pregnancy overweight status had any impact on breastfeeding intentions, exclusivity, and duration. The results identified no difference between being overweight or healthy weight for breastfeeding intentions but did find that being overweight was less likely to motivate exclusive breastfeeding at hospital discharge and at 4 months post-partum. Additionally, de Jersey et al. (2017), found that being at a healthy weight compared to overweight mothers when having a higher intention to breastfeed was associated with increased exclusive breastfeeding upon hospital discharge. Lennon et al. (2018) studied the strategy of using businesses practicing lactation support policies to mentor other businesses that were lacking lactation policies. The premise was based on data correlating improved workplace breastfeeding rates to the business having a written lactation program policy. This study by Lennon et al. (2018) was the first of its kind but uncovered a strategy or model which could be utilized to help businesses and organizations improve lactation support in the workplace.

Other related studies had identified workplace lactation support programs and policies as strong predictors of breastfeeding intentions and outcomes (Dinour & Szaro, 2017; Kim et al., 2019; Winegar & Johnson, 2017). In other research conducted with the objective to examine or discover the relationship between workplace breastfeeding outcomes and workplace support, Lennon and Willis (2017) and Payton et al. (2018) used a scoring system to evaluate the quality of an employer's lactation support program, and Jantzer et al. (2018) found that working women had improved breastfeeding duration and home balance when the employer provided enhanced lactation support.

Components of a workplace lactation support program that were identified as facilitators of improved breastfeeding versus barriers, were flexible work schedules (Zilanawala, 2017) and maternity leave length of time (Rimes et al., 2019; Steurer, 2017; WHO, 2017). When an employer provided a space for expressing milk and adequate break time to do so, Vilar-Compte et al. (2021) found women were more likely to be exclusively breastfeeding at 6 months. When space to express milk, adequate time during the workday, and no lactation support accommodations were seen or perceived in the workplace, these were identified as barriers (Bradford et al., 2017; Dinour & Szaro, 2017).

Creating a workplace lactation support program and environment had been identified as a key component in improving workplace breastfeeding and is aligned with HEP (Kim et al., 2019). Important components of workplace support included creating an organizational culture that supports breastfeeding (Angeletti et al., 2018; Bradford et al., 2017), developing a workplace health promotion program to educate and encourage

working mothers and improve lactation support perception (Linnan et al., 2019; Jantzer et al., 2018), and focusing on positive interpersonal communication between working mothers and managers (Jantzer et al., 2018).

To aid employers in developing a workplace lactation support program, the WABA created an *Employer Toolkit*, which recommends setting up adequate break times, secure and private pumping spaces, adopting an environment of positive attitudes and zero discrimination towards workplace breastfeeding, and including union advocates and social protection measures (WABA, n.d.). This approach could be used in conjunction with interventions designed to accomplish workplace lactation programs that effectively promote and sustain continued workplace breastfeeding provision.

Interventions aimed to improve workplace breastfeeding rates and meet the 6-month breastfeeding goal had been sponsored or supported by various organizations internationally and within the United States. The WHO had been heavily engaged in improving breastfeeding metrics throughout the world for decades (WHO & UNICEF, 2003). As part of the WHO, the World Health Assembly (WHA) Resolution 65.6 in 2012 set up six global nutrition targets to give countries goals to strive for by the year 2025 (WHO, 2017). Specifically, the nutrition target set regarding breastfeeding metrics is to increase the rate of exclusive breastfeeding to at least 50% in the first 6 months (WHO, 2017).

The WHA global nutrition targets included five actions suggested for policymakers to use when implementing policies to improve breastfeeding. These five actions were (a) provide hospitals and facilities the necessary provisions to support

exclusive breastfeeding, with the goal to initiate or sustain the BFHI; (b) provide community-based strategies to support exclusive breastfeeding; (c) limit the advertising and promotion of breastmilk substitutes, and enforce legislation under the International Code of Marketing of Breastmilk Substitutes (WHO, 1981); (d) enact legislation to provide maternity leave at full pay and for at least six months to encourage exclusive breastfeeding, and policies to encourage workplace and public breastfeeding; and (e) ensure adequate investment in the training and education, promotion, and protection of support for exclusive breastfeeding (WHO, 2017).

One of the key guidelines outlined within the WHA's global nutrition targets was related to the BFHI, which encouraged having the country's health-systems implement the 10 Steps to Successful Breastfeeding developed by the BFHI, and to have maternity facilities seek certification through the designation process of becoming a BFHI facility (Baby-Friendly USA, n.d.-a, n.d.-b; WHA, 2017). Research indicated improved exclusive breastfeeding rates and benefits to mother and infant when following the BFHI steps and recommendations (Nobari et al., 2017; O'Connor et al., 2018).

The BFHI was created by the WHO and UNICEF in 1991 with the overall objective to improve, protect, promote, and support breastfeeding (WHO, n.d.-a). Since its inception, various educational materials, field-tested models and strategies, and assessment tools had been developed to aid in those countries or general healthcare systems which choose to implement the BFHI process (WHO, n.d.-a). The BFHI was accepted as an effective program for improving breastfeeding practices and metrics and promoted for use on a global scale at the 55th WHA in 2002 (WHO & UNICEF, 2003).

To further encourage the implementation of the BFHI within any maternity or general medical facility where perinatal care is provided, a certification process and the public label of *Baby-Friendly Hospital* (BFH) could be obtained by meeting the designation criteria and then maintaining that criterion upon each recertification period (Baby-Friendly USA, n.d.-b; CDC, 2019-c).

Per recent analysis, within the United States there were currently 604 facilities meeting the BFHI standards and criteria, with 28% of all births born in BFHI facilities each year (Baby-Friendly USA, n.d.-c). The steady upward trend of BFHI related births aligns with the ODPHP Healthy People 2020 goals and objectives, which included multiple specific goals for improving breastfeeding metrics across all outcomes (ODPHP, n.d.-a). One section within the Healthy People 2020 was the Maternal, Infant, and Child Health (MICH), wherein certain goals were set forth covering breastfeeding initiation, exclusivity, and duration, but also touching on aspects of workplace breastfeeding support, with one specific goal to increase the percentage of employers offering Lactation Support programs from 25% to 38% (ODPHP, n.d.-a).

O'Connor et al. (2018) revealed that not having the BFHI standards of practice in place was a modifiable predictor of decreased exclusive breastfeeding at 3-months. Nobari et al. (2017) studied participants in the Women, Infants, and Children (WIC) program to investigate the impact on breastfeeding after giving birth in a BFH. Findings indicated that giving birth in a BFH, or one going through the certification process, increased the odds of exclusively breastfeeding at 1 and 3 months.

Due to the positive overall impact on breastfeeding metrics, implementation for the BFHI certification in maternity facilities and the support thereof had become a top priority in the United States and part of the United States Surgeon General's *Call to Action to Support Breastfeeding* (CDC, 2019-c); not to mention, other organizations within the United States implementing the Ten Steps to Successful Breastfeeding as an integral component of any successful breastfeeding initiative (AAP, n.d.-a; NCSL, n.d.).

The participation in the WIC program had shown to be a positive indicator of increased breastfeeding outcomes (Angeletti & Llossas, 2018). Typical WIC locations included breastfeeding counselors and lactation consultants, who provide consistent education and training for breastfeeding behaviors (Angeletti & Llossas, 2018). Bullinger and Gurley-Calvez (2016) used the IFPS II longitudinal study conducted by the FDA and CDC between the years 2005 to 2007 to indicate that WIC participation decreased exclusive breastfeeding time but had a positive effect on work leave duration. (CDC, 2017, 2019-a)

The Coalition for Improving Maternity Services (CIMS) in the United States set its standards for achieving implementation of a *Ten Steps of Mother-friendly Care Initiative* (MFCI) in alignment with the BFHI Ten Steps to Successful Breastfeeding (Coalition For Improving Maternity Services, n.d.). Like the intent of the BFHI, the stated mission and intent of the MFCI was to utilize evidence-based practices and guidelines to improve maternity and perinatal care, which includes breastfeeding.

The Benefits of Breastfeeding

Breastfeeding yields important benefits for the infant receiving it, the mother producing it, and the public health, economy, and workplace impacted by it. The Advocacy Brief on *Breastfeeding and Family-friendly Policies* from the WHO, UNICEF, and Global Breastfeeding Collective in 2019, stated emphatically that breastmilk gives a baby the healthiest start to life (WHO & UNICEF, 2019). Breastmilk is uniquely tailored for the infant and can change based on the metabolic or nutritional needs of the infant (Blake et al., 2016). Though the volume produced, and the nutritional composition can change per the health of the mother, breastmilk is nonetheless considered *personalized medicine* for the infant, offering various protective mechanisms for its present and long-term health outcomes ("The Public Health Benefits of Breastfeeding," 2017; WHO & UNICEF, 2019). Brahm and Valdés (2017) reported based upon research evidence that exclusive breastfeeding for at least 6 months was the most effective health intervention that exists for an infant. The numerous benefits from breastfeeding for the infant, mother, and environment, economy, and workplace will be further reviewed in this section.

Benefits of Breastfeeding for the Infant

One key benefit for the infant is the bonding and relationship created between the infant and its mother, for which can be difficult to substitute or replace (Spitzmueller et al., 2018). Breastfeeding of any kind has a significant impact on an infant's short and long-term health outcomes (WHO & UNICEF, 2003). Of note was the dose response relationship or positive correlation seen across most research, indicating that the longer the duration of breastfeeding and the longer an infant receives exclusively breastmilk, the

more significant and lasting the health impacts were (Brahm & Valdés, 2017). Research

had specifically indicated that any breastfeeding was protective ("The Public Health

Benefits of Breastfeeding," 2017).

A quantitative study by Bartick et al. (2017) revealed specific health advantages

associated with breastfeeding, which included: (a) breastfeeding reduces the incidence of

non-specific GI infections by 64% and lowers risks for rotavirus diarrhea by 30% while

lowering all other diarrheas significantly; (b) lowers acute otitis media incidence by 23%;

and, (c) hospitalizations related to lower respiratory tract infections or non-specific illness

is decreased by 72% if exclusive breastfeeding occurs for at least 4 months. Findings

from these studies also indicate a 15% to 30% risk reduction in obesity during both

adolescence and adulthood, with any breastfeeding showing a protective role against

adult obesity, type 2 diabetes mellitus, hypertension, and dyslipidemia (Bartick et al.,

2017; Brahm & Valdés, 2017). Other research had corroborated that breastfeeding

reduced the risks of developing adulthood obesity, asthma, type 2 diabetes mellitus, and

could reduce Sudden Infant Death Syndrome (SIDS), as well as ear and respiratory

infections (CDC, 2020-b; U.S. Office of Personnel Management [OPM], n.d.).

Gay et al. (2018) reported that human breastmilk in addition to providing key

essential nutrients, contained metabolites that links maternal lifestyle and gut microbiome

to the health of the infant's microbiome. A healthy gut microbiome had been associated

with an improved immune system response, which could lower the risk of disease

contraction and lead to longevity ("The Public Health Benefits of Breastfeeding," 2017).

Breastfeeding for more than 6 months was also shown to decrease the risk for developing

leukemia during childhood by 19%, reduce the risk of developing necrotizing

enterocolitis (NEC) in preterm infants by 58% to 77%, had a 52% reduction in the risk of

developing celiac disease in infants at the time of exposure to gluten, and was associated

with a 31% reduction in the risk of developing inflammatory bowel diseases during

childhood (Brahm & Valdés, 2017; WHO & UNICEF, 2019).

Numerous benefits for the infant had been identified when exclusive

breastfeeding was achieved for any length of time, but especially if to the duration of up

to 4–6 months, at which time typically solid foods were introduced as part of the weaning

process (Blake et al., 2016; Sánchez et al., 2021). Lyons et al. (2020) reported that

exclusive breastfeeding provided the most optimum nutrition and health protection for an

infant in the first 6 months of life. The WHO and UNICEF reported that globally only

41% of children were exclusively breastfed, and by the age of two years, only 45%

received any breastmilk (WHO & UNICEF, 2019).

Per Brahm and Valdés (2017), it was estimated that more than 900 children per

year within the United States would be saved from SIDS if exclusive breastfeeding

recommendations were met. Brahm and Valdés (2017) also reported that exclusive

breastfeeding was protective against acute febrile illness, which had a direct correlation

on increased hospitalizations. Brahm and Valdés (2017) reported further that infants who

are breastfed for a shorter duration showed a higher frequency of eczema, atopy, food

allergy and respiratory allergies. Hossain and Mihrshahi (2022) found that exclusively

breastfeeding infants had lower risk for *all-cause* mortality compared to partially

breastfed and non-breastfed infants, and that the risk for infection-related mortality was two-fold higher in non-breastfed infants.

In contrast to breastfeeding, formula fed infants had an 80% higher risk for diarrhea, and fifteen times higher mortality risk from pneumonia compared to exclusively breastfeeding infants (Brahm & Valdés, 2017). The environmental impact and carbon footprint from formula feeding was another concern worth recognizing in comparison to the benefits of breastfeeding. Brahm and Valdés (2017) reported that it was estimated more than 4,000 liters of water were required to produce one kilogram of milk powder formula. The waste products from the empty formula cans, thrown-away bottles, and other needed components to produce and sustain the formula industry was significant; not to mention, the increased costs to the mother and family to afford adequate formula to feed the infant (Blake et al., 2016).

Benefits of Breastfeeding for the Mother

Payton et al. (2018) and Sánchez et al. (2021) expounded on the importance of breastfeeding for the health and wellness of the mother. The CDC (2018) and "The Public Health Benefits of Breastfeeding" (2017) reported findings that indicate mothers who do not breastfeed, or have lower duration periods of breastfeeding, were at higher risk for ovarian and breast cancers, and type 2 diabetes mellitus. Per Bartick et al. (2017), women who breastfed had reduced risks of myocardial infarctions, hypertension, and all cancers. Walters et al. (2019) identified data that showed that breastfeeding enhanced the mother-child relationship, possibly reducing the rates of maternal childhood neglect.

When related to the workplace, mothers who breastfed and felt supported by their employer tended to be more productive, had fewer distractions, less absenteeism, and a healthier work-life balance, which motivated breastfeeding for a longer duration (Jantzer et al., 2018; Johnson & Salpini, 2017; OPM, n.d.).

Benefits of Breastfeeding for the Public Health, Economy, and Workplace

Azad et al. (2020) and Hossain and Mihrshahi (2022) concluded the gravity of breastfeeding and its overall impact on infant mortality, maternal morbidity, and healthcare costs, made the topic of utmost importance as a public health strategy for any country. The WHO and UNICEF (2019) reported that increasing breastfeeding rates globally would prevent more than 800,000 childhood deaths per year and prevent around 100,000 maternal deaths each year associated with cancer and type 2 diabetes mellitus. In the United States, Bartick et al. (2017) reported that increasing breastfeeding rates to 90% for duration and exclusivity would save 3,000 deaths per year at minimum.

The economy also benefits from breastfeeding. The WHO and UNICEF (2019) announced that healthcare costs would be lowered by increased breastfeeding rates. Within the United States, workplace breastfeeding policies could save an average of $3.00 dollars per every $1.00 dollar invested (WHO & UNICEF, 2019). Per findings from Walters et al. (2019) and Brahm and Valdés (2017), United States annual cost savings could be around $13 billion if at least 90% of women were to exclusively breastfeed for up to 6 months. Finally, due to the overall health improvements seen in both the infant and the mother, healthcare costs were minimalized by any breastfeeding

rates, with longer durations leading to increased economic prosperity (Azad et al., 2020; Bartick et al., 2017).

The benefits of breastfeeding for the workplace are multi-layered and extend to the economy, public health sector, and community by providing a place where women can strive for success in reaching breastfeeding recommendations. Workplaces that support breastfeeding will see increases in productivity, less absenteeism, less turnover and greater retention rates among employees who breastfeed (Payton et al., 2018). Angeletti and Llossas (2018) reported that employers with a workplace lactation program produce increased job loyalty, satisfaction, and a more favorable outlook among breastfeeding employees, along with less expenditures from training new hires. Winegar and Johnson (2017) showed that employers practicing breastfeeding support saw a 75% continuation rate for female employees returning to work, even when exclusively breastfeeding up to 6 months.

Breastfeeding Goals and Recommendations in the United States and Abroad

In 1998, the WHO shifted a broad scope of health-related topics to a focus on infant nutrition and feeding practices, particularly centered on breastfeeding and the provision of complimentary foods (WHO & UNICEF, 2003). This shift was a collaboration between the WHO, UNICEF, and the WHA, and by the year 2002 the emergence of a program structure and objectives were formulated (WHO & UNICEF, 2003). The aim and objectives were to be evidence-based and founded in epidemiology. The specific goals and recommendations for breastfeeding for global public health were set as, (a) to exclusively breastfeed the infant for the first 6 months; (b) then the infant

should receive 'nutritionally adequate and safe complementary' foods while breastfeeding continues for up to two years or longer; (c) breastfeeding mothers should have access to skilled practitioners to aid in lactation challenges; (d) working women who choose to breastfeed should be provided amenities to enable this practice, such as paid maternity leave and space to express breastmilk; and, (e) further explanations on how to provide complimentary foods to the infant with timeframes outlined (WHO & UNICEF, 2003; p. 7).

Current breastfeeding recommendations per the most updated WHO and UNICEF collaboration included (a) early initiation of breastfeeding within the first hour after birth, (b) exclusive breastfeeding for the first 6 months of life, and (c) introducing complementary foods at 6 months to be combined with continual breastfeeding up to 2 years of age or beyond (WHO, n.d.-b). The World Health Assembly (WHA) Resolution 65.6 in 2012 included this recommendation in the *Global Nutrition Targets for 2025*, which specifically sets the goal to increase exclusive breastfeeding in the first 6 months of life by at least 50% (WHO, 2017). The WHO *Breastfeeding Policy Brief* that reports on the WHA Resolution 65.6 also outlined evidence-based recommendations for policymakers and legislators to adhere to when striving to improve breastfeeding metrics (WHO, 2017).

In the United States, the updated breastfeeding goals and recommendations were found in several key documents and resources. Under the HHS, the Surgeon General's *Call to Action to Support Breastfeeding* document stated that infants should be exclusively breastfed for the first 6 months, and then with combined breastfeeding and

complimentary foods up to the first 12 months (CDC, 2019-c). The current CDC breastfeeding recommendations matched those of the HHS Surgeon General's (CDC, 2020-b). As part of the Surgeon General's *Call to Action* plan, it recommended the implementation of the BFHI certification process in any perinatal and maternal facility, and to follow the specific 20 Actions provided to improve a workplace's breastfeeding level of support (Baby-Friendly USA., n.d.-c; CDC, 2019-c).

Similar recommendations regarding exclusive breastfeeding for the first 6 months are found within the policies of the AAP and American Academy of Family Physicians (AAFP), but with additional language to increase strategic administration and improve health metrics. The AAP's current policy on breastfeeding included recommendations such as: (a) breastfeeding should begin as soon as possible right after birth, preferably within the first hour; (b) infants should be breastfed whenever showing signs of hunger, which is approximately eight to 12 times every 24 hours; (c) evaluating the infant's adequate nutrition intake according to having 4 to 8 wet diapers and 3 to 4 soiled diapers daily (AAP, n.d.-a).

Regarding work-related breastfeeding recommendations, the OWH under the direction of the HHS, promoted specific things the mother and her workplace manager can do before returning to work (OWH, n.d.). The OWH created a series of guidebooks and educational materials for a working mother and the employer/ manager, entitled the BCB (OWH, 2017-a). The series included an *Easy Steps to Support Breastfeeding Employees* guidebook for the employer, and the *Employees' Guide to Breastfeeding and Working* guidebook for the working mother (OWH, 2017-b, 2017-c). Finally, the

Employees' Guide to Breastfeeding and Working guidebook recommended that the

working mother practice pumping milk and storing it before returning to work, and to

talk to her manager about flexible work schedules to accommodate her breastfeeding

plans (OWH, n.d., 2017).

Within the State of California, the global and United States' specific breastfeeding

goals and recommendations were accepted and promoted (CDPH, n.d.). Both the

California Breastfeeding Coalition (CBC) and the CDPH supported the implementation

of the BFHI within all birthing centers and maternity facilities (CDPH, n.d.). This

recommendation aligned with the California Health and Safety Code §123367, which

required all perinatal facilities to adopt the Ten Steps to Successful Breastfeeding of the

BFHI (NCSL, 2019). Finally, the CDPH *Breastfeeding Initiative* pronounced goals to (a)

change breastfeeding as the community norm of infant feeding practices in California, (b)

ensure that those medical facilities involved in perinatal care implement an infant feeding

policy, and (c) make workplace breastfeeding accommodations a reality (CDPH, n.d.).

The United States Breastfeeding Rates and Trends are a Public Health Concern

Under the direction of the CDC, the National Immunization Survey (NIS) tracks

breastfeeding practices within the United States and monitors any progress over time per

designated metrics (CDC, 2017). The Division of Nutrition, Physical Activity, and

Obesity within the CDC publishes a yearly *Breastfeeding Report Card - United States*,

which reports national, individual states, and each territory's breastfeeding rates for the

key measured indicators; namely, infant feeding practices and behaviors, and the mPINC

scores (CDC, 2020-a). The most recent national data from the Breastfeeding Report Card

- United States 2020 report indicated: (a) Ever breastfed at 84.1%; (b) Breastfeeding at 6 months at 58.3%; (c) Breastfeeding at 12 months at 35.3%; (d) Exclusive breastfeeding through 3 months and 6 months at 46.9% and 25.6%, respectively; and (e) Breastfed infants receiving formula before 2 days of age at 19.2% (CDC, 2020-a). The Maternity Practices in Infant Nutrition and Care (mPINC) survey was a bi-annual tool used by the CDC to track and monitor maternity care practices related to infant feeding behaviors, with the highest score desired as 100 (CDC, 2019-b; 2020-a). The most recent 2020 mPINC national data indicated: (a) Total Score at 81; (b) Immediate Postpartum Care at 83; (c) Rooming-In at 76; (d) Feeding Practices at 82; (e) Feeding Education and Support at 93; (f) Discharge Support at 79; and (g) Institutional Management at 71 (CDC, 2020-a).

California Rates and Trends

Per the 2019 NIS data, the key breastfeeding indicators for the State of California were as follows: (a) Infants ever breastfed at 89.9%; (b) Infants breastfed at 6 months at 62.3%; (c) Infants breastfeeding at 12 months at 43.6%; (d) Infants exclusively breastfeeding through 3 months at 51.6%; (e) Infants exclusively breastfeeding through 6 months at 27.%; (f) Breastfed infants supplemented with formula within 2 days at 19.0%; (g) Breastfed infants supplemented with formula before 3 months at 32.0%; and (h) Breastfed infants supplemented with formula before 6 months at 35.2% (CDC, n.d.-a). The percentage of live births within a designated BFH for California for 2019 was 42.2% (CDC, n.d.-a).

Per the most recent Breastfeeding Report Card - United States 2020 report, California data indicated: (a) Ever breastfed at 90.3%; (b) Breastfeeding at 6 months at 67.1%; (c) Breastfeeding at 12 months at 43.3%; (d) Exclusive breastfeeding through 3 months and 6 months at 50.1% and 28.2%, respectively; and (e) Breastfed infants receiving formula before 2 days of age at 23.4% (CDC, 2020-a).

The most recent 2020 mPINC California data indicated: (a) Total Score at 87; (b) Immediate Postpartum Care at 88; (c) Rooming-In at 86; (d) Feeding Practices at 86; (e) Feeding Education and Support at 93; (f) Discharge Support at 85; and (g) Institutional Management at 80 (CDC, 2020; CDC, 2020-a). In each of the six subdomains, California outscored the national total scores. The 2020 mPINC dataset included 159 of the 232 (69% participation rate) eligible California hospitals (CDC, 2020).

The Public Health Concern

As described by Bartick et al. (2017) and Azad et al. (2020), breastfeeding was a viable public health concern and needed to be treated as a strategy to improve infant mortality, maternal morbidity, reduce health care costs and economic burdens, and overall health of an environment. Breastfeeding could also have a positive impact on both social-cognitive and emotional wellness factors for the mother, which could increase her self-efficacy and motivation to continue breastfeeding through challenges (Shepherd et al., 2017).

A prospective study conducted by Griswold et al. (2018) with the aim to investigate the relationship between breastfeeding initiation or duration and experiences of racism, neighborhood segregation, and nativity, discovered an inverse relationship to

breastfeeding rates with racism in the job-setting and in growing up as a child in a segregated community.

The U.S. Bureau of Labor Statistics (2019) report indicated that as of 2019 approximately 55.4% of the employed labor force were women. As more and more women are employed in either part-time or full-time jobs, critical breastfeeding metrics could decline (CDC, 2019-c; Payton et al., 2018). Hamada et al. (2017) discovered that employment had a negative impact on breastfeeding duration, workplace perception of support, and overall breastfeeding practices. Payton et al. (2018) identified that a lower proportion of full-time working women reached 6 months breastfeeding than part-time women, and these women were more likely to stop breastfeeding the month they return to work.

Barriers to Breastfeeding

Numerous research studies have been conducted throughout the world and specifically within the United States to assess and identify what barriers to breastfeeding are most prevalent. This section will review what general barriers have been identified through research and which barriers correlated directly to the workplace.

General Barriers to Breastfeeding Success

Within the United States Surgeon General's Call to Action to Support Breastfeeding from 2011, one section included a list of prominent barriers identified within the United States (CDC, 2019-c). These included: (a) lack of knowledge – a general lack of knowledge regarding the benefits and risks associated with breastfeeding, not knowing how to accomplish lactation techniques, and resources available; (b) social

norms – a combination of cultural and societal norms may confuse best-practices and lead to misunderstandings about alternative forms of food instead of breastmilk; (c) poor family and social support – a lack of support from friends or family members can have a negative impact on a mother's decision to breastfeed; (d) embarrassment – many women feel uncomfortable breastfeeding in public and have either experienced or believe they will experience some sort of distain or discrimination; this discomfort carries over into social interactions and the workplace; this discomfort may also stem from the obsession of woman's breasts as sexual objects within the United States culture; (e) lactation problems – multiple challenges can have a negative impact, such as mastitis, sore nipples, engorgement, leaking milk, and latching problems; not to mention, insufficient milk supply, previous breastfeeding experiences, and possible conflicting information from healthcare professionals on how to resolve these issues; (f) employment and child care – the influence of employment on breastfeeding is extensive and includes multiple factors, with challenges finding child care as a significant one; (g) barriers related to health services – various factors are included under this topic, most notably (1) hospitals and clinics have not performed adequately in educating and supporting the practice of exclusive breastfeeding from the start right after birth; (2) hospitals or general birthing centers traditionally offered a care package with formula in it; (3) hospitals and birthing centers did not provide lactation consultant services prior to discharge; and, (4) the post labor and delivery practice had been to separate mother and infant immediately after delivery, which practice has since been changed. Since the published date of the United States Surgeon General's Call to Action to Support Breastfeeding report, many of these

practices have since improved and changes made to offset these traditional expectations within birthing facilities and outpatient clinics (CDC, 2019-c).

The demographic location where a woman resides, e.g., rural, urban, or city, had been identified as a barrier to breastfeeding rates (Hardison-Moody et al., 2018; McCardel, & Padilla, 2020). Per Dinour et al. (2019), married women tend to breastfeed longer than those unmarried. Demirci and Bogen (2018) found that being primiparous increased early cessation of breastfeeding and unintended or a reduction in breastfeeding duration. Analyzing the IFPS II study, Whipps (2017) found that parity and education attainment level had a direct impact on breastfeeding.

Fernández-Cañadas Morillo et al. (2017) identified that factors associated with EBF cessation included: no college degree, pacifier use, a c-section delivery, and not attending breastfeeding support groups. Dinour et al. (2020) discovered that the higher the education level or college degree, the more likely to initiate breastfeeding, continue after 6 months, or prolong the duration overall.

The type of industry a working mother was occupied in also had been shown to have an impact on breastfeeding outcomes. Per Lauer et al. (2019), accommodation and service-oriented industry occupations had the lowest rates of breastfeeding initiation and workplace support. Whether the disparity between types of industry was due to budgetary differences or other factors is a topic for further research.

Findings from studies by Amiel Castro et al. (2018) and Hardison-Moody et al. (2018) found that the income and socio-economic status of the mother had a negative

influence on breastfeeding metrics overall. Unemployment status was also a barrier identified (CDC, 2019-c; Dinour et al., 2017; Angeletti & Llossas, 2018).

The Correlation Between Breastfeeding Cessation and the Workplace

The length of time between giving birth and returning to work had a negative impact on breastfeeding duration, specifically if before the 6-month mark (Monteiro et al., 2017; Rimes et al., 2019; Steurer, 2017; Tangsuksan et al., 2020). The length of maternity leave was also a measurement factor utilized within the research of breastfeeding barriers, indicating the shorter the length of time, the decreased length of breastfeeding duration (CDC, 2019-a; Fernández-Cañadas Morillo et al., 2017; Steurer, 2017). Monteiro et al. (2017) found that lack of maternity leave increased the chance of exclusive breastfeeding interruption or cessation by 23%.

Lack of a workplace lactation support program or policy was found to be a barrier for breastfeeding duration among working women (CDC, 2019-c; Hilliard, 2017). Winegar and Johnson (2017) reported that employers with lactation programs can see a 75% continuation rate for employed women choosing to breastfeed up to 6 months. In addition to lack of a lactation support program, the lack of enforcement of that program or of the breastfeeding laws and policies within the workplace was also a barrier to breastfeeding duration (Angeletti & Llossas, 2018; Steurer, 2017).

Support from coworkers, peers, and managers or supervisors was critical for a working woman to have a positive attitude about workplace breastfeeding (CDC, 2019-c; Demirci & Bogen 2017; Hilliard, 2017; Litwan et al., 2021). Zhuang et al. (2018)

discovered that female coworker support ascribed a positive influence on workplace breastfeeding success and contributed to the working mother's self-efficacy.

Two key examples of workplace breastfeeding accommodations can be described as hygienic, safe, private spaces to express milk and break times to enable time to express breast milk (Hilliard, 2017; Steurer, 2017). Per findings from a study by Vilar-Compte et al. (2021) which conducted a systematic review of 37 research studies between 2008 and 2019, it was indicated that working women with both adequate break times and a private space were more likely to be exclusively breastfeeding at 6 months.

Beliefs, Perceptions, and Attitude Towards Workplace Support for Breastfeeding

This section will review any research conducted where any form of HEP intervention was attempted to improve or study the effects on perception of workplace breastfeeding support. As attitude in this study was measured in part using beliefs and perception, the relevant related literature will be outlined here. Current research which aimed to address the possible relationship between belief, perception, and attitude towards workplace breastfeeding support and breastfeeding behavior will be reviewed in this section.

A study by Anstey et al. (2018) explored what perceived barriers an international board-certified lactation consultant (IBCLC) deals with in helping mothers manage early breastfeeding problems. Numerous studies have linked the professional aid of IBCLC's to breastfeeding success and duration of the recipient mother (Angeletti & Llossas, 2018; Lennon & Willis, 2017; McCardel & Padilla, 2020). Although this study did not examine the effects of HEP from an IBCLC on working women who breastfeed, it did help to

display the importance of the role of an IBCLC in the successfulness of reaching recommended breastfeeding metrics.

Physicians working with breastfeeding mothers to help them overcome challenges and meet recommended durations, are strategically positioned to provide HEP to help. A study by Esselmont et al. (2018) was not aimed to assess a physicians' knowledge, comfort levels, clinical practices, and perceptions regarding breastfeeding. Results indicated that overall breastfeeding knowledge score was 71% (95% CI: 69-79%); only 4% of physicians felt comfortable evaluating latching, educating parents on breastfeeding positioning, and answering parent questions about overcoming challenges; nearly 94% agreed that HEP is a part of their role, but less than half report acquiring breastfeeding education during residency training; and, almost all physicians wanted more interactive education.

Pounds et al. (2017) confirmed that the timing of the maternal support system, specifically right after birth, was pivotal in achieving breastfeeding success. Jantzer et al. (2018) concluded that when workplace breastfeeding support was provided, specifically when adequate time and space to express milk was provided, the woman's perception that work enhances her personal life increases. Zhuang et al. (2019) revealed that a working mother's perception of workplace breastfeeding support can have a positive impact on her intentions to breastfeed after delivery.

Zhuang et al. (2018) indicated that continuing to breastfeed was heavily influenced by other female attitudes towards breastfeeding within the shared workplace.

The perception of female coworkers yielded a positive or negative influence on the

working mother's breastfeeding behavior, depending on the coworker's attitude.

Schafer et al. (2017) implied that a woman's positive perception related to

breastfeeding self-efficacy, opinions regarding infant feeding capabilities, and beliefs

about breast milk adequacy, all of which were associated with a 16%–27% longer

duration time. The positive changes a first-time mother experienced in perception were

also able to mediate the severity of physiological challenges the mother would face.

Sachdeva (2017) discovered that the stronger a person's beliefs the more

significant of a predictor of perception of risk. Sathyanarayana Rao et al. (2009) reported

that beliefs are developed as trusted information is received and that perceptions are the

result of these preset, filtered beliefs in our environment. Bandura (2000) concluded that

beliefs contribute to perceived self-efficacy in the capability to perform a behavior.

Rogelberg (2007) explained that the construct of attitude within the TRA is based on

behavioral beliefs, which are determined by a person's belief in the behavioral outcome

and the evaluation of risk or capability to perform the action. Both aforementioned

concepts, evaluation of the behavior and beliefs about the behavior, are influenced by the

self-efficacy to be able to perform the behavior, and perceived beliefs that the intended

action is what is best (Fishbein & Ajzen, 2010; Humphreys et al., 1998).

Numerous research studies correlating attitudes to breastfeeding outcomes had

been conducted. Most notably were the studies which indicated how attitude directly

facilitates both EBF and overall breastfeeding duration (Casal et al., 2017; Gebrekidan et

al., 2020, 2021; Shabbir et al., 2020). Alnasser et al. (2018) and Taylor et al. (2020) also

found that knowledge about the benefits of breastfeeding and amenities offered in the workplace, the age of the mother, and positive support from coworkers or supervisors were all related to a more positive attitude towards breastfeeding duration. Other studies had shown that positive attitudes and perceived employer support were correlated with improved breastfeeding intention (Litwan et al., 2021; Vilar-Compte et al., 2021).

These reviews supported the underlying fundamental pathway within the constructs of the TRA, which followed that a mother's intention to breastfeed while at work is heavily influenced by the normative beliefs she perceives from those around her she cares about, the subjective norms she is motivated by based on her perception, the attitude she develops based on her beliefs regarding the benefits and advantages of the behavior, and how she perceives her self-efficacy to carry it out successfully (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975; Wood & Qureshi, 2017).

Current Workplace Breastfeeding Policies, Legislation, and Protective Laws in the United States

Breastfeeding provisions within the law of the United States had been in existence for many decades working to provide protection for breastfeeding women, improve the standards at work or in the public, and encourage better rates, with specific mention of the inception of the FLSA of 1938 (U.S. DOL - Wage and Hour Division [WHD] - Section 7(r) of the FLSA – Break Time for Nursing Mothers Provision, n.d.-b). To continue the pursuit for breastfeeding improvements, in 1984 the United States Surgeon General, C. Everett Koop, held the very first *Surgeon General's Workshop on Breastfeeding,* the purpose being to bring together experts and policymakers to come up

with specific action plans the country could elicit to improve breastfeeding metrics

(CDC, 2019-c). The key recommendations for action from this workshop and others

which followed, paved the way for a focused effort on breastfeeding in the United States.

In 1990, the United States signed onto the momentous *Innocenti Declaration on*

the Protection, Promotion and Support of Breastfeeding, a program which had been

adopted by the WHO and UNICEF, which was designed to encourage all nations to better

coordinate efforts and best-practices in the global pursuit for improved breastfeeding

(CDC, 2019-c). In addition, under commitment of this Declaration it was expected of

governments to accept the International Code of Marketing of Breast-milk Substitutes

and use it to guide legislative change which would improve breastfeeding protections for

women (WHO, 1981; CDC, 2019-c).

The next major developments in the United States came in 1999 and in 2000

when the Surgeon General asked that governmental policy on breastfeeding be

formulated, which led the HHS in conjunction with the OWH to develop and release the

HHS Blueprint for Action on Breastfeeding (CDC, 2019-c). Among other important

guidelines, recommendations, and listing the benefits of breastfeeding, the Blueprint

effectively declared breastfeeding as a public health issue in the United States.

Starting around the year 1970 and continuing until 2007, much of the

breastfeeding metric data was collected by the *Ross Mother's Survey* and the CDC's NIS

(CDC, 2019-c). Results of the available data helped develop the objectives and goals of

the Healthy People 2010 recommendations, which were (a) breastfeeding initiation target

at 75%, (b) continued breastfeeding up to 6 months targeted at 50%, (c) breastfeeding up

to 12 months at a target of 25%, (d) and for exclusive breastfeeding related goals, a target

at 40% for up to 3 months, and 17% for up to 6 months (CDC, 2019-c; ODPHP, n.d.-b).

In March 2010, more momentous changes were set into motion to improve United

States breastfeeding by the enactment and implementation of Patient Protection and

Affordable Care Act (ACA), which included an amendment to the FLSA Section 7, later

termed the *Break Time for Nursing Mothers provision* (DOL & WHD, n.d.; OPM, n.d.).

This provision included mandates that now required all employers to provide reasonable

breaktimes for breastfeeding employees for up to the first year of the child's life, and a

hygienic, private place to express milk other than a bathroom (DOL & WHD, n.d.;

Gurley-Calvez et al., 2018).

The ACA and Break Time for Nursing Mothers provision included health benefits

and insurance coverages for breastfeeding amenities not previously acquirable, including

some of the following: (a) women's preventative services, e.g. mammograms, cervical

cancer screening, and breastfeeding support services, and cost-sharing plans to reduce or

eliminate co-pays; (b) breastfeeding equipment; (c) and, prenatal care and child health

follow-up care (Gurley-Calvez et al., 2018; NCSL, n.d.; U.S. Health Resources &

Services Administration [HRSA], n.d.). Initially, the new law and provisions were

designed with intentions to improve breastfeeding rates and prompt mothers to succeed

through new support mechanisms not previously available.

A second provision to the FLSA Section 7 under the ACA occurred in August

2012, which essentially required all non-grandfathered private insurance plans to cover

lactation services and support without undue cost-sharing (Gurley-Calvez et al., 2018).

This new provision effectively did not apply to mothers covered under Medicaid, leaving many women without the new added benefits (Hawkins et al., 2018). Though there existed exemptions within the law causing challenges and problems for certain women or groups to be worked out, the underlying intention of these provisions was to strive to prevent undesired or adverse outcomes that could occur if left without workplace breastfeeding accommodations (Center for WorkLife Law, n.d.).

After the first and second provisions of 2010 and 2012 of the FLSA - Section 7, certain exemptions existed leaving numerous women without the new coverages and benefits of the Break Time for Nursing Mothers provision (Center for WorkLife Law, n.d.; Economic Policy Institute, n.d.). A list of some of these exemptions are (1) only non-exempt (or non-salaried) employees benefited directly; (2) employers did not have to pay for the breastfeeding breaktimes; (3) employers with less than 50 employees were not subject to this law if it could cause a financial hardship or difficulty to the business functionality; and, (4) FLSA requirements cannot preempt any State laws that might provide greater levels of protection (DOL, n.d.; DOL & WHD, n.d.; HHS, n.d.).

The effects of the exemptions from the Break Time for Nursing Mothers provision can be summarized in a report by the Economic Policy Institute (EPI) analyzing data from 2018 (EPI, n.d.). This report stated (a) that roughly 1 out of 4 women working and of child-bearing age are impacted by these exemptions in the United States; (b) with nearly 38.7 million women of child-bearing age in the workforce, around 9 million were excluded from the direct benefits of the FLSA; and (c) those directly affected included 1 million Black women, 976,000 Hispanic women, 825,000 Asian

women, over 6 million White women, and 185,000 from other races. In the exempt category, including those considered misclassified as exempt, was 12.7 million working women of child-bearing age (EPI, n.d.).

In response to the exemptions and the negative effects for many United States women left without coverage under the new breastfeeding laws, legislation continued to move forward in the effort to fill in the gaps. One example was a bill (H.R. 3255, 115th Congress) termed SWMA of 2018, submitted, and supported by Senator Jeff Merkley from Oregon (Merkley, 2017). As described by the United States Breastfeeding Committee (USBC) (n.d.), the SWMA was designed to fix some of the gaps left by the exemptions in the FLSA Section 7 provisions of 2010 and 2012, ensuring that the national policies providing breastfeeding accommodations and protections, especially healthcare coverage, are extended to exempt, salaried working women also. This Act, in conjunction with ongoing State by State improvements in legislation and policy, was continuing to focus efforts on the importance of breastfeeding success.

During this period of improvement and development under the new provisions and focus from the ACA on national breastfeeding, in 2011, the HHS published an important action report called, the *Surgeon General's Call to Action to Support Breastfeeding* (AAP, n.d.-a; CDC, 2019-c). This foundational document included several key sections. These sections were:

(a) The Importance of Breastfeeding, which was separated by topics on the

benefits of breastfeeding for the mother, infant, economy, and the environment,

and a brief history of the timeline of federal breastfeeding policy development.

(b) Rates of Breastfeeding, which covered national trends on breastfeeding rates, disparities in breastfeeding practices.

(c) Barriers to Breastfeeding in the United States, which reviewed the various types of barriers based on the current data.

(d) Breastfeeding from the Public Health Perspective, which included topics such as family units, communities, health care, employment, research and surveillance, and the public health infrastructure.

(e) A Call to Action, which outlined the 20 actions this report recommended, with specific focus on Mother and their Families, Communities, Health Care, Employment, Research and Surveillance, and Public Health Infrastructure (CDC, 2019-c).

Key additional components within this action report included an action step to initiate the BFHI and follow the BHF *Ten Steps* protocols, along with several appendices to help implement the *20 Calls to Action*, *Steps to Create a Baby-Friendly Worksite*, and important resources to utilize in improving breastfeeding across policy and organizational development (CDC, 2019-c).

As a result of the creation and continued development of the ACA and Surgeon General's Call to Action to Support Breastfeeding, numerous benefits to United States breastfeeding outcomes have occurred. Hawkins, Noble, and Baum (2018) reported that the ACA was associated with an increase in breastfeeding duration by 10%, or 0.57 months, and duration of exclusive breastfeeding by 21%, or 0.74 months. These results were pulled from the NIS of data between 2007 and 2014. Further investigation of this

data revealed that the ACA had no significant effect on breastfeeding initiation or the age of the first formula provision to an infant (Hawkins et al., 2018).

As reviewed earlier in this chapter, Lennon and Willis (2017) conducted a study of businesses in the United States to assess how the passage of the ACA effected workplace breastfeeding support and lactation programs. As was expected due to the existing exemptions within the FLSA Section 7 provisions, results of this study indicated large employers or businesses had higher breastfeeding support scores compared to medium or small businesses. Small employers and some medium-sized ones were considered exempt from the Break Time for Nursing Mothers provision because of lower numbers of employees, or because of potential financial or other types of hardships.

Other benefits indirectly associated with the passage of the ACA included the development of the *Guide for Establishing a Federal Nursing Mother's Program* in 2013 from the OPM, which was a series of specific workplace guidelines and tools for explaining the existing federal laws supporting breastfeeding to employers, and for helping organizations set up workplace lactation programs (OPM, 2013). Another example included the creation in 1996 of the *Mother-friendly Hospital Initiative* by the Coalition for Improving Maternity Services (CIMS) with the purpose to improve maternity and childcare by incorporating evidence-based practices (Coalition For Improving Maternity Services, n.d.). This initiative developed a *Ten Steps of Mother-friendly* guide for any health facility, which included within it a step to exercise and achieve the Ten Steps of Successful Breastfeeding of the WHO/ UNICF initiative (Coalition For Improving Maternity Services, n.d.; WHO, n.d.-a).

Another indirect benefit of the passage of the ACA related to workplace breastfeeding support, was the development of a series of guidebooks for employers, employees, and overall policymakers, called the BCB (OWH, 2017-a). This program was developed by the OWH under the HHS, with the purpose to provide substantial education materials to employers about the benefits of workplace breastfeeding, how to set up a workplace lactation support program, and for employees who breastfeed how to succeed in doing so. The educational materials available through the BCB included (1) The Business Case For Breastfeeding: For Business Managers, (2) The Business Case For Breastfeeding: Easy Steps to Supporting Breastfeeding Employees, (3) Tool Kit: Resources For Building a Lactation Support Program, (4) The Business Case For Breastfeeding: Employees' Guide to Breastfeeding and Working, and (5) the Outreach Marketing Guide (OWH, 2017-a). Each guidebook of the program included specific benefits associated with the topic that can be seen from workplace breastfeeding support. Specifically, the guidebook for employers and business managers outlines how to set up a lactation program, how to establish stakeholders, the value of providing flexible scheduling to breastfeeding employees, and the economic cost analyses for offering the support (OWH, 2017-b). The guidebook for employees focuses on resources a working mother can utilize for outreach and support, guides on how to talk to managers and supervisors, sample pumping schedules, exhaustive lists of the benefits of continued breastfeeding, and steps for how to return to work with a breastfeeding goal (OWH, 2017-c).

More direct and indirect benefits exist because of the increased efforts within the United States to improve legislation and policies to protect and improve breastfeeding rates, which cannot be discussed within this review. In addition to the federal mandates implemented, each State must also play its part to adhere to federal laws, while working to create improved laws for its own unique population.

Current Breastfeeding Policies, Legislation, and Laws in California

In adherence to the federal laws and provisions regarding breastfeeding protection and policies under the ACA, the FLSA Section 7, the State of California had enacted additional laws in compliance with federal laws, which have led to increased breastfeeding outcomes in comparison to national metrics (CDC, 2019-b; CDC, 2020-a; NCSL, 2019).

In the effort to improve breastfeeding metrics within California and further protect breastfeeding accommodations, numerous laws have been implemented. The following list of laws and policies flow in chronological order without relevance to importance or ranking. This list of laws was pulled from NCSL (2019) with corresponding years of publication, and includes:

1. A pregnant or breastfeeding mother cannot be discriminated against in hiring for any position (1980).

2. Cal. Civil Code §43.3 states breastfeeding is permitted in any public or private location (1997).

3. Cal. Stats., Chap. 266 (AB 1814) allows a breastfeeding mother to waive jury duty (2000).

4. Cal. Health and Safety Code §123360 and §1257.9 require the Department of Public Health to promote mothers breastfeeding their infants in its public service campaigns and require the development of an 8-hour training course for healthcare professionals (2007).

5. Cal. Government Code §12926 makes it unlawful to discriminate in employment or housing accommodations against a breastfeeding woman (1980 & 2012).

6. Cal. Health and Safety Code §123367 requires all hospitals and clinics that provide perinatal care to adopt the Ten Steps to Successful Breastfeeding of the BFHI, or some alternative which is founded on an evidence-based plan (2013).

7. Cal. Education Code §222 requires most schools to provide reasonable accommodations to any breastfeeding student on a high school campus, to have break times to express milk, to breastfeed their infant, or address other needs related to breastfeeding (2015).

8. Cal. Penal Code §4002.5 requires any County Sheriff or the county jail administrator to develop and implement an infant and toddler breast milk feeding policy for inmates detained or sentenced (2018).

9. Cal. Ed Code §66271.9 requires any community college and State University to provide accommodations to a breastfeeding student to express milk, breastfeed their infant, or address other needs related to breastfeeding; in addition to this, the Code requires all educational institutions to provide a sink

in any new construction, replacement, expansion, or renovation, along with
access to a private and secure room for breastfeeding students (2018).

10. Cal. Public Utilities Code §99176 requires multimodal transit stations
(meaning train or rail stations) that begin construction or a renovation on or
after January 1, 2021, must include a lactation room (2019) (CBC, n.d.-a;
NCSL, 2019).

To further add to existing California laws and policies regarding breastfeeding,
Senate Bill 142 was passed in October 2019, which required (1) (all) businesses to
provide safe and clean lactation facilities that meet the minimum requirements, (2)
requires that any new construction includes appropriate lactation facilities, and (3)
requires that employees receive written information regarding their rights to a safe and
comfortable lactation space at work (California Legislative Information, n.d.). This new
bill and others before it, have aided in the positive trend of breastfeeding outcomes in
California compared to the national metrics (CDC, n.d.-a, 2020-a).

Measurement and Assessment Tools for Workplace Breastfeeding Support

Limited measurement tools or assessment mechanisms had been successfully
developed and tested to date that can be used effectively to evaluate breastfeeding
support of an employer, or to assess accurately a breastfeeding mother's perception and
attitude towards workplace breastfeeding support, or her experience of breastfeeding.
This section will review the current research on the tools that had been studied, first
within and for use in the United States, and second, those which were developed outside

the United States. The studies will be reviewed in chronological order of the date published.

To create and investigate the validity of the *Workplace Breastfeeding Support Scale* (WBSS), Bai et al. (2008) conducted a study of this WBSS tool, which was used to assess a working mother's perception of workplace breastfeeding support. The researchers used both internal consistency (α) and split-half reliability (r) tests, and a factor analysis to establish reliability and construct validity of the scale. Results of this study reported that the WBSS showed acceptable reliability ($\alpha = .77$, $r = 0.86$), and can be effectively used by healthcare professionals to assess worksites for breastfeeding support.

Greene and Olson (2008) worked to develop and assess an instrument to measure a breastfeeding woman's perception of workplace breastfeeding support. After conducting the methods of collection, the researchers developed five subscales to measure: (1) company policies/work culture, (2) manager support, (3) co-worker support, (4) workflow, and (5) the physical environment of the breastfeeding space. The conclusive reasoning of this study indicated that the researchers had developed subscales and items, which would accurately reflect a woman's perception of workplace support, and this instrument was ready for pilot testing.

In a follow-up study, Greene et al. (2008) used the instrument gained to assess a working mother's perception of workplace breastfeeding support to conduct a pilot on working mothers. Results of this pilot indicated that the internal consistency reliability coefficients were high (0.90). The researchers developed the *Employee Perceptions of*

Breastfeeding Support Questionnaire (EPBS-Q), which they concluded can be used to effectively assess working women's perceptions of workplace breastfeeding support.

Olson and Fulmer (2017) authored a description of the *BESt: Breastfeeding and Employment Study Survey*, which was developed to identify which areas of a company's breastfeeding policies, support, and organizational culture that are facilitators or barriers to workplace breastfeeding. The BESt toolkit included a survey designed for employees, managers, and companies. Olson and Fulmer (2017) described these surveys as useful in measuring (a) the climate of breastfeeding support from the perspective of the employee or manager; (b) improvements that have been implemented to aid in breastfeeding support; and (c) benefits available from the breastfeeding support. The surveys focused on these key topics: breastfeeding policy, maternity leave, breastfeeding and pumping at work, and supports such as education and facilities. The BESt surveys use a scoring method to correlate to positive breastfeeding support.

Researchers Hirani et al. (2013) conducted a research study in Pakistan to further develop and test the properties of the *Perceived Breastfeeding Support Assessment Tool* (PBSAT) in relation to urban Pakistani working women's perception of workplace breastfeeding support. The researchers assessed this instrument using five phases of testing. Findings revealed that the instrument had an inter-rater reliability of 0.95 and Cronbach's alpha of 0.85. Thus, the researchers concluded that this instrument was reliable and valid for use in measuring working mother's perceptions of workplace support.

Ghazanfarpour et al. (2018) sought to review the validity and reliability of the *Breastfeeding Self-Efficacy Scale-Short Form* (BSES-SF). Through this study, it was concluded that this instrument was valid and reliable for measuring a breastfeeding woman's self-efficacy.

Babakhanian et al. (2019) reviewed instruments that posited to measure breastfeeding support from a working mother's perception. The researchers evaluated by use of Cronbach's alpha the following instruments: (a) *Perceived Breastfeeding Support Assessment Tool* (PBSAT) which received an $\alpha = 0.85$; (b) *Exclusive Breastfeeding Social Support* (EBFSS) instrument, which identified three key factors of assessment; (c) *Workplace Breastfeeding Support Scale* (WBSS), which received an $\alpha = 0.77$, and (d) *Employee Perceptions of Breastfeeding Support Questionnaire* (EPBS-Q), which received an $\alpha = 0.90$. The researchers concluded from this analysis that all four instruments were valid and reliable in measuring a working mother's perception of workplace breastfeeding support.

Kim, Fiese, and Donovan (2017) investigated the facilitators and barriers to African American first-time mothers. One construct measured in this study was attitude. The researchers utilized the Iowa Infant Feeding Attitude Scale (IIFAS) which was a 17-item tool using a 5-point Likert scale to measure each participant answer. The scale was shown to be reliable and valid as a tool for measuring attitudes towards breastfeeding (De La Mora et al., 1999; Kim et al., 2017). Another measurement tool used in the study by Kim et al. (2017) was the Breastfeeding Self-Efficacy Scale–Short Form (BSES-SF), which was a 14-item scale also using a 5-point Likert scale designed to assess a

breastfeeding mother's self-efficacy in performing the breastfeeding action and associated aspects. This scale measured confidence in latching ability, confidence in overcoming breastfeeding related obstacles, and what the infant's satisfaction level was with the breastfeeding. The BESE-SF has been validated and considered reliable as a tool for measuring breastfeeding self-efficacy (Dennis, C-L., 2003; Kim et al., 2017).

Summary and Conclusions

This literature review provided background information on breastfeeding in relation to a working mother's perception and normative beliefs of workplace breastfeeding support, with an emphasis on how those beliefs and perception influences her subjective norms, attitude, intentions, and behavior in the breastfeeding experience. Due to the great importance on overall health to the infant, mother, and outside factors, such as the economy, the workplace, and the environment, breastfeeding had been deemed a public health issue within the United States (Bartick et al., 2017; "The Public Health Benefits of Breastfeeding," 2017). In fact, breastfeeding had been shown to have a dose-response relationship on health benefits, which interpreted means the longer the infant was breastfed the more positive the short and long-term outcomes (Brahm & Valdés, 2017). Therefore, it was imperative to identify what barriers hinder increased breastfeeding and what mechanisms can protect effective practices.

The themes identified in this literature review yielded conclusions to what was known and what was not known within the field of research concerning workplace breastfeeding and attitude and subjective norms. It was known that returning to work after giving birth was a major barrier to continued breastfeeding. It was also known that

workplace breastfeeding support had a positive influence on a working mother's breastfeeding behavior. Likewise, the primary barriers and facilitators to initiation and duration had been well determined. It seemed also clear that positive attitude and subjective norms of workplace breastfeeding support correlated to intention and behavior to continue breastfeeding once returning to work. What was minimally uncovered from the current literature was whether a working mother's positive or negative attitude and experience of workplace breastfeeding support correlated to her intentions to breastfeed or the length of duration. With the United States goal to have breastfeeding at 6 months post-partum reach 60%, it was unclear if attitude towards workplace breastfeeding support negatively impacted a working mother reaching this length (ODPHP, n.d.-a; WHO & UNICEF, 2019). Moreover, it was also unknown if a working mother in the state of California, where breastfeeding laws and legislation over the workplace are well-established to motivate improved rates, was influenced by her perceived attitude of workplace support.

Considering these unknown factors from the literature review about workplace breastfeeding support, attitude, and subjective norms, and the administration of health promotion and education to influence breastfeeding behavior, a meaningful gap existed in the field. As such, there was a need to determine if perception of workplace breastfeeding support led to attitude to breastfeed in a mother's California workplace, or if subjective norms of that support had any significant influence on her breastfeeding experience. The gained knowledge from this study could aid in the development of workplace

interventions aimed at improving breastfeeding behavior, with the overarching goal to increase breastfeeding rates associated with a duration of 6 months.

In Chapter 3, the research design, the research questions, and details of the target population for this study will be discussed and outlined. The details of inclusion criteria and purposive sampling definitions for the participants will also be discussed. The data collection tools, and analysis mechanisms will be discussed to correlate the purpose of these instruments to the purpose of the study. In addition, the utilization of semi-structured interviewing and thematic analysis techniques will be explained as effective methods for determining the factors associated with the TRA and a hermeneutic phenomenological study, which focused on attitude and experience. As this study used a qualitative design with open-ended interviewing, the methods of ensuring outcome trustworthiness and ethics will be explained.

Chapter 3: Research Method

Research indicated that returning to work was a major barrier to continued breastfeeding among women. Beliefs and perception of a phenomenon could be linked to the reality of a person's surroundings and have an influence on their attitudes and ultimately, their behaviors (Sathyanarayana Rao et al., 2009; Schafer et al., 2017; Tenny et al., 2020). The perception and attitude a working mother has towards her workplace's support of her breastfeeding practice can likewise have an impact on whether she continues to breastfeed and for how long (Leon et al., 2019; Taylor et al., 2020). Currently, the impact of workplace breastfeeding support, or the level of that support, on a woman's attitude of that support has been understudied (Snyder et al., 2018). Equally important was to discover whether a mother's attitude and subjective norms about her workplace's level of breastfeeding support would negatively or positively impact her experience while at work or overall (Bradford et al., 2017). Even in California, where breastfeeding metrics were exceeding national goals for any breastfeeding up to 6 months, there was room for improvement and to determine the impact workplace support had on a working woman's perceived attitude.

As stated, a person's perception of a phenomenon can influence behaviors and actions (Schafer et al., 2017). It was therefore the purpose of this qualitative phenomenological study to discover how a mother's attitude towards workplace breastfeeding support influenced her breastfeeding experiences, particularly in mothers working in California. In addition to this purpose, this study explored the impact that the provision of HEP on workplace breastfeeding accommodations and benefits to the

mother, influenced her experience. By determining the impact attitude and subjective norms can have on breastfeeding experience, interventions and workplace policies can be developed to improve breastfeeding behavior.

This chapter will outline the research design utilized to identify the impact of attitude and subjective norms on breastfeeding experiences, and the rationale for this design. The construct of attitude was measured using questions focused on perception and belief, as well as attitude. Also, to be discussed is my role as the phenomenological researcher, how bias was controlled and managed out of the study methods and results, and what ethical issues were accounted for. Next, the Methodology section will include details on participant selection criteria and demographic reasoning. Then, the recruitment steps and participant contact methods will be explained, followed by the rationale behind the sample size and saturation number. Next, I discuss the qualitative research instrument used for this study and the reasoning and research supporting its use. Following these will be an outline of the procedures for how the data were collected, analyzed, and compiled from the included participants, along with the data analysis plan. The final section of this chapter will include the explanations for each component of trustworthiness, specifically credibility, transferability, dependability, confirmability, and how the ethical procedures were adhered to.

Research Design and Rationale

In response to the noted phenomenon related to working women and breastfeeding experience, the following research questions were developed to investigate the source(s) and factors involved and guide this study:

- RQ1 – How does HEP about workplace breastfeeding support impact a working mother's attitude towards breastfeeding behavior?

- RQ2 – How does a working mother's attitude towards her workplace's breastfeeding support and her experienced subjective norms influence her breastfeeding experience towards reaching the 6-month breastfeeding goal?

These research questions were designed to link together the purpose of the study, the theoretical and conceptual frameworks, and the methodology.

The central phenomenon of this study was that working mothers in California are influenced by their lived experience of attitude towards workplace breastfeeding support. The premise of this study related the concept that this was a shared phenomenon, and the influence of the perception, beliefs, and subjective norms on attitude towards breastfeeding support within a workplace was understudied. The results of this study yielded the potential for knowledge to be discovered, which could improve the situation of breastfeeding duration for working mothers and aid in the development of effective and beneficial HEP materials.

The research tradition used for this study was the qualitative method. As discussed by Flynn et al. (2019), the research tradition is the blueprint or guide that precedes research methods and decisions throughout the qualitative process. The rationale for using a qualitative research method was that this method would help determine the significance of attitude to the breastfeeding experience associated with workplace breastfeeding support. Creswell and Creswell (2018) explained that qualitative research is exploratory and that researchers can use it to probe a topic when the variables

and theory base are basically unknown. Ravitch and Carl (2016) stated, "qualitative research, broadly, is based on the methodological pursuit of understanding the ways that people see, view, approach, and experience the world and make meaning of their experience as well as specific phenomena within it" (p. 7). Because this research study focused on the lived experiences of working women, a qualitative research tradition was most appropriate to qualify these experiences and investigate the phenomena in a more natural setting (Yilmaz, 2013).

The theoretical framework for this study was the TRA, which has been shown to be effective in predicting behaviors related to health and the determinant factors that might influence the intentions to undergo a specific behavior, like breastfeeding (Azjen, 1991; LaMorte, 2109). The primary constructs within the TRA underlining behavioral intention included attitude towards the behavior and subjective norms to perform the behavior (Coreil, 2010; Fishbein & Ajzen, 1975; Romano, 2015). The TRA helped uncover if attitude towards workplace support or improved understanding from the reception of health promotion education was linked to influences within the TRA constructs.

The approach utilized was hermeneutic phenomenology, because in this study it was posited to discover how the perceived attitude a mother has of her lived experience, led to a specific interpretation of that event. As described by Jarrett (2017), the use of hermeneutic phenomenology is well suited for studying behaviors such as breastfeeding and the lived experiences behind what and why a woman chooses to practice it. As this study investigated a shared phenomenon or experience, a hermeneutic approach was

aligned as it was used to describe the lived experiences of a group of participants regarding a shared phenomenon (Creswell & Creswell, 2018). The shared phenomenon in this case was the breastfeeding experience either in a workplace or breastfeeding while working, where barriers and certain influences impacted the behavior and duration of breastfeeding success rates.

The hermeneutic phenomenological approach aligned with qualitative research methodology because, as Yilmaz (2013) explained, the aim of qualitative research is to describe and understand a phenomenon studied by capturing and communicating the research participants' experiences in their own words via observations and interviews. Åkerlind (2018) reported that phenomenological qualitative research methodology is used to define and explore the different ways people experience or think about various phenomena in the world around them. Patton (2015) defined *hermeneutics* as the theoretical framework for interpretation or meaning, allowing for context elaboration, or understanding to the purpose of a person's observed experience. Furthermore, the hermeneutic method relates the idea that every act of communication involves interpretation, which is then reconstructed by the researcher to establish context and meaning underlying what people do and why (Patton, 2015). Since qualitative research was defined as "an emergent, inductive, interpretive and naturalistic approach to the study of people, cases, phenomena, social situations and processes in their natural settings in order to reveal in descriptive terms the meanings that people attach to their experiences of the world" (Yilmaz, 2013, p. 312), it was well suited for utilization in this study with a hermeneutic approach. Considering through this study, attitude towards

breastfeeding support was evaluated, interpretation of the experience each mother had, and her beliefs and perceptions related to that experience, qualitative methods were required.

Other considerations for choosing the hermeneutic-phenomenological qualitative method included the unit of analysis, using open-ended interview questions in an interview format, and using coding and thematic analysis to determine patterns and meanings and to decipher textural descriptions underlining the shared experience of the participants. The participants were all working mothers within the same age category and had similar inclusion criteria characteristics, which denoted the use of the unit of analysis as one group (Patton, 2015). The unit of analysis for this study was each working mother from California who had a shared experience of perceiving breastfeeding support from their workplace. The use of open-ended questions and interviews is effective for obtaining data from the units of analysis in a qualitative study and allows for probing questions to extract any deep impressions or emotions underlying behavior (Rubin & Rubin, 2012). After the data are collected, coding and thematic analysis has been shown to be effective in discerning the patterns and meanings behind the shared phenomenon (Saldaña, 2016).

Role of the Researcher

In qualitative research, reflexivity is used to describe the researcher's role according to aspects that could have influence on how the study is shaped, such as background, culture, and experiences, which can yield to interpretations of the data (Creswell & Creswell, 2018). Likewise, a qualitative researcher can form connections

with the study participants or study environment due to past experiences where the research problem or phenomenon is personal (Creswell & Creswell, 2018). Where other research traditions, like quantitative or mixed methods research, can be altered and influenced by potential biases from the researcher's past experiences, qualitative researchers can utilize these connections to the research phenomenon to add insight, interpretation, and meaning to the results (Flynn et al., 2019).

As the researcher in this study, I performed the role of an observer only and not a participant. I am of a male gender and therefore had no personal experience with breastfeeding or support from the workplace regarding breastfeeding. I have had children with my spouse, each of whom was breastfed by their working mother, who experienced workplace breastfeeding support or lack thereof. With our first child, my wife was working part-time and was not supported well by her employer or manager, which potentially led to her milk supply ceasing early in the third month. With our second and third children, my wife was working part-time and for the same employer but different a manager than the first. Again, support was limited and even coworkers were less than supportive, which again led to a more stressful and challenging breastfeeding experience. But, because of her previous experiences, she was able to find ways to adjust and make it work. With our fourth child, the ACA had been enacted and was having an impact across the United States and in California, which helped my wife learn more about her workplace breastfeeding rights. Her manager became more supportive, and she was able to convince him to allow her to use a conference room for pumping. With our fifth and sixth children, my wife was a full-time employee and the manager of the workplace,

which allowed her to have adequate accommodations set for herself to utilize and other breastfeeding mothers. These two children were able to breastfeed beyond the goal of 6-months. In addition to these experiences, I have worked in healthcare worksites both military and civilian, where workplace breastfeeding policies have been practiced and working women have had both challenges and successes. Though I have not personally experienced the phenomenon in question for this study, my exposure and eye-witness accounts of other coworker women provided a connection with which established a foundation of qualitative inquiry and reflexivity (Creswell & Creswell, 2018).

In addition to acting as an observer, I had the following roles for this study: to recruit participants; schedule interviews for the participants; act as interviewer; collect and compile the data and analyze it for thematic meanings and codes; transcribe the interview results; provide follow-up opportunities as available or necessary for the participants; pass information of progress, relevant study changes, or promised updates to participants once study results are available; provide discussion of correlations between identified factors, experiences, and themes; ensure no ethical issues develop and maintain confidentiality and integrity of all data of participants; and outline all steps taken for the study to obtain permission from the Walden University Institutional Review Board (IRB) and ensure integrity of all collected participant information.

No personal or professional relationships occurred between me and the participants. This was in part due to method of recruitment, which utilized online and remote-type communication methods, such as social media and listserv email services. If a participant was admitted into the participant group who is known or acquainted with

me, full disclosure of the relationship and to what extent was conveyed with transparency within the study. The participants were primarily identified by random purposeful selection from using LinkedIn and Facebook, or other social media platforms. As Creswell and Creswell (2018) and Patton (2015) explained, *purposeful selection* or *sampling* is useful for qualitative research to specifically select the most appropriate participants who have experienced the phenomenon in question, and even purposefully bring a "bias" with them to the study. The bias is intended to help form the structure and depth of the meanings underpinning the shared phenomenon (Patton, 2015).

Breastfeeding behavior is of a sensitive and personal nature, which I as a male cannot experience personally. For this reason, the experiences of the interviewer (myself) as a father, married to a spouse who has borne children and breastfed them, were explained to each participant before the interviews and during the scheduling process. The written consent form, which was provided to each participant during the recruitment phase, also outlined the details of the interviewer's background. Any follow-up interviews or interactions with participants, when necessary, was to be also handled by me. However, if a participant felt uncomfortable being in the interview session with the interviewer alone, though videoconferencing was available as the primary method for the interview sessions, a phone or email interview would be conducted using the same questionnaires and interview questions. These options were offered to all participants. The intention of this method was to maintain a comfortable environment within which each participant could openly discuss breastfeeding practices, situations, and personal experiences.

Further experiences and background details, including gender and biological familial experiences, that I brought to the study were divulged to each participant and within the discussion of this study. As explained by Creswell and Creswell (2018), the biases a qualitative researcher brings into the study are not conveyed entirely as a method of reducing validity or reliability but can be a validation of the shared phenomenon, and a way to increase authenticity and credibility. However, despite the value of researcher shared experience, to ensure accurate reduction of meanings and rigor from the study results, I needed to practice bracketing. Patton (2015) explained that *bracketing* is used to dissect the phenomenon into all its parts, and treat it as a document or text, which must be analyzed and interpreted in this context, not defined with preconceived understanding or expectations of what meanings are supposed to be or should be (Chan et al., 2013).

As an incentive and expression of gratitude for participation in the study, the participants were offered a gift card for Starbucks or Wal Mart for $20.00, which I purchased. Each participant was given the choice of which store the gift card would be for. The participant received this incentive after completion of their portion of the study. The participants were told that I purchased the gift card for their volunteer participation in the study, and that no agreement with Starbucks or Wal Mart was part of acceptance into the study. All approvals were obtained from the Walden University IRB (approval number 05-12-22-0675753). No ethical issues or conflicts of interest with my workplace were foreseeable. If a participant worked in the same workplace as I did, or does currently, that information would be clearly denoted within the study contents.

Methodology

Participant Selection

Participants for this study consisted of mothers between the ages of 23 to 45 years, who delivered a baby within the past seven years and breastfed during the postpartum period while working in California. These women had returned to either full-time or part-time work after maternity leave, or had intended to return to work postpartum, but then did not end up returning at all during the time while breastfeeding continued. This also included any mother who attempted to start a new job postpartum or who did. The intention in including any mother who had experienced these differing work situations was to also include those women who had intended to return to work and breastfeed, but for whatever reason then decided not to go back to work. This study also included questions to probe if these women could have been influenced by their workplace's breastfeeding support, to the extent this support, or lack thereof had an impact on their decision to return to work. This study also included any woman who had tried to or was successful in starting a new job after delivery and maternity leave, intended to breastfeed, and was successful or not in her attempts. This wide inclusion criteria ensured any woman who worked or intended to work while breastfeeding was given the opportunity to participate.

Participants recruited to this study met the Walden University IRB requirements and the risk assessment for this study was minimal (Walden University, n.d.). No personally identifiable information (PII) of participants was published with study

findings, except for those acceptable demographic data collected. Likewise, no secondary data was utilized or gathered for this study.

The sampling strategy for this study was purposive or purposeful sampling, which was best suited and aligned to target women who match the inclusion criteria set (Creswell & Creswell, 2018; Patton, 2015). As explained by Ravitch and Carl (2016), purposeful sampling is a strategy to selectively find and chose participants that meet the study criteria and intent, which in this study was working women in California who had a shared experience with breastfeeding their infant while working. For the purposes of this study, no organizational type or industry was preferred, no specific type of worker or type of occupation was preferred. The type of purposeful sampling was thus denoted as random without the direct recruitment of specific women known to meet the criteria or acquainted with myself. By utilizing random purposeful sampling, credibility is increased in the study and the potential for an overly large sample size is minimized (Ravitch & Carl, 2016). Considering the sample size for this study was between six and 10 participants, the tendency in research is to assume bias will be high; however, in a qualitative research study, purposeful sampling allows for higher quality results and the bias of participants is considered a strength not weakness (Patton, 2015).

Inclusion criteria was based on the following premises. The participants would be full-time or part-time working mothers who have returned to work, or had intended to return to work postpartum, within the last seven years. This timeframe of seven years was to ensure the most current United States and California State laws for breastfeeding protections and legislation within the workplace were in place during the time the mother

worked or intended to work, which might have affected her experience or perception. The

minimum age of 23 years was set to ensure no minors or any woman who delivered in

past seven years was not a minor at the time of delivery. The minor age category could

add additional factors and influences on the perception or breastfeeding behaviors of the

mother as well as others around her (Sipsma et al., 2018). The maximum age of 45 years

was set to strive to avoid any high-risk pregnancies, which are known to be higher within

the age group over 40 years (Keevash et al., 2018). Additionally, including the higher age

range would provide a wider life perspective and experiences. Research had also shown

that age is positively correlated with increased breastfeeding continuation (Whipps,

2017). The purpose to include both types of work statuses, part-time and full-time, was

based on the potential to elucidate and collect varying degrees of influences and factors,

considering part-time workers are less likely experience the level of barriers to workplace

breastfeeding as a full-time worker (Hamada et al., 2017; Hardison-Moody et al., 2018).

Affirmation of inclusion criteria was determined among the participants by using

the written consent form. Partial determination was made during the recruitment phase

communication, which outlined what the qualifications for inclusion will generally be. If

a woman who read or heard about the study, believed she met the minimum criteria posed

in the recruitment message, the written consent form was sent to her through the provided

contact information to then determine inclusion affirmation. The written consent form

was sent to each participant during the recruitment phase prior to their acceptance into the

study. Demographic data was collected during the interview process, and included

background questions on work history, details surrounding breastfeeding intentions and

behaviors, parity, age during breastfeeding experience, and other pertinent demographic information.

The number of participants or sample size within a qualitative research study is based on various factors and does not necessarily follow a pattern or set parameter by which to determine the correct number needed to produce meaningful results (Patton, 2015). For a phenomenological study, an adequate target number of participants involves a range of three to 10 as stated by Creswell and Creswell (2018). Furthermore, the appropriate sample size depends on the qualitative study design being used and has no set rules which dictate a set number, but more importantly depends on what is at stake, how much time is available, and what will provide credibility (Creswell & Creswell, 2018; Patton, 2015; Ravitch and Carl, 2016).

Saturation is a term often used in a Grounded Theory research design and denotes the point when enough data has been collected to no longer generate new insights (Creswell & Creswell, 2018; Saldaña, 2016). Ravitch and Carl (2016) explained that saturation in a qualitative study is about analyzing patterns and continuing to add samples until nothing new is learned. Therefore, it is not the goal of qualitative research to generalize to the point where the sample size becomes less critical, but to rigorously, ethically, and thoroughly answer the research questions to achieve understanding of the phenomenon being studying (Ravitch & Carl, 2016). Likewise, it is the responsibility and role of the qualitative researcher to acknowledge limitations and weaknesses in the sample size strategies which led to the number of participants (Ravitch and Carl, 2016).

The procedures for how participants were identified, contacted, and recruited are as follows. The primary source of searching and recruiting was via the online professional social media site, LinkedIn. Rationale behind use of LinkedIn related to this being a general site for working females, and therefore provided a wide and vast source of potential candidates that meet inclusion criteria. LinkedIn services through the website also can aid in advertising for study participants and sending out specific messages to targeted groups. This service was not, however, utilized to assist in finding adequate participant hopefuls. Other resources that were used include Facebook, the California Dietetic Association, California state and county WIC agencies, the Le Leche League of California centers, and private practice IBCLC's who agree to help advertise the study participation requirements and incentives and overall purpose. These resources provided a summary of the study purpose and research questions as well as perspective interview time frames if participation is accepted.

The secondary source for recruitment was through my own professional network or by snowball sampling from those confirmed or potential participants, who willingly advertised the study to other potential participants.

Contact with potential participants was made through email, phone call, or texting, or via the social media platform utilized. Pertinent communication was documented for study use and discarded once the study concluded.

As the intent of this study was not to examine or analyze the perception, attitudes, or actions of workplace managers or coworkers, or to evaluate the status and effectiveness of an organization's breastfeeding support quality, no interviews, data, or

surveys were conducted to assess actual workplace breastfeeding support or adherence to existing laws.

Instrumentation

Data collection instruments are utilized in qualitative research to collect, measure, document, and observe the desired data surrounding the phenomenon in question. As Creswell and Creswell (2018) explained, researchers are the key instrument in qualitative studies. Semi-structured interviewing was the primary collection method and protocol. This protocol utilized probing and open-ended questions to elicit follow-up questions, which were intended to extract the meaning of responses that can lead to thematic determination (Rubin & Rubin, 2012). One rationale supporting the use of interviewing for this study was underscored because breastfeeding is a behavioral choice, and one that can be fraught with multiple influences and pressures from various sources in a mother's life (Amiel Castro et al., 2017). As the TRA focuses on the constructs of attitude and subjective norms, which are respectively influenced by perceptions and normative beliefs, interview questions concentrated on collecting a mother's perceptions and beliefs as measures of attitude and subjective norms. For a woman to describe her perceptions, feelings, and experiences surrounding workplace breastfeeding, an interview setting provided ample opportunity and engaged in open-ended questioning to ensure the deepest meanings within experiences could be brought to the surface and shared.

Upon agreeing to participate in this study, the participants were provided a full disclosure of the intention and purpose of the research study via the Written Consent Form, which was required to proffer approval for the interview and for the proceedings to

be transcribed and recorded. Each interview session was recorded using video and audio instruments. The participants' demographic information and responses were hand-written by myself on paper and kept with me securely and confidentially until the study conclusion. The collected data was also kept electronically on data storage device and excel spreadsheet used with the chosen coding analysis program and for any additional study uses. Once the study completed and the results published, all participant information and any recordings were discarded properly to ensure confidentiality and trustworthiness not to exceed the required 5-year limit.

The data collection instruments used for this study were developed by me and included the interview questions (see Appendix B, survey, and consent forms. I developed the format and type of data collection spreadsheet for recording codes and for use of data analysis. The manual by Francis et al. (2004) for researchers to use for an instructional resource when utilizing the TPB framework served as a guide in the development of interview questions and ensuring inclusion of TRA constructs throughout research instruments. I did not use any professional or published templates or guides to produce these instruments.

As this study was not a pilot study or being used to set up a pilot study, there were no procedures to be outlined for this type of research protocol. Likewise, no tools or instruments were utilized for this study that have been published by others.

Procedures for Recruitment, Participation, and Data Collection

I served as the interviewer, which was the primary means of collecting the data. The primary method of data collection was through the semi-structured interviews, which

were held over videoconferencing to ensure privacy and confidentiality, and safety for COVID-19 precautions (CDC, 2020-c; Creswell & Creswell, 2018). The locations of the video conferencing interviews were ideally a private setting where just the participant mother and I convened in their separate locations, which setting offered a more conducive opportunity for sharing of experiences and perceptions, while also yielding options for probing questions (Creswell & Creswell, 2018). Computer Mediated Communication (CMC), which incorporates the use of secure point-to-point video and web-based platforms, was utilized for the video conferencing platforms (McDonald, 2019; Wienclaw, 2019). The details of the interview setting, location, and personnel were outlined and submitted for approval within the Written Consent Form the participants were required to sign.

The secondary method of data collection included demographic questions. Each participant answered the specific questions to ensure inclusion criteria and to collect data to determine certain demographics, breastfeeding practices, type of workplace, type of employment status (part-time or full-time), work history at current workplace, and workplace breastfeeding support adherence per the perception each participant had experienced.

The frequency of the interviews required at least one interview event, which provided adequate data to meet the objectives of the study. Consent was requested from each participant to engage in follow-up questions as appropriate and necessary. These follow-up communications would be accomplished by email, phone call, or by additional interviews if the participant insisted on this method only.

The duration of the interviews was approximately 30-60 minutes long. The participants were provided with the anticipated interview time duration during recruitment procedures to gain approval. At the start of the interview the participants were told they can terminate the interview at any time during the event. Approval was also requested at the start of each interview to ask if the interview can continue even if the time anticipated was exceeded. These procedures provided the participant with feelings of trust and control over the progress of the interview, while also allowing for an environment of collaboration and openness to share (McDonald, 2019; Rubin & Rubin, 2012).

The interviews were recorded with an electronic recording and video device to improve the validity and quality of the results and ensure data integrity for interpretation and analysis (Rudestam & Newton, 2015). The recording devices were also used for data transcription, which was needed for coding and thematic analysis. I also took handwritten notes during each interview, which were transcribed to electronic format and saved. To uphold confidentiality with the data collected and stored, each participant was assigned a number to coincide with their collected data instead of their real name. The collected data was stored in a confidential folder on my personal password-protected computer, along with two backup, encrypted data drives in case any files were corrupted or lost.

Once each interview concluded, the participant was invited to exit and be given opportunity to ask any final questions. The participants would then be advised to email, call, or send a letter if they had any additional information to add to their interview responses. The participants were not required to return for a follow up visit but advised

that if I needed to clarify any responses or had questions related to misunderstood responses, a follow up request for information would be requested.

Such stringent interview methods can reveal the significance of the phenomenon correlating the noticed variables in a phenomenological theoretical framework (Ravitch & Carl, 2016).

Data Analysis Plan

The data analysis process for qualitative research is immersive, recursive, and ongoing throughout the entire research process and continues from when the first data is collected through the entire research progression (Ravitch & Carl, 2016). Therefore, to adequately scrutinize and interpret the data for this study, the analysis process continued until all data was collected and all follow-up communications had been concluded. Any notes or added insights from participants or that I had gained after the conclusion of the interviews, would then also need to be included in the analysis portion.

The qualitative analysis process that was incorporated for this study was to code the transcribed data collected from the surveys, interviews, hand-written notes, and any follow-up communications with participants. After the data was coded, the thematic analysis process was followed to organize the meanings into themes, which then were used to determine patterns and underlying thematic meanings that related to each research question of this study, as well as the constructs of the TRA (Ravitch & Carl, 2016; Saldaña, 2016). Patton (2015) described this process as *inductive analysis*, where the data is used to discover patterns, themes, and categories, which assists the researcher to relate the phenomena being studied to the shared experiences of the targeted group.

The coding process followed several distinct cycles, through which the collected data was formatted, organized, and categorized to then be analyzed for themes and meanings (Patton, 2015). The coding process included first-cycle coding, a transitional method termed eclectic coding, and finally second-cycle coding.

Part of the process of the first-cycle coding includes the critical process of converting the transcribed data into a prescribed format that conforms with the coding program to be used, which for this study was ATLAS.ti (Saldaña, 2016). Rudestam and Newton (2015) ascribed the use of Computer Assisted Qualitative Data Analysis Software (CAQDAS) as an effective method of bringing qualitative research analysis into focus and aiding the researcher in the daunting task of data interpretation. Saldaña (2016) insisted that CAQDAS programs help researchers efficiently store, organize, manage, and reconfigure the data to enable human analytic reflection. The CAQDAS program which was utilized for this study was ATLAS.ti, because of its ease of use over multiple device formats, customer service and professional guidance on coding procedures, and coding capabilities across multiple coding methods (Rudestam & Newton, 2015; Saldaña, 2016).

The first-cycle coding process used for this study included (1) pre-coding, a process of reading, questioning, and engaging with the data as the researcher (Ravitch & Carl, 2016); to also include jotting down any ideas or thoughts which came to mind as an analytic memo, (2) Attribute Coding, (3) Structural Coding, (4) Descriptive Coding, (5) In Vivo Coding, Process Coding, Emotion Coding, and Value Coding, and (6) Themeing (Saldaña, 2016). Within each of these coding steps were specific methods used with the matching qualitative research approach.

The purpose of an analytic memo is to capture thoughts, feelings, ideas, or anything that comes to mind while deciphering research notes, transcriptions, or simply analyzing the collected data, and writing them down in a memo format (Saldaña, 2016). Further explained, Saldaña (2016) stated that analytic memo writing is a way to express and validate researcher reflexivity, where the researcher thinks critically about the reason for the phenomenon, why revealed discoveries are occurring in the study population, and challenging assumptions related to the study research questions that can shape the results.

The first-cycle coding methods were described and outlined as follows per Saldaña (2016):

- Attribute coding is a general process of coding all data and useful to establish notations at the beginning of each data set. The Descriptive information targeted typically includes, the fieldwork setting, participant characteristics or demographics, data format, time frame, and any other variables of interest. This method of coding is especially useful for running through the CAQDAS program utilized in the data analysis process.

- Structural coding is useful for its categorization function, where content-based data can be applied collectively to specific research questions. This method is appropriate for this study because multiple participants will be interviewed, and semi-structured interviews questions will be used for data-gathering. As further explained, this coding method helps categorize the data sets into commonalities, relationships, and segments that can be used for pattern recognition and themeing.

- Descriptive coding is appropriate for coding analytic memos, documents such as interview transcripts and researcher notes, survey results, and any other notes, which can help provide an inventory of the overall patterns. One limitation to this coding method relates to small groups of interviews or documents, to where this procedure may not reveal participant insights about the phenomenon. Thus, if the coding analysis does not add to the pattern development and themeing process, these coding results for this method will be discarded.

- In vivo coding typically uses the participants' own words or phrases to notate data segments, and not the researcher's created words (Ravitch & Carl, 2016). This method will be useful and appropriate with this study to bring to light any cultural terms, medical terms understood or misunderstood, specific breastfeeding terms, and a way to close the language gap across the potential age categories within the study population.

- Process coding is used to capture words and phrases that relate to actions, such as those related to observable activities, or actions that connote concepts or emotions. This coding method is appropriate to help understand breastfeeding barriers and reasons behind behaviors, like cessation or continuation.

- Emotion coding is appropriate for coding data where inter- and intra-personal experiences are undertaken, such as decision-making, reasoning, and behaviors. This method is a way to provide deep insights into the participant's

perspectives and views. This method will be particularly appropriate for this study to discover the emotions behind and related to breastfeeding behaviors and its relationship to perception.

- Value coding applies to coding a participant's values, attitudes, beliefs, all with respect to perspective or perception towards a lived experience. This insight will guide in the discovery of shared reasons behind breastfeeding beliefs and behaviors within the study population.

The final step in the first-cycle coding process incorporated themeing or thematic analysis, which typically starts with categorizing the coded data into groupings and comparable categories, from which distinctive themes will begin to emerge (Ravitch & Carl, 2016). From these categories, the themes were determined which then revealed the patterns and implications behind attitude and subjective norms (measured using beliefs and perception) and the intention to breastfeed while at work (Rudestam & Newton, 2015). Thematic analysis is appropriate to use to analyze qualitative data related to a phenomenological approach where behaviors, beliefs, experiences, and participant constructs need to be explored (Keevash et al., 2018; Saldaña, 2016). The themeing process includes first, identifying overarching themes from the coding results until no more themes emerge and saturation is reached; second, reanalyzing the coding results for any missed themes central or supportive; and third, naming the central themes under which all sub-themes identified will align (Guest et al., 2012).

The next step in the coding process was Eclectic Coding which is a refining process that incorporates reflecting on the coding methods used for the first-cycle and

combining the results into an overall coding sequence (Saldaña, 2016). This coding technique is a way to connect the first-cycle coding to the research questions of the study and discern the data from a more combined outlook (Saldaña, 2016). Researchers written analytic memos can also be coded using this method. The intent of this Eclectic Coding can furthermore be summated as a first draft of the first-cycle coding results, and then lead into a revised draft for use in the second-cycle (Saldaña, 2016).

The second-cycle coding process is necessary to reorganize and reanalyze the data coded through the first-cycle, which by doing links unrelated facts into categories and related categories into groups that form coherent themes (Saldaña, 2016). The goal of the second-cycle coding process is to take the first-cycle coding results and develop them into a smaller, more selected list of categories, themes, and assumptions (Saldaña, 2016). The primary coding methods used in this cycle for this study were Pattern Coding and Focused Coding. The use of Pattern Coding was appropriate to help identify the emerging themes from the categories discovered, or validate the categories and themes pulled from the first-cycle coding process. Focused Coding is like the In Vivo Coding process and is utilized to take the most frequent codes and develop them into more salient categories that can be applied to analytic assumptions (Saldaña, 2016).

Regarding the manner of treatment of any discrepant cases, I would have disclosed within the research results section a clear description of any discrepancies of any of the participants' data or where a participant had accidentally or falsely answered affirmatively to the inclusion criteria, and/ or later discovered did not meet with all

qualifying criteria for this study. Any data of such a participant would be removed from all data analysis and discussion. For this study, no such discrepancies occurred.

Issues of Trustworthiness

Credibility

In a qualitative research study, credibility is equivalent to internal validity often used in quantitative research, which allows the researcher to ascribe confidence in the study results and back the findings (Jarrett, 2017; Creswell & Creswell, 2018). Validity was defined as a convergence of accuracy from the standpoint of the researcher, the participant, or any readers of the account (Creswell & Creswell, 2018). The process of data analysis, transparency in research methods and interview protocols, and use of triangulation will validate the research credibility and enhance the researcher's trustworthiness (Patton, 2015). To increase validity, each participant was granted adequate time to respond to all interview questions and provide feedback and follow-up responses. The participants were read back their responses through the interview and invited to make corrections and/ or provide feedback to ensure accuracy of each interview. The study findings were not peer reviewed but checked and validated by the research study committee members. Data analysis findings were provided to the research committee for review and interpretation. Any suggested themes or categories spotlighted by the committee were added back into the data analysis process.

The process of triangulation was used to increase validity to the study. Ravitch and Carl (2016) describe triangulation as a set of processes or checks that researchers can use to enhance the validity of a study by challenging the sources or methods of data

collection and analysis. This can also include confirming the consistency across participant interviews, inclusion criteria, survey responses, data analysis methods, and comparing the research study protocols against other methodologies (Patton, 2015). The process of thematic analysis and development can also be validated when the identified themes are established throughout all data sources and participants (Creswell & Creswell, 2018).

Transferability

The concept of transferability was described as the ability to transfer research findings to other research settings and is like the quantitative research equivalent of external validity (Ravitch & Carl, 2016). Through thick description the researcher provides details into the phenomenon being studied, the inclusion criteria and background of the participants, the setting of the study and data analysis protocols, demographic questions to help reveal some of the characteristics of the participants and the bonds they share, and in-depth elaboration on the study findings (Patton, 2015). The goal of transferability is to provide adequate amounts of information about the study and data to allow readers to transfer aspects of the study findings by applying the contextual factors unique to the study but not by attempting to replicate the outcomes (Ravitch & Carl, 2016).

Dependability

Dependability is the process of working to ensure the data is stable, consistent, and reliable over time (Ravitch & Carl, 2016). Part of the process to accomplish dependability in qualitative research is to show how the research design, methods, data

collection processes, and sequences of data interpretation align with the research questions and are transparent for review (Ravitch & Carl, 2016). Creswell and Creswell (2018) suggested documenting as precisely as possible the steps of the research procedures within the research report. Incorporating triangulation principles will also increase the dependability of the research (Ravitch & Carl, 2016; Patton, 2015). Furthermore, conducting member checks and audit trails as part of a quality assurance process added to the dependability. Data and interview transcripts and surveys were also checked repeatedly for errors. All steps within the verification and quality checks were documented in the research.

Confirmability

The process of qualitative research confirmability is parallel to objectivity in a quantitative research study and concerns establishing the durability and value of the interpretations, findings, and assertions made within the research; that the researcher is not objective but forthcoming in openly explaining and conserving the bias that potentially exists among the researcher and participants (Patton, 2015; Ravitch & Carl, 2016). This process is mitigated by increasing researcher reflexivity, wherein any biases, backgrounds, personal experiences, values, genders, history, culture, and possible objectivity of the researcher are made transparent and discussed within the research content (Creswell & Creswell, 2018; Patton, 2015). Strategies to improve confirmability and reflexivity include auditing, peer reviewing, and member checking for accuracy (Jarrett, 2017; Patton, 2015). Auditing was performed for this study by me and the research committee. Member checking was conducted throughout the research process to

ensure in-depth reporting accurately depicted the responses and interpretations of the participants in the research data collection and analysis processes (Creswell & Creswell, 2018).

Ethical Procedures

As part of qualitative research ethics, five principles were critical to be admonished by a qualitative researcher. These typically include, (1) respect for persons, (2) beneficence and nonmaleficence, (3) justice, (4) fidelity and responsibility, and (5) integrity (McClure, 2020). Notable among these principles is the practice of beneficence, which Ravitch and Carl (2016) explained is when the researcher pays considerable attention and care to the welfare of the study participants. Mihajlovic-Madzarevic (2010) revealed that these principles form the core of the code of ethics in research concerning human rights and protection. These principles of ethics were followed and maintained throughout the research process of this study.

The principle of nonmaleficence underscores several fundamental principles to be adhered to in the process and conduct of this qualitative research; namely, to do no harm, and to strive for the research to invoke a positive impact on science or society at large (McClure, 2020). This research study was considered low-risk and did not include any practice or process which could bring intentional harm to its participants. The participants included in this study were not considered a vulnerable population group (Harris, 2010; Ravitch & Carl, 2016). As for unintentional harm towards reputation, economic prosperity, mental health, or any other aspect of human welfare, this type of harm was safeguarded against by the various means of securely keeping, storing, and destroying the

data collected, and by maintaining confidentiality with all participant information and the research findings.

As mentioned, the primary method of data collection was through semi-structured interviews. As Patton (2015) pointed out, interviews and the probing questions that can occur within an interview environment, can evoke feelings, thoughts, emotions, and experiences, that can negatively or positively surface as a result, and then become exacerbated. Though the interview is not meant to cause any harm or discomfort to the participants, it is possible to evoke such emotions and feelings unintentionally. To help avoid this type of potential harm from occurring, prior to their participation, participants were made fully aware of the interview purpose, setting, my background, and topics to be posed as interview questions. Additionally, I asked consistently throughout the interview how the participant was doing to check on her well-being and adjust or terminate the interview as needed.

Each participant was granted control of their interview session duration and could terminate the interview at any time. Likewise, each participant was assured that she could leave the research study and withdraw participation at any time. To increase confidentiality, participant's names were not included as part of the collected data but assigned a number designation. After the research study was completed, all collected data and participant information was properly destroyed within five years to maintain integrity and confidentiality. I as the researcher bore the responsibility to ensure the integrity of all research data and analyses, as well as acquire all necessary approvals from the

appropriate Walden University IRB, the social media resources through which recruiting was conducted, and each participant's Written Consent forms.

The Walden University IRB approval process included the submission of the research proposal along with Form A (Description of Data Sources and Partner Sites), which provided a detailed outline of the research purpose and questions, recruitment plan, participant demographic general identifiers, whether the participants would be of a vulnerable population group or not, a list of the data collection methods, the data analysis plan, and any other appropriate research study protocols the Walden University IRB required (Harris, 2010). After approval was granted, any additional documents the Walden University IRB required was sent to me for completion, such as contractual agreements with recruiting sources or organizations, any confidentiality agreements, and other pertinent documents specific to study parameters. After these documents were obtained and returned to the Walden University IRB, Form C, which contained details about all ethical issues, was completed. At the conclusion of these steps, recruitment and research data collection began.

To acquire each participant's informed consent, Written Consent Forms were administered to them during the initial recruitment phase, directly following their acceptance into the study. The method of administration was via email, regular mail, or in-person. The participant then replied to me of their consent to participate. The process of gaining the participant's informed consent was an integral part of upholding research ethics and illustrated to the participants that their rights and privacy was imperative (Ravitch & Carl, 2016). The Written Consent Form is also required by the Walden

University IRB process and needs to inform the participants of the nature of the research, that they are aware of any risks or confidentiality concerns and are not being coerced to participate in any way (Rubin & Rubin, 2012). Additional information that the Written Consent Form will provide to the participants is the name of the sponsoring institution (Walden University), the researcher's identification, benefits of participating, a guarantee of confidentiality, a point of contact for them if questions arise (in this case myself), and an understanding of their commitment of involvement (Creswell & Creswell, 2018).

The monetary gift card incentive for participation was also stated within the Written Consent Form with a description that it was not intended to coerce participation, nor was it provided under any kind of organizational or institutional endorsement agreement. The administration of this monetary gift card was not a breach of ethics, because it was not a bribe to participate or coerce any commitment. It was made transparent to the participants that the gift card was voluntarily offered as a token of appreciation and to help reimburse their valued time for participation.

I provided Walden University IRB with a required researcher-signed statement confirming that all participants were provided their informed consent prior to the start of any data collection or interviewing.

The interview transcription process and any data analysis were conducted by me using the ATLAS.ti software program along with any additional tools that became necessary. In all cases and with all tools, whether online or otherwise, no PII was used.

The interview and probing questions that might occur during the interview process did not record any organizational name or identifiable information, or any

manager or coworker names. These collection protocols ensured no legal ramifications were caused because of this research study with any organization or workplace. The type of industry the organization a participant worked in or works at was not recorded. In the case where any participant announced the name or location of her workplace, a coworker, or manager/ supervisor, that indicator was replaced during transcription and analysis with a generic identifier. If a participant was acquainted with me from a past workplace, any potential conflicts of interest were strictly managed by me to ensure no relationship or workplace ethical dilemmas arose.

<p style="text-align: center;">**Summary**</p>

Chapter 3 presented the research method and frameworks for the current qualitative phenomenological study. Also contained in this chapter were sections on the research design and rationale, which included the research tradition; the role of the researcher; the methodology components such as, participant selection, the planned instrumentation utilized, procedures for recruitment, participation and data collection, and the data analysis plan. This chapter also included discussions on the issues of trustworthiness and ethical procedures that are critical to a qualitative research study. The principles of ethics in research and practices to improve trustworthiness was also discussed. Chapter 4 will include an in-depth discussion of the results of the data collection and analysis; specifically, thematic analysis from the semi-structured interviews, demographic meanings, and correlation between findings and the research questions. Chapter 5 will then provide the interpretation of the results and any recommendations for future research.

Chapter 4: Results

The aim in conducting this qualitative phenomenological research was to explore the shared experiences of eight working mothers who lived and worked during their breastfeeding experience in the state of California. The purpose was to discover how HEP of workplace breastfeeding support influenced these mothers' knowledge of workplace breastfeeding accommodations and benefits, and understand how this knowledge impacted their perception, attitude, and experience (Monteiro et al., 2017). The additional purpose was to explore how each mother's perception of workplace breastfeeding support influenced her attitude towards her breastfeeding experience (ODPHP, n.d.-a; Schafer et al., 2017).

The eight participants included met the recommended sample size for a qualitative study and the purpose outlined for this study (Baker et al., 2012). As mentioned, for a phenomenological study using the TPB, or a similar framework like the TRA, an adequate target number of participants should include anywhere between three and 25 (Creswell & Creswell, 2018; Francis et al., 2004).

The two research questions that guided this study focused on the influence and impact of a Californian working mother's perception of workplace breastfeeding support from her previous, current, or future workplace, and how this affected her attitude to continue breastfeeding towards the 6-month breastfeeding goal. The first research question was how does HEP about workplace breastfeeding support impact a working mother's attitude towards breastfeeding behavior? The second was how does a working mother's attitude towards her workplace's breastfeeding support and her experienced

subjective norms influence her breastfeeding experience towards reaching the 6-month breastfeeding goal? This chapter includes the summary of the interview findings from the eight participants recruited through purposeful sampling, as well as information about the participants' demographics, data collection process and procedures, data analysis, evidence of trustworthiness, results, and a summary relating to the two research questions.

Setting

The purpose of this section is to describe and divulge any situations which might have influenced me as the researcher or the participants during the administration of this study. Each noteworthy situation applicable is outlined. The extent or degree of influence each situation had on the recipient is subject to interpretation; likewise, no attempt to elaborate or explain the influential impact of each situation is made here.

Regarding the research study in general, of significant note was the COVID-19 pandemic, which occurred during the initial data collection portion of this study (CDC, 2019-c). The pandemic had a major impact on the practicality of data collection methods and follow up by the researcher. Due to this situation, face-to-face interviews with participants became impractical and, in some circumstances, not authorized per health regulations (CDC, 2019-c). This same pandemic also had positive repercussions, and in multiple participants' workplace situations, led to improved breastfeeding outcomes and workplace modality changes. Of the eight participants involved in this study, three were allowed to work either from home primarily, or on a modified schedule, which allowed each mother to have an improved breastfeeding experience.

For myself, the situational change of note was that, during the beginning of the data collection phase, I moved out of California to another state within the United States. Due to this geographical change, interviews with participants on a face-to-face basis became unlikely and impractical. This change made the use of videoconferencing the most effective method for conducting interviews. This aligned with the COVID-19 pandemic situation, which also caused the increased necessity to use videoconferencing as the primary method of conducting participant interviewing.

Participant 1 (P1) experienced several situations that impacted the setting of her breastfeeding experience. She gave birth and began breastfeeding while employed as a full-time student. During her breastfeeding experience, she completed her graduate degree and started her postdoctoral studies. She suffered from a chronic illness during this breastfeeding period that induced high amounts of fatigue and stress, which she reported would have likely led to cessation had she not been allowed to work primarily from home.

Participant 2 (P2) gave birth to her baby 1 month prematurely, which she reported influenced a lack of milk production from the onset of her initiation of breastfeeding. She reported that the baby had latching issues and lactation consultant support was necessary, though pumping became the alternative option to continue breastfeeding duration. Participant 4 (P4) also gave birth to her infant 3 weeks prematurely, which she indicated led to poor latching and the need to introduce formula early in the breastfeeding duration.

Participant 6 (P6) reported that during her breastfeeding experience, her workplace started a major project, which caused high stress in her life and influenced her breastfeeding volume or output negatively.

Demographics

The study participants answered a series of demographic questions related to their breastfeeding experiences and workplace details (see Table 1).

Table 1

Demographic Information from Interview Introduction Questions

Demographic	*n*	%
Education Level		
Less than high school graduate	0	-
High school graduate	0	-
Some college completed	0	-
College graduate	3	37.5
Some graduate school completed	2	25.0
Graduate school completed	3	37.5
Age category when delivered most recent baby in California?		
18-25yr	0	-
26-30yr	0	-
31-35yr	7	87.0
36-39yr	0	-
40yr or over	1	13.0
Prefer not to say	0	-
Race Description		
Black	0	-
White	6	75.0
Hispanic	1	12.5
Asian	1	12.5
Bi-racial or multi-racial	0	-
Other _____	0	-
Prefer not to say	0	-
Marital status when breastfed or intended to breastfeed in California		
Married with baby's father	8	100.0
With baby's father, not married	0	-
Married, not with the baby's father	0	-
Not with the baby's father	0	-
Prefer to answer _____	0	-
How many children birthed?		
Participant 1, 2, 4, 5, 6, 8	1	75.0
Participant 7	4	12.5
Participant 3	6	12.5

Demographic	*n*	%
How many of those children were breastfed while working in California?		
Participant 1, 2, 4, 5, 6, 8	1	75.0
Participant 7	4	12.5
Participant 3	6	12.5
Employment status when delivered the baby		
Employed full-time	5	45.0
Employed part-time	4	36.0
Employed part-time and a student	0	-
Not employed	1	9.0
Not employed and a student	1	9.0
Prefer not to say	0	-
Other _____	0	-
How long each child breastfed?		
Less than 3 months	0	-
Within 3-6 months	3	28.0
6-12 months	3	28.0
Greater than 12 months	5	44.0
During maternity leave did you intend to continue to or breastfeeding after returning to work?		
Yes	8	100.0
No	0	-
How long was it after the birth of the baby that returned to work, or would have?		
<3 months	1	10.0
3-4 months	5	45.0
4-5 months	5	45.0
5-6 months	0	-
>6 months	0	-
Had the California job before starting maternity leave, or was it a new position?		
Same	8	100.0
New	0	-

All the participants graduated from high school and had completed college. Over half (>50%) of the participants completed some graduate school or completed it. All the participants were over the age of 30 years and seven out of eight participants were between the ages of 31 to 35 years. All the participants reported a race with the majority of 75% being White. The study included one Hispanic and one Asian participant. All the participants were married and living with the baby's father at the time of the breastfeeding experience and during the participation in this study. All participants gave birth to and breastfed their babies in California. Nearly half of the participants worked full-time during their breastfeeding experience. Only one was a full-time student during breastfeeding while attending her full-time student responsibilities. Of the participants, six of the eight worked in a healthcare setting and were considered healthcare workers or professionals. Only one participant worked in a non-healthcare occupation or organization. All participants at least initiated and breastfed for more than 3 months. Four of the 11 babies involved in this study breastfed to the United States goal of 3 to 6 months, and more than half these babies breastfed beyond the goal of 6 months (ODPHP, n.d.-a; Pounds et al., 2017; WHO & UNICEF, 2019). Four of the 11 babies breastfed beyond 12 months duration. Only two of the 11 babies did not EBF to the goal of 4 to 6 months. One of the babies made it to the 4–6-month goal for EBF, but then stopped wanting to breastfeed on its own. Most of the babies, or eight out of 11, breastfed into the 4- to 6-month goal for EBF. All participants except one, who was the only student during her breastfeeding experience at first, returned to the same workplace. All participants had planned to breastfeed once they had returned to work, or at least had planned to attempt

it. One participant decided to return to work before the 3-month typical maternity leave time under no pressure from her employer to do so. Nearly half of the participants were able to take the full 3 months or more of maternity leave, but none were on leave more than 6 months. All participants lived in and worked in California before and after maternity leave, and at the same job or workplace. For additional responses to interview questions regarding demographic data, see Appendix B.

Data Collection

The number of participants included in this study was eight. All the participants were women who had worked or were working in California at the time of the breastfeeding experience, which had occurred within the last 7 years prior to participation in this study. From these eight women, 11 babies were included as being breastfed for this study. One of the participants (Participant 7) had four (P7A, P7B, P7C, and P7D) of her own children who had all been born and breastfed within the last 7 years prior to participation in this study. All participants met the inclusion criteria required for participation. Each participant participated in a videoconference interview session, covering all the questions illustrated in Appendix B.

The recruitment flyer was sent out via LinkedIn to acquaintances or networked working people who had access to my profile. I requested the forwarding of the flyer to any known working women who might be interested in the study and who could possibly meet inclusion criteria. The practice of purposeful sampling was utilized to also send the recruitment flyer through my working networks and my working acquaintances in California. This process resulted in some interested participants. As the goal for the

sample size was set at six to 10 participants, I also sent the recruitment flyer to contacts within Facebook, the California Dietetic Association, California state and county WIC agencies, the Le Leche League of California centers, and private practice IBCLC's within California where a potential for working mothers would be likely found. I found the emails of board members or contacts for these organizations by searching their public websites.

When positive contact was established with one of the organizations listed above, they agreed to send out the study recruitment flyer to their email listservs. This action resulted in the identification of six interested participants who made positive contact with me via email. Seven interested working mothers also expressed interest and responded to the recruitment flyer by directly emailing me, who had all learned of the study or provided the recruitment flyer by word-of-mouth from another who had heard about the study. Of these seven women, three were included in the study. Once a potential participant emailed me to let me know of her interest, the recruitment flyer was sent to her, to make sure that each participant understood the study purpose and commitment being requested for participation. I asked the potential participant to email back to confirm their committed interest. After receipt of their understanding and confirmed interest, I would email the participant the Written Consent Form and ask each woman to read over it, keep it for their records, and email me back the words, "I Consent" to participate in this study. I kept an accurate record of when each participant was either sent one of the participation forms or when I received back responses to consent and later for gift card choices.

After I received back the emailed written consent for each participant, I would begin seeking to schedule the videoconference interview. Five of the participants who had provided consent to participate failed to respond back to me with dates to conduct the interview and were eventually dropped from the study participant list. For each participant who agreed to participate in the study, their information was added to my researcher-developed spreadsheet that gave each participant a coded number. No personal information was recorded or kept for the participants except the dates each was sent the study Recruitment Flyer, Consent Form, and gift card if the interview was completed.

The average time it took between emailing the first request for an interview date and the completion of the interview was 3–4 weeks. This may have in part been due to the time of the year these communications were occurring, which was at the start of the summer months, where vacations and other priorities might have conflicted. The average time between me receiving an email response from a participant and returning the appropriate email was less than 2 days. The average response time for me to receive emails back from a participant was 2 to 3 weeks.

The videoconference interviews were completed using an online private conferencing platform which recorded the video directly to a digital file and not to a cloud service or other storage mechanism. The digital video file was saved directly to my personal computer only. This was ideal to maintain confidentiality of participant data. I used a digital recording device to record the audio from the interview also. The audio file was saved only on my personal computer. The average interview duration was 55 minutes from the beginning to the end of questions and responses.

At the start of each interview, the study purpose and explanation of the interview process, time expectation, and interviewee rights was read to the participant by me directly from the interview protocol form (see Appendix B). I took hand-written notes on a printed copy of the interview protocol form and the copies were stored securely in a folder in my possession. The notes I took per interview were components in helping formulate the codes, themes, and categories for data analysis. The forms have been shredded and destroyed to ensure participant confidentiality.

During the interviews, a series of demographic questions were given to each participant to aid in compiling comparable information related to the participants and link shared experiences surrounding the workplace breastfeeding phenomenon. As the interviews were conducted, I went through the semi-structured interview questions (see Appendix B) and followed up with clarifying and probing questions to elucidate the responses from participants in the effort to fully gain understanding and meaning to their breastfeeding experiences. No participant required a follow-up interview session. The interviews were carefully held over videoconferencing in a private setting per the participant's choosing. I maintained a private and unaccompanied location and setting throughout the duration of each interview.

At the conclusion of each interview, the participants were advised to email, call, or send a letter if they had any additional information to add to their interview responses. No participants contacted me after the conclusion of the data collection process. These protocols and methods used for each interview provided each participant with feelings of trust and control over the progress of the interview, while also allowing for an

environment of collaboration and openness to share (McDonald, 2019; Rubin & Rubin, 2012). No variations in the recruitment and data collection plans occurred from the outline in Chapter 3.

Most of the interviews went as planned and had no unusual circumstances or issues from start to completion. During two of the interviews the connection for cellular service was disrupted significantly to where long pauses or breaks in the contact occurred and the interview had to be restarted. Because the interviews were all conducted through videoconferencing technology, service disruptions were somewhat expected to occur as the time of day and distances between myself and participant was different. The video recordings frequently presented problems hearing the audio between my questions and the participant's responses. Thus, the digital audio recordings were utilized to help fill in any gaps in transcribing the interviews to word documents for data analysis. No other unusual circumstances were encountered during the data collection process.

Data Analysis

To adequately acquire the needed insights and underlying meanings to support the purpose of this study, and seek to explore the research questions, the data analysis process needed to be ongoing and immersive throughout the recruitment process, data collection period, and data analysis portion (Ravitch & Carl, 2016). At each juncture of the data collection and analysis components, detailed notes and insights were recorded within memos and on the documents that accompanied the interview transcriptions and in ATLAS.ti. Once the data had been collected from the participant interviews, the data analysis process began, which included transcribing the interview responses into digital

transcriptions which were entered into ATLAS.ti for coding, categorizing in groups, and then extrapolating the main themes which related to the two research questions guiding this study (Saldaña, 2016). The entire data analysis process followed an inductive analysis, where the data was used to uncover the patterns, categories, and themes, which assisted me in relating the phenomena being studied to the shared experiences of the targeted group of working mothers (Patton, 2015).

Once I inputted the eight interview transcriptions into the ATLAS.ti program, the first-cycle coding process began. As part of this first-cycle coding process, I used pre-coding, which is a process of reading, questioning, and engaging with data (Ravitch & Carl, 2016). Within ATLAS.ti I began creating pre-codes and attaching them to paragraphs, words, or phrases within each transcription. Pre-coding also included jotting down ideas or thoughts which came to mind as an analytic memo. The analytic memos were stored in ATLAS.ti for use in later coding processes. After pre-coding, I used the Attribute Coding format to guide the identification of Codes, Categories, and Themes (Saldaña, 2016). The results of the pre-coding and the first-cycle coding process yielded a total of 88 original Codes. These original codes are listed in Appendix D.

After the original codes were identified, the final step in the first-cycle coding process incorporated the theming component, which started with categorizing the codes into similar groups and categories, from which distinctive themes emerged (Ravitch & Carl, 2016). The intent in formulating the code groups and subsequent categories was to reveal the patterns and implications behind attitude and subjective norms that feed into breastfeeding behavior and the intention to breastfeed while at work (Rudestam &

Newton, 2015). As stated previously, thematic analysis is appropriate to use to analyze qualitative data related to a phenomenological approach where the behaviors, beliefs, experiences, and participant constructs are under scrutiny (Keevash et al., 2018; Saldaña, 2016). From the first-cycle categorizing (or code grouping) 19 groups were formulated. Included in the 19 groups were the five main constructs of the TRA, with the intent to remind myself when converting these categories into themes, to focus on identifying those themes most related to the subjective norms and intentions that underline a person's attitude to perform a behavior (Lau et al., 2018).

From the list of code groups, I began formulating potential themes. This process continued until no more themes emerged and a saturation of ideas was reached. Then, I reanalyzed the coding results by thoroughly reviewing the interview transcripts and analytic memos again, searching for any missed themes central or supportive. Once this reanalysis had been exhausted, I condensed and streamlined the names of the identified themes into seven central themes under which any sub-themes identified would also align (Guest et al., 2012). The seven themes from this original theming process are Attitude Towards Support, Attitude Towards Workplace Support, Reasons to Breastfeed at Work and Beyond, Perceptions that Influence Breastfeeding Duration, Knowledge of Support or Amenities Impacted Duration, The Impact Knowledge of Support has on Attitude, and Facilitators of Breastfeeding Duration. As the data analysis proceeded, I added branches to the central themes that were to become subthemes. These central themes and subthemes would further undergo scrutiny during the Eclectic coding and second-cycle coding processes.

With the first-cycle original codes, categories and code groups, and original themes formulated, the next step in the coding process was Eclectic Coding. I used this as a refining process to actively reflect on the coding methods used for the first cycle (Saldaña, 2016). Using this method, I connected the first-cycle coding process and results to the two research questions of the study, which then helped look for final products of themes and sub-themes (Saldaña, 2016). By the end of this phase, I compiled the categorized code groups into theme groups, related to which original theme it might fall under. These grouped codes would become sub-themes at the end of the second cycle.

I next moved into the second-cycle coding process of data analysis. As Saldaña (2016) explained, the goal of the second-cycle coding process was to take all first-cycle coding results and mold them into a more concise list of categories, themes, and assumptions, and ensure the collected data and all notes written or recorded were thoroughly reviewed. The primary coding method I used was pattern coding, which was appropriate in identifying the themes from the categories already discovered, and then validating what had been pulled out from the first-cycle coding process. At the end of this second-cycle of rechecking all the demographics, transcriptions, analytic memos and hand-written notes, and formulated codes, categories, and themes, the final six themes were developed.

The final main themes for this study which were guided by the two research questions were (a) the impact of HEP on attitude towards workplace breastfeeding; (b) how workplace breastfeeding support impacted attitude; (c) reasons to breastfeed at work and beyond; (d) how knowledge of support or amenities impacted workplace

breastfeeding duration; (e) improvement suggestions for the workplace, manager, and organizations; and, (f) perceptions that influence breastfeeding duration. From the first-cycle categories and groups, subthemes were developed. The original codes developed from the two coding cycles are connected to each of the subthemes. The main themes and correlated subthemes are in Table 2. Each of the main themes will be discussed in detail later in this chapter.

Table 2

Main Themes and Subthemes

Main themes	Subthemes
Impact of health education and promotion (HEP) on perception and attitude towards workplace breastfeeding	- HEP had positive impact - Lack of HEP had negative impact
How workplace breastfeeding support impacted attitude	- Positive support led to positive attitude - Negative support led to negative attitude - COVID had positive impact - COVID had negative impact - Manager related impact
Reasons to breastfeed at work and beyond	- The influence of subjective norms - Barriers to breastfeeding success Facilitators: - Breastfeeding benefits - Breastfeeding goals and standards
How knowledge of support or amenities impacted workplace breastfeeding duration	- Acquired knowledge led to improved outcomes - Lack of knowledge of support or amenities was a barrier
Improvement suggestions for the workplace, manager, and organizations	- Change in workplace modality impacted breastfeeding - Mothers' suggestions
Perceptions that influence breastfeeding duration	- Positive perception and attitude - Negative perception and attitude

Regarding the manner of treatment of any discrepant cases, I did not have the fifth child of P3 included in the study because the child was turning seven years old the year the data was collected. One participant who had given consent to be in the study was not included due to her child being breastfed over the 7-year inclusion criteria. P7 had four children, but each was within the past 7 years being born and breastfed to be included in this study. There were no discrepancies in any of the participants' demographic data or where a participant had accidentally or falsely answered affirmatively to the inclusion criteria. No participant data was removed as discrepant. Several instances occurred within the interviews where a participant mentioned the name of their workplace, supervisor, or manager. These names and any other details divulged during the interviews were not included or mentioned within this study.

Evidence of Trustworthiness

Credibility

Credibility can be described as equivalent to internal validity used in quantitative research, which allows researchers to confirm confidence in the study results and provide support to the findings (Jarrett, 2017; Creswell & Creswell, 2018). In this study, the process of data analysis, transparency of the research methods and interview protocols, and use of triangulation validated the credibility and enhanced my trustworthiness in the results (Patton, 2015). An integral part of developing trustworthiness was building rapport and trust between participants and myself, which aided in developing the underlying meanings throughout the data collection process. Rapport was built during the interview commencement when I reviewed the study purpose, my background and

personal family breastfeeding experiences, and the reasons behind why I was studying the topic of breastfeeding.

To increase validity, each participant was granted adequate time to respond to all interview questions and provide feedback and follow-up responses after each question. In addition, I read back over the interview question responses throughout the interview, and at the end of the interview would ask each participant to confirm if there were any corrections, additions, or clarifications. The participants were not provided with the research interpretations and analytic categories developed from the data during the interview process but were provided the opportunity to send in additional comments or insights after the interview. The study findings were not peer reviewed but checked and validated by the research study committee members. Data analysis findings were provided to the research committee for review and interpretation.

To enhance the validity of this study, I consistently challenged the data sources and methods of data collection and analysis throughout the data collection and analysis process; thus, using triangulation to increase the validity of the study (Ravitch & Carl, 2016). Further triangulation was completed by myself confirming consistency across the participant interviews, ensuring the inclusion criteria was met and adhered to for each participant, the data analysis methods followed the patterns set by me and were guided by the two research questions, and comparing the research study protocols against other methodologies referenced (Patton, 2015). With the use of ATLAS.ti and analytic memo writing, the thematic analysis process and development was validated by correlating the identified themes throughout the participants' interview transcripts and the data sources.

Transferability

As described by Ravitch and Carl (2016), transferability is the ability to transfer research findings to other research settings and is the quantitative research equivalent of external validity. I provided detailed descriptions for the phenomenon being studied, supported by the inclusion criteria and background of the participants, the setting of the study and data analysis protocols, demographic questions to reveal characteristics of the participants, and in-depth elaboration on the study findings (Patton, 2015). The development and intent of the demographic questions was guided by the TRA constructs, two research questions, and to discover commonalities shared between these working mothers regarding the phenomenon of workplace breastfeeding perception. The purpose in collecting the demographic data from the participants was to help provide information about them and their experiences to help readers visualize and understand the sources of the data. The goal of this study was to provide adequate amounts of information to allow readers to transfer critical and relatable aspects of the study findings by applying the contextual factors but not by attempting to replicate the outcomes (Ravitch & Carl, 2016).

Dependability

Dependability can be described as the process of working to ensure the data is stable, consistent, and reliable over time (Ravitch & Carl, 2016). To establish dependability in this study, I documented as precisely as possible the steps of the research procedures within the research report, incorporated triangulation principles, and conducted member checks during and right after the interviews and audit trails as part of

a quality assurance process. The interview transcripts were not sent to the corresponding participants but reviewed thoroughly at the conclusion of each interview with the participant and offered the opportunity to add or change any responses. In follow up communications with each participant after their interview, I would inquire if they had any additional insights, comments, or edits to make to their interview. Throughout the entire data collection and analysis processes, the data and interview transcripts were checked repeatedly for errors.

Confirmability

Confirmability is parallel to objectivity in a quantitative research study and is focused on establishing durability and value to the meanings, findings, and assumptions made within the research, which enable the researcher to openly explain and conserve the bias that potentially exists among the researcher or participants (Patton, 2015; Ravitch & Carl, 2016). I increased reflexivity by disclosing right up front to the participants in the Written Consent letter and Interview Protocol (see Appendix B) introductory paragraphs, which were read to each participant at the start of each interview. By doing this I was transparent and openly discussed my background, personal experiences related to my wife and children breastfeeding, values, gender, work history, and objectivity, which improved reflexivity (Creswell & Creswell, 2018; Patton, 2015). Other strategies I used to improve confirmability and reflexivity included consistent auditing, committee checking and reviewing, and member checking for accuracy during and directly after the interview process (Jarrett, 2017; Patton, 2015). As briefly mentioned in the last section,

member checking was conducted throughout the data collection process to ensure in-depth reporting accurately depicted the responses and interpretations of the participants.

Results

The data that were gathered for this study from each of the eight participants were analyzed and resulted in the recognition of six main themes. The themes were titled, The Impact of Health Education and Promotion (HEP) on Attitude towards Workplace Breastfeeding, How Workplace Breastfeeding Support Impacted Attitude, Reasons to Breastfeed at Work and Beyond, How Knowledge of Support or Amenities Impacted Workplace Breastfeeding Duration, Improvement Suggestions for the Workplace, Manager, and Organizations, and Perceptions that Influence Breastfeeding Duration. Each of these main themes has sub-themes as listed in Table 3. These are also used to discuss the data findings. The themes will be reviewed with supporting excerpts from the participant interviews.

The first research question (RQ1) that guided this study was 1) How does HEP about workplace breastfeeding support impact a working mother's attitude towards breastfeeding behavior? One of the themes that emerged from the research which strongly supported RQ1 was Theme 1, which was titled, The Impact of Health Education and Promotion (HEP) on Attitude towards Workplace Breastfeeding. This theme was divided into two sub-themes: a) HEP had a Positive Impact, and b) Lack of HEP had a Negative Impact. The codes and quotations from the participant interviews that related to this theme and sub-themes will be reviewed here.

The three questions from the interviews related to breastfeeding-support HEP given to each participant (see Appendix B), revealed that zero of the eight participants received information, practices, or policies about workplace breastfeeding support, only one out of the eight received any materials or information regarding workplace breastfeeding support before, during, or after maternity leave; however, four out of the eight participants received HEP information or materials from the medical facility where the baby was delivered, whereas three received partial information, and only one did not receive any.

For the sub-theme, HEP had a Positive Impact, the codes that influenced the development of this sub-theme included BFH provides positive HEP, HEP-education, HEP from medical not work, higher education, and packet of resources. Several of these codes were used in support of multiple themes. When codes influenced multiple themes or sub-themes, specific mention was made for continuity.

P1 reported that she did not receive any HEP from her workplace prior to, during, or after maternity leave but that she did receive things from the medical facility where she delivered her baby. In response to the interview question she stated, "yes, it was a BFH; I knew that going in that they were BFH, and why I chose them for the delivery," revealing her expectation for material on breastfeeding. P1 was not able to elaborate into more detail on what HEP she received, just that she had, and she had the knowledge of the support the medical facility would provide being a BFH.

Within the interview responses, commonalities were discovered between the sources of HEP received from the participants. One source was the workplace and the

other from the medical facility where the baby was delivered, primarily from classes the participants attended at the facility.

P5 recalled that her work provided "general health education and encouragement" and reported that it was possible to have included something on breastfeeding, though she could not recall for sure. P6 stated that her workplace provided the policies explaining breastfeeding support and her options before and after maternity leave, but that these were not given to her automatically, that she had to request them. She knew of these policies through interactions with coworkers who had delivered babies.

The other source participants received HEP was from the medical facility where they delivered their babies, and primarily from attending classes at the medical facility on pregnancy or postnatal care. P1 reported that she was provided with recommendations and information from "baby-training" classes taken at the hospital, which also provided information for how to contact and get help with breastfeeding from a lactation consultant they would offer her. P2 reported that she did not receive HEP from her workplace but from the medical facility. P3 reported that the medical facility where she delivered, "I delivered at (name excluded), and they seem to be ahead of the game with providing enough education material before and after the baby so that there can be success with breastfeeding."

Another code that influenced this sub-theme was Higher Education. From the demographic interview data, it was gathered that all eight participant mothers completed at least 4 years of college and over half completed some graduate school or completed it. Furthermore, six of the eight participants worked in a healthcare setting and were

considered healthcare workers or professionals, one of the two became a healthcare professional shortly after her breastfeeding experience, and the other one participant worked in a non-healthcare occupation. P7 reported that her education provided her knowledge that aided in her decision to breastfeed. She stated, "I had to take lectures even when I was training for the NICU on the importance of breastfeeding and look at different formulas in comparison to breastfeeding; so that hugely influenced my decision to breastfeed for that long." The correlation made here directly to HEP is subjective and relies more on the implication that the participants' higher education levels granted them advantages in receiving numerous HEP knowledge through their educational attainments and learning.

The final code that influenced the HEP had a Positive Impact sub-theme was Packet of Resources. This code was not mentioned by the participants to specifically provide the HEP related to this theme; however, three of the six mothers who spoke about a packet of resources brought this up during the HEP interview questions. P4 stated, "like when someone is going on maternity leave, give us information prior to, regardless of whether or not you know they know if you're going to breastfeed or not, but have the information available."

For the next sub-theme, Lack of HEP had a Negative Impact, the codes that influenced the discovery of this included Hard to Focus on BF Support Materials When Provided at Poor Timing, Lack of HEP from Workplace, and Lacking Knowledge of How to BF Correctly.

The code Lack of HEP from Workplace revealed insights into the problems associated with how and why a lack of receiving HEP from the mothers' workplaces could be negative. Of the eight participants, P3 stated, "No, I wasn't aware of any of this kind of information," and P4 said, "not that I am aware of; not that I remember specifically about breastfeeding." P6 reported that she only received a few handouts from her workplace's human resource department on policies related to maternity leave and possibly workplace breastfeeding support. P7 was surprised to report that her workplace, which was a hospital, did not provide any handouts to her, though she does recall seeing a poster about the importance of breastfeeding in one of the lactation rooms. P2, who worked at California state health agency, was also surprised and somewhat shocked to report:

> I found out most of the things that I found out from my coworker who had just also had a baby, had been like going through it; but I don't really think they gave us any other information; looking back now, which is kind of ridiculous looking back now, especially as a state entity; they should be an example.

The second research question (RQ2) that guided this study was "How does a working mother's attitude towards her workplace's breastfeeding support and her experienced subjective norms influence her breastfeeding experience towards reaching the 6-month breastfeeding goal?" The themes that emerged from the research which strongly supported RQ2, were How WP BF Support Impacted Attitude, Reasons to BF at Work and Beyond, How Knowledge of Support or Amenities Impacted Workplace Breastfeeding Duration, Improvement Suggestions for the Workplace, Manager, and

Organizations, and Perceptions that Influence Breastfeeding Duration. Within each theme emerged sub-themes from which the various codes contributed influence. These sub-themes will be outlined and reviewed along with the corresponding main themes.

Theme 2, How WP BF Support Impacted Attitude, was heavily focused on the workplace support components of the study and included the following sub-themes: Positive Support Led to Positive Attitude, Negative Support Led to Negative Attitude, Manager Related Impact, COVID had Positive Impact, and COVID had Negative Impact. Codes and quotations or interview excerpts from the participant interviews were included to review each sub-theme and explain the relationships or correlation to the RQ2.

The sub-theme, Positive Support Led to Positive Attitude, was influenced by the codes, Medical Professional/ Facility Support, Lactation Room Positive, Workplace Support, Specific Job Position Made It Easier to BF at Work, Positive WP Experience b/c of Support Amenities, and Positive Support Network.

The code Medical Professional/ Facility Support influenced the sub-theme of positive support by showcasing several instances where the mother received special care or amenities when otherwise it would have been absent. P1 remarked that when she was still in the hospital after giving birth, she and the baby were having difficulties establishing a good position for the latch. The medical facility had not yet sent the lactation consultant in to help her, but one of the nurses providing care taught her a key breastfeeding position to hold the baby which solved the latching problem. P4 had a similar circumstance in her hospital stay after delivery of her baby where no lactation

consultant had come to see her when she needed help with latching. However, the nurses providing care gave her guidance and helped her discover the latching help she needed.

The code Workplace Support influenced the sub-theme Positive Support Led to Positive Attitude. With this code, the focus was on the interview responses that were more targeted toward the workplace environment or atmosphere having a positive impact. P3 reported that her workplace allowed her to prepare adequately before leaving for maternity leave and even work out a plan of where she would pump once she returned to work after leave. She further commented about her workplace that, "I was very aware of the laws surrounding breastfeeding mothers. I knew that the company worked hard to work within those laws. … I felt supported by my workplace's support." P6 remarked that her workplace allowed her to use a private space to pump whenever she needed that had clean water and sanitizing capabilities. She also commented that "our HR is very good about providing policies before you go on leave," which is an atypical reporting from the other participants within this study, who had the opposite experience with their human resource departments. P7 reported that one of her three workplaces during her breastfeeding experiences was a large hospital with multiple lactation rooms and amenities. She remarked that this fact and other factors solidified her perception that this workplace supported her positively. Lastly, P1 reported that her workplace was supportive positively because of the friends, colleagues, and support staff that helped and supported her, and that her workplace offered her a lactation consultant as part of her employment. The combination of these things gave her that feeling of positive support.

The code Positive WP Experience b/c of Support Amenities influenced this sub-theme by pointing out that several of the participants' workplaces offered amenities that aided the working mothers in their efforts to breastfeed at work, such as lactation rooms, private offices or spaces that could be locked or kept private, refrigerators and sinks with clean water, and support through policies protecting workplace breastfeeding.

The last code which influenced this sub-theme was Positive Support Network. The source of emergence of this code was not due to a specific interview question asked but was discovered throughout all the responses. P4 stated of her support network that "my husband was supportive, and my mother was with us at the time too and supportive." P5 had a similar experience with her husband reporting that he is the one feeding the baby at home usually while she is gone at work. She also commented that at work she had a support network with coworkers who had experienced pregnancy and workplace breastfeeding.

The next sub-theme, Negative Support Led to Negative Attitude, was influenced by these codes from the interviews, WP Support Not Prepared to Support, WP Openly Not Supporting Me, Lack of Support Based on Laws, No Support to Ask for Help, Lack of Support Network, Lack of WP Amenities to Facilitate BF, and Lactation Room Problem/ Lacking.

The first code that was identified to influence this sub-theme was WP Support Not Prepared to Support. P1 was a student at her workplace with her breastfeeding experience and reported when asked about their level of assistance before maternity leave, that "I feel like the student help wasn't prepared for that, and I think they couldn't

give me any info." She was referring to an incident during her pregnancy when she

needed help during exams while feeling unwell. Later in the interview when asked if she

was aware of her workplace's support and adherence to breastfeeding policies, she

answered, "I feel like they have all these things, but they don't tell you anything; it's like

all just hidden knowledge." P2 commented that she was discouraged that her workplace

did not have any information or support materials for when she returned from maternity

leave. P3 relayed that her first experience with workplace breastfeeding included a

workplace that did not offer a lactation room or space for pumping, and this was a major

influence in her having to cease EBF at 4 months. P3 also told of a later experience where

she was unable to pump when she needed to during the day because she could not leave

her employees alone running the business responsibilities while she pumped.

The next code, Workplace Openly Not Supporting Me, is unlike the previous

code, where experiences relayed how a participant's workplace was not supporting their

breastfeeding efforts, this code was more about the workplace negligently providing no

support or worse case, thwarting the breastfeeding efforts of working mothers. P3 stated

that during her first workplace breastfeeding experience her manager would not allow her

to pump and then take the required additional break time for herself; or in other words,

she had to use her pumping time as her only break time. She reported that:

> My first manager, when I returned to work was not in any way supportive, it was
>
> all about the business and not the health and welfare of the employee. He gave me
>
> the one option on where to pump and that was in the bathroom.

Finally, P1 reported that her workplace, where she was a full-time student, did not treat her kindly or well whenever she went to the human resources department for help with maternity leave stuff and that overall, the staff did not seem to know how to help her, as if they had never had a student go on maternity leave and return after wanting to pump. This experience left P1 feeling heavily unsupported.

The two remaining codes that influenced this sub-theme were Lack of Wp Amenities to Facilitate Bf and Lactation Room Problem/ Lacking. The primary topic that was seen within both codes mentioned by mothers, related to the lack of lactation rooms or adequate places to serve as lactation rooms, which was considered an amenity. P7 mentioned that at her first workplace there was no refrigerator to store her pumped milk and so she had to bring her own cooler with her to work. She also mentioned that because of only one lactation room, it was often occupied causing her to have to wait to pump and she would therefore be forced to overextend the times between when she needed to pump. P3 and P4 both explained that their workplaces did not have a lactation room, which meant they had to find alternative locations to pump, such as storage rooms, offices, or bathrooms. P1 and P2 stated that their workplaces offered a lactation-type room but in both places the location was inside a bathroom, where it was not private or sanitary, and lacked a refrigerator for storing milk after pumping.

The next sub-theme under Theme 2, was Manager Related, which was influenced by the following codes, Mgr Positive Support Facilitator, Mgr Relates as Bf Woman, Positive Mgr Support, and Negative Mgr Support Caused Poor BF. The interview included several key questions designed to discover if each working mother felt

supported by their workplace manager and how that impacted their attitude towards workplace breastfeeding and perception of if they felt supported. These interview questions were "Do you feel your manager had any impact on your decision to breastfeed at work?" "How do you feel about your manager's knowledge and support of your choice to breastfeed at work?" "Do you feel your manager had any impact on your decision to breastfeed at work"? And "Describe your perception of how well your manager supported your decision to breastfeed during work." The significant responses and results will be reviewed.

A powerful factor was manifested in the code Mgr Positive Support Facilitator, which was how positive support leads to a positive attitude, and which supported RQ2 firmly. P3 reported experiences related to having a positive manager at her workplace. She stated, "[I had a] good relationship with my manager. He was very supportive, and he already knew that I worked hard so there was little worry about anything." Concerning breastfeeding support, she stated, "my manager was supportive of my choice to breastfeed," and when it came to workplace support on a day-to-day basis, she recalled that "he made sure to provide a clean, locked office to use for my pumping." When reviewing the outcomes reported for P3 through the interview questions, she was able to EBF her baby up to the goal 4–6-month period, stopping only to start introducing solid foods as recommended; likewise, she was able to continue breastfeeding this baby for 3 full years. Positive manager support correlated to positive outcomes and reaching goals – a facilitating force.

A closely related code to managers being a positive facilitator was the general support of workplace managers, Positive Mgr Support. Five of the eight mothers reported that their manager did not impact their breastfeeding choices because they were determined to breastfeed no matter what. But all eight of the mothers reported that their manager was adequately supportive and that he or she promoted improved breastfeeding outcomes and a positive attitude. When asked in the interview if P5's manager was supportive, she stated, "yes, because she would be supportive and allow me the appropriate time I needed, for my pumping breaks." P1 had this to report about her manager's support, "she was very supportive, knew the importance of it and that I wanted to do it, and to support that."

Another code that supported this sub-theme was Mgr Relates as BF Woman. The value and significance of this code was difficult to measure as it pertained to relating oneself to another based on commonalities and gender-specific roles. Moreover, it was primarily manifested here in this study as positive and supportive. Several responses from mothers related directly to the realization that their manager was not a male and how that made a difference. P3 directly stated, "it was easier not to have work under a male in the office, who did not have a family and didn't understand breastfeeding." P6 commented that "she is a mother herself who breastfed, and so she really understands what it is like to be a working mother and trying to breastfeed." P8 had a similar experience and remarked, "my boss has two young kids and my boss like basically exclusively breastfed; I think her going through that really helped too and I do like ask her questions about pumping."

Comments on this topic were also made by the participants where the manager, a female, provided guidance and tips learned. For example, P8 stated:

> Actually, she's the one that was like 'yeah you should pump every three hours;' I feel like she gave me really good tips on how to pump and things like that; and she was so 'you need anything let me know,' and she even said like 'you know you should buy your own breast pump and have it for like work.'

The final code which influenced this sub-theme was Negative Mgr Support Caused Poor BF. As discussed previously, the participants of this study expressed positive experiences with their managers overall. However, several of the participants had more than one workplace and manager to whom they experienced workplace breastfeeding challenges, or in one case, a coworker's manager at the same workplace. These shared experiences related to RQ2, where discovering how negative support impacted attitude towards workplace breastfeeding perception and behavior.

Three participants reported experiencing negative support with management. P3 recalled,

> My first manager, when I returned to work was not in any way supportive; it was all about the business and not the health and welfare of the employee. He gave me the one option on where to pump and that was in the bathroom.

P7 had a similar experience from one of her workplaces, stating,

> My manager was asking for timing of pumping and how long I was pumping and when I was going to get back from pumping, so that one was a little more

stressful; the manager was more on top of you and how many patients you saw and your productivity.

Finally, P2 had this to say about a coworker's manager at the same workplace:

Then my coworker was going through it at the same time and her manager was very different; her manager was more aggressive to her, and it seemed like she was just stressed out all the time, rushing in [to pump] and trying to get it done as quick as possible, and rushing back out.

These negative support experiences reported about managers were shared by those mothers who had the opportunity to experience breastfeeding at different workplaces or with different managers. The chance to compare the levels of support between managers and workplaces would prove valuable in influencing attitude development towards breastfeeding behaviors.

Two sub-themes remain to be reviewed under Theme 2; specifically, COVID had Positive Impact and COVID had Negative Impact. There were two main questions within the interview question set designed to investigate if and how COVID-19 might have impacted workplace breastfeeding. The two questions were "Due to the COVID-19 pandemic, did you work from home after completing maternity leave? And if yes, how do you feel this change in location influenced your breastfeeding goals, practices, and outcomes?" And "Do you feel that the COVID-19 pandemic had a positive or negative influence on your breastfeeding goals and outcomes?" Three of the mothers in this study reported that the COVID-19 pandemic happened after their workplace breastfeeding experience and had no direct effect. Two mothers reported that despite the COVID-19

situation, they had to still return to work after maternity leave due to the nature and occupation type being a medical environment. The remaining three mothers reported that COVID-19 did change their work situation, with one stating it had an overall negative impact and the other two stating it had a positive impact.

For the sub-theme COVID had Positive Impact, two codes emerged from the interviews, COVID Caused Improved BF Work Situation and COVID In-Part Improved BF Duration. P6 commented that in contrast to being at work before maternity leave and returning to this same job, "I feel like being at home and doing it at the comfort of my own home, being a little less stressed in general, at home versus the office, really helped." P4 told of how during her pregnancy at her workplace she had requested to work from home due to feared exposure to COVID-19 from patients or other people. When questioning the other participants about their overall experience due to COVID-19, P8 stated that it was "positive, definitely positive," and P7 stated that one of the primary reasons she breastfed longer was because of COVID, which had much to do with benefits of breastmilk for the baby.

The last sub-theme of Theme 2 was COVID had Negative Impact. There were not many responses from the participants on COVID having negative impact or influencing a negative attitude towards breastfeeding, but two codes emerged from the interviews; namely, COVID Caused Negative Attitude About Being at Work Pregnant or BF and COVID Had Negative Impact on WP BF.

In relation to COVID having a negative impact on workplace breastfeeding outcomes, P3 reported that because of COVID-19 staffing mandates, her workplace cut

personnel back and she explained, "thinking about it, I did lose a couple team members which then made it impossible to pump, so we transitioned from pumping to just breastfeeding at night." P7 complained that before COVID-19 her manager was less concerned about productivity, but after the pandemic began, she reported her attitude was a "negative one because productivity-wise; they were a little stricter in the hospital to see more patients. [And] more supportive before the COVID-19 pandemic." The impact of COVID-19 on workplace breastfeeding support and attitude correlated to shift to a more home-based modality, which the participants who experienced this change correlated with a positive effect.

Theme 3, Reasons to BF at Work and Beyond, integrated the concepts of motivating factors like benefits and the facilitating influence of outside sources, such as subjective norms, as well as the barriers that hinder breastfeeding. As the interview transcription process unfolded, it became clear that the participant mothers had certain reasons or knowledge that motivated their persistent behavior to breastfeed at work, or which influenced their attitudes towards breastfeeding. The discovered reasons are reviewed within this theme, whereas the knowledge component will be reviewed in the next main theme to follow within this chapter. This theme contains the following sub-themes: The Influence of Subjective Norms, Barriers to Breastfeeding Success, and two sub-themes categorized under Facilitators: Breastfeeding Benefits and Breastfeeding Goals and Standards. The significant codes that emerged from the interviews were included to review each sub-theme and explain the relationships or correlation to the RQ2.

The first sub-theme was The Influence of Subjective Norms, owing to the relationship between a person's beliefs and experienced subjective norms. The theoretical framework for this study was the TRA, within which theorizes how a person's subjective norms are influenced by their normative beliefs, which leads to the behaviors they choose (Blatz et al., 2020).

The codes that influenced the emergence of this sub-theme included, Didn't Talk with Support Network About BF, Positive Coworker Support b/c Women, Negative Feelings & Emotions About BF Situation, Negative Peer Pressure, Peer Support, and Didn't Ask for Support from My Support Network. Results and quotations from the participant interviews are reviewed to show how these codes connected the influence of subjective norms.

One code that influenced this sub-theme was Positive Coworker Support b/c Women. This code connected to the subjective norms construct because the participants determination on whether their coworker support was positive or negative was based on their belief if those coworkers support their decision to breastfeed, and in this case was influenced by them being also a woman. P3 commented on the importance of the acceptance and support of female coworkers to her, stating, "I worked with mostly women who were mothers. Having that support is so important. Sometimes, they would recognize that I needed a break to pump and would do what they could to protect my time." The acceptance of female coworkers who had been mothers was also mentioned by P6, who said, "I also am fortunate to just chat with some of my coworkers who had been recently on maternity leave; to get some tips as well." The acceptance of female

coworkers at work who had also experienced similar workplace breastfeeding challenges was remarked by five out of the eight participants as a critical motivator to dealing with their breastfeeding challenges at work.

The code, Negative Feelings & Emotions About BF Situation, influenced this sub-theme because feelings and emotions can influence a person's beliefs about acceptance of behaviors or support (Ajzen & Fishbein, 1980; Blatz et al., 2020). In the workplace where P4 shared her breastfeeding experience, the lactation room was a small storage room that was in the rear of a conference room where meetings would often occur. P4 related her experience:

> It was sometimes awkward because there would be a meeting going on in the conference room outside of where I was pumping; I requested a white noise making machine, because people could potentially hear me in there. In the beginning it was kind of awkward because I walk through these people's meeting to go into this room and I would wonder if they could hear me in there; then, after a while I got used it and then didn't care.

She also remembered how in the beginning of her breastfeeding experience "there was definitely anxiety and the unknown; like I said I didn't know where the lactation space was going to be, and who was going to be in charge of it; so definitely, I was nervous."

The last code to be reviewed having influence on the subjective norms theme was Peer Support. All eight of the participant mothers had at least one or more responses related to this code within the interviews. The interview questions did not contain any questions that directly asked the participants about peer support. For this chapter, the

more significant participant comments are reviewed, which related most closely to subjective norming where influence on attitude or behavior was most predominantly noticed.

From her workplace experience, P1 recounted that "I worked with mostly women who were mothers. Having that support is so important. Sometimes, they would recognize that I needed a break to pump and would do what they could to protect my time." P1 believed firmly that her coworkers accepted her behavior and supported her. P5 reported that in her workplace situation, "even though I am not in a private office, all my coworkers have been really supportive." The underlying common thread noticed in the participants' comments on peer support revolved around the coworkers in workplaces that not only were supportive but gave advise, tips, guidance, and even encouragement when things were not going well. Each participant related how these shared peer support experiences provided positive encouragement.

The next sub-theme for Theme 3 was Barriers to Breastfeeding Success, which aligned with reasons to breastfeed by revealing the common barriers the women in this study experienced while they attempted to overcome workplace breastfeeding challenges. Multiple codes influenced this sub-theme which were Going to WP Was Barrier to Duration, Long Commute to Work Caused Barrier, WP Meetings Caused Barrier, WP Pumping Caused Cleaning and Lots of Prep Made It a Stressor, Barrier Was Pump and Pumping Eq, Pumping Breaktime Not Adequate, No Plan for WP BF, Barrier to Get Appt w/ IBCLC, Lactation Consultant in Hospital Took too Long to Come, Breastfeeding Complications, WP Barrier, and WP Barrier Caused Uncomfortable Feelings. This list of

codes underlying the emergence of this sub-theme was extensive but not unexpected. The two primary questions from the interview transcript (see Appendix B) related to barriers were "After returning to work, what barriers hindered your breastfeeding practice at work?" and "Which barrier or challenge had the most impact, and can you explain why?" As these interview questions were designed to help discover what factors were influencing the working mothers' attitudes and perceptions towards workplace breastfeeding, it was expected that multiple responses and bounteous experiences would be shared. This portion of this chapter will only review and highlight the more significant and poignant interview responses.

In review to the first two codes for this sub-theme, Going to WP Was Barrier to Duration, and Long Commute to Work Caused Barrier, when asked the interview question about workplace barriers, several responses were about having to go to work itself or the commute. P1 responded by stating, "I think it would've been harder, like a lot harder; and I don't know if I would've done it as long if I had been having to go into work." In her case, she reported that going to work was a barrier. P7 said that a barrier for her workplace experience was the commuting distance to and from work, which caused complications with pump timing and discomfort. She stated,

> When I worked at the large hospital, that was an hour from my home, so I would even sometimes have to pump in the car on the way there or on the way back; not the safest driving … the barrier was the distance from my home.

Another barrier expressed by two mothers had to do with the pumping equipment and cleaning of this equipment, expressed as code WP Pumping Caused Cleaning and

Lots of Prep Made it a Stressor. Both P7 and P8 experienced the added stress of having to find methods of taking their pump equipment home after work and cleaning it because their work facility either didn't have a sink and adequate cleaning amenities, or the amenities were lacking, such as cold tap water. Both mothers expressed how this was a barrier to wanting to continue pumping at work.

Continuing with codes that influenced the sub-theme of barriers, the next code was Pumping Breaktime Not Adequate. P2 told of her workplace having two lactation-type rooms, one nearby her work area and one that was on the other side of the building and took time to walk to. The problem was that the nearer room was inside a bathroom and not private. The other room was private and had the needed amenities to achieve successful pumping but had a signup sheet and was nearly always scheduled. P2 expressed her frustration for the lack of adequate breaktime to get her pumping done with these words:

> You are already taking like 30 minutes to however long you know you need and then the walking time and stuff, and so I always try to use the one closer even though it didn't feel as private. Then there is a signup sheet and so like you needed to kind of make sure that you weren't going on at someone else's time; then that makes it more difficult for meetings and planning your day…

P2's frustration and added complication to achieving daily needed pumping could have been alleviated and solved by having adequate break time, or simply the time she required to get everything done.

The next code, No Plan for WP BF, was also one of the interview questions asked, and read "Did you have an idea or plan of how you wanted to feed your baby after returning to work?" Of the eight participant mothers, only one did not have a clear plan, but reported she would 'just kind of wing it.' The other mothers reported having plans but for many of them, the plan changed, and they had to learn to be flexible. P1 expressed in her response, "I had no clue how breastfeeding was going to go." Part of the comfort and self-efficacy for P1 was knowing she had a plan in place and that gave her a positive attitude towards returning to work to breastfeed. She stated, "I had the chance to plan and prepare before leaving for maternity leave. Ensuring I had somewhere clean to pump and somewhere that had a locked door." Each of the eight mothers relayed how their planning, however chaotic and dynamic these plans ended up having to be, was vital in their overcoming of the barriers experienced in returning to work. Not having a plan was reported as the barrier potential.

Another code related to breastfeeding and barriers which influenced this sub-theme was Breastfeeding Complications. Three of the eight participant mothers reported adverse complications with their breastfeeding, whether it was due to latching problems or their milk production, which caused reduced breastfeeding success. P5 told of how she was freezing her milk from pumping at work and then trying to thaw it for her husband to give to the baby during the day or after work. In the beginning months this was not going well, and the baby rejected the milk repeatedly, causing alarm and stress while seeking to improve the amount of milk the baby would get while P5 was gone working. P1 reported that she had planned to pump at work and give her baby the expressed milk when she was

gone or after work, but that plan was thwarted somewhat by her baby's reaction to the bottle. P2 shared her experience with her baby who had been born prematurely and as mentioned earlier in this chapter had her milk production come in late after the delivery.

The remaining code that influenced the sub-theme, Barriers to Breastfeeding Success, of note was WP Barrier. As these two codes are closely related, the interview responses and results were molded together in this section. P3 recounted that she experienced several workplace barriers with her most recent workplace breastfeeding experience. Her workplace did not have a lactation room and so she used a coworker's office when it was available. All in all, P3 stated that to her the biggest barrier to her workplace breastfeeding success was time during the work hours to fit it in, especially as her workplace would not allow her to take additional breaks from her pumping ones.

P5 worked as a clinical care specialist in a medical facility where she saw patients during her shifts. Pumping was a challenge to fit in because of the patient population and dynamic shifting around of their schedules. Because of these challenging shifts in her day-to-day work hours, she found herself having to constantly shuffle her pumping schedule. With her the barrier was shifting schedules, including meetings mixed in, where she couldn't just take the time off the floor to pump when she needed to. P2 mentioned how her workplace having constant meetings was a major barrier for her to get all her work done throughout the day and make sure to fit in pumping breaks.

P4 attributed much of the workplace barriers to the job position you hold within the workplace, asserting that managers or supervisors who have their own offices, have

the added advantage to go into their private space and pump when more convenient than those who are not in those positions.

The remaining sub-themes for Theme 3, which have been categorized as Facilitators, are Breastfeeding Benefits and Breastfeeding Goals and Standards. As was mentioned earlier, research has indicated that facilitators to workplace breastfeeding can influence perception of workplace support, which can lead to attitude development, and eventually have an influence on a mother's intentions, behaviors, and practice of breastfeeding continuation (Angeletti & Llossas, 2018; Bandura, 2000; Lennon & Willis, 2017; McCardel & Padilla, 2020). Considering that RQ2 was focused on determining how a working mother's attitude towards her workplace's breastfeeding support and her experienced subjective norms influenced her breastfeeding experience, interview questions were designed specifically to explore and discover what, if any, facilitators each participant mother experienced.

The codes that influenced the sub-theme Facilitators: Breastfeeding Benefits, were BF Benefits for Baby, BF Benefits for Mother, and BF Benefits. Noteworthy codes will be explored and reviewed in relation to the participant mothers' responses.

The first code that influenced this sub-theme was BF Benefits for Baby. The interview questions did not specifically include anything that asked the participants about benefits for the baby or otherwise; however, seven of the eight mothers responded during the interviews, typically when explaining why they chose to breastfeed and for how long, that they breastfed because of the benefits for themselves or their baby. P3 reported that the benefits for the baby include a "great connection between the mother and the baby; it

is also the best nourishment available for the baby." P4 was an educated medical professional with knowledge of breastfeeding benefits. Additionally, each of the mothers responded to reasons behind why they believed breastfeeding was important and as a facilitating purpose to give it to their baby.

A similar code to benefits for the baby was the emergence of the influence of knowledge or understanding for the participant mothers as to how breastfeeding was also a benefit to their own body or life. The code BF Benefits for Mother will be discussed. The three mothers who touched on this subject related the benefits to health factors. P1 said, "I've heard that breastfeeding may also help the mother avoid or reduce the risk of breast cancer." P6 did not have details on specific benefits for which breastfeeding provides to her or the baby, just that she believed firmly there are numerous benefits for both.

The final code that influenced this sub-theme was BF Benefits. As mentioned, all eight of the participant mothers responded with a comment or more related to the overall benefits of breastfeeding. This section highlighted the most pertinent of those responses. P2, P3, P4, and P8 all mentioned the connection or bonding that occurs as an important benefit of breastfeeding, which was highly motivational for each. P4 and P5 related the benefits of breastfeeding to giving the baby antibodies towards COVID-19 and just in general. P1, P6, and P8 connected the benefits of breastfeeding overall to health aspects founded on research or at least some research they had heard or personally read, believing that breastmilk is the best nutrition for the baby. Finally, P4 brought up a benefit of breastfeeding that related more to an economic and convenience aspect.

The final sub-theme for Theme 3 was Facilitator: Breastfeeding Goals and Standards, which was influenced by the following codes: Longer Duration d/t Immunities, Evidence-Based Reason to Stop EBF, BF Goal to Reach High Standard, and Had a Plan to BF at Work. As the title of this sub-theme indicated, the topics that underline these codes related to the reasons behind why a mother would choose to breastfeed, whether set by some goal she had or because she was working towards a standard recommendation, or both. Significant codes will be reviewed along with corresponding results as evident.

The code for this sub-theme Evidence-Based Reason to Stop EBF was significant. One of the interview questions asked each participant mother about EBF for their baby or babies. The question was two-pronged as such "How many of your children exclusively breastfed (EBF) up to 4-6 months? What was the primary reason the baby stopped EBF?" As was reported at the beginning of Chapter 4, two of the 11 babies included in this study were unable to EBF. One mother was unable to produce enough milk for her baby in the first couple months and so supplemented it with formula and the other mother supplemented her baby with formula because the baby was having trouble latching. One baby EBF to about 5 months but then stopped on its own. Of the babies that EBF up to the 4–6-month goal or beyond, six stopped EBF because their parents began administering solid foods to them, and the remaining two began solid foods because their mother's milk production ceased. Providing solid foods to the baby between the months of 4 to 6 months meets the global WHO and United States recommendations based on current research and initiatives; although, striving to EBF to a minimum of 6 months is

the stronger recommendation (AAP, n.d.-a; CDC, 2019-c; WHO, n.d.-b). Thus, the reason each of the six mothers whose babies EBF beyond the 4-month goal mark, was aligned with current best practices for stopping EBF.

The final code that influenced this sub-theme was Had a Plan to BF at Work. In Theme 2, one of the codes reviewed for the sub-theme Barriers to Breastfeeding Success, was No Plan for WP BF. As was mentioned in that section, the interview posed a question to the participant mothers asking if they had a plan of how they would feed their baby after returning to work. Of the eight participant mothers, only one did not have a clear plan. One of the primary purposes in posing this interview question to the participants was to discover whether having a plan to return to work, or once at work, to breastfeed, would influence a positive attitude which would potentially lead to positive breastfeeding behavior. P1 reported that she had a plan to breastfeed after maternity leave and get to at least 4 to 6 months EBF. She spoke of how having a plan was positive towards behavior, saying how her plan had a "positive influence because since I could try hard to work around the obstacles and barriers knowing that I was in control of the environment."

P4 spoke of her solid plan stating, "Yes, I initially knew I wanted to go into breastfeeding him right off the bat, as long as I was able to." She also had a goal duration in mind, stating, "I knew that I wanted to try and breastfeed for at least 6 months and if possible, up to a year; that was always my plan." The positivity expressed with each participant's responses to this question and probing follow up questions relayed how

having a plan, whether detailed or not, was associated with improved attitude and behavior towards workplace breastfeeding success.

For Theme 4, How Knowledge of Support or Amenities Impacted Workplace Breastfeeding Duration, the underlying focus of this main theme was on how the duration, or length of breastfeeding practice, was improved upon or decreased from the knowledge a mother gains, whether accidentally or from her own efforts. As discussed previously, a longer breastfeeding duration has increased health benefits for the baby and the mother, especially when beyond six months (Amiel Castro et al., 2017; Bartick et al., 2017; "The Public Health Benefits of Breastfeeding," 2017). The two sub-themes which were discovered as components of Theme 4 were, Acquired Knowledge Led to Improved Outcomes and Lack of Knowledge of Support or Amenities was a Barrier.

The first sub-theme was Acquired Knowledge Led to Improved Outcomes. The primary association with the outcomes in this sub-theme was breastfeeding duration. The codes that emerged and influenced the discovery of this sub-theme were Knowledge of BF Benefits a Facilitator, Knowledge of BF Benefits Motivated Duration, Knowledge of WP Support from Coworkers Only, BF Goal to Reach High Standard, Lactation Consultant Support, Higher Education, and HEP – Education.

The first code, Knowledge of BF Benefits a Facilitator, related the concept that when the mother has some knowledge, however acquired, about the benefits of breastfeeding, whether for the baby, herself, or other factors, it acts as facilitating force to improve her breastfeeding duration, barring unforeseen obstacles beyond her control. The responses from the participants regarding benefits were reviewed within Theme 2 above,

where the relationship of knowledge of specific benefits was outlined. This code was closely related to the code Knowledge of BF Benefits Motivated Duration.

The next code of significance for this sub-theme was BF Goal to Reach High Standard, which was related to the concept of duration. And as was reviewed with the code Had a Plan to BF at Work in Theme 3, the goals many of the participants had set for their duration time periods were influenced by their gained knowledge of standards and recommendations set forth by national organizations or by word-of-mouth from other mothers. One example of this came from P8, who remarked, "I'm like, well my goal is to reach six months minimum," which she admitted was influenced by her knowledge gained from other coworkers around her that had strived for similar outcomes.

The next code that emerged within this sub-theme was Lactation Consultant Support, which was focused on how the utilization of lactation consultant support for several of the participant mothers helped provide them with knowledge that motivated improved duration. Of the eight participants, seven reported seeing a lactation consultant at some point for help and assistance with their baby. P7 received help from a lactation consultant for two of her four babies. P4 reported that "I had a ton of support from lactation consultants." One piece of knowledge P4 gained from her lactation consultant support she expressed, stating "I didn't know much about it, as far as when to pump, how long, all of that, so before I came back to work, I consulted with lactation consultants as well." P5 in response to the interview question about where she had received important and helpful HEP materials for breastfeeding, responded:

Definitely the lactation consultant; they also gave me a packet that I didn't have

time to read, so it is possible, but yeah, I would just say yes for the lactation

consultants, and they offered a pump if I didn't have one or needed to rent one.

P5 had received invaluable support from her lactation consultant visits. P2 and P6 both

reported how they relied on their lactation consultants for help to get through the

challenging parts of the breastfeeding experiences, receiving encouragement and

knowledge of how to get over those challenges.

The second sub-theme for Theme 4 was Lack of Knowledge of Support or

Amenities was a Barrier. This sub-theme focused on how a lack of knowledge was a

barrier to achieving either a longer breastfeeding duration or to reach a duration that met

the standardized goal time periods. The premise was based on the concept that knowledge

of support would lead to improved outcomes whereas lack of such knowledge would

cause decreased duration and outcomes. The codes that emerged within this sub-theme

were Vague Knowledge of WP Support, Lack of WP Amenities to Facilitate BF, Vague

Knowledge of BF Laws, and No Plan for WP BF.

The first two codes for this sub-theme were Vague Knowledge of WP Support

and Lack of WP Amenities to Facilitate BF. From the interviews it was revealed that

three of the eight participants did not have a clear knowledge of their workplace's

lactation room location or existence before maternity leave or upon their return to the

workplace after. These same three mothers also reported not knowing much about their

workplace's support towards breastfeeding and how that would affect their breastfeeding

efforts. Of the eight participants, only one did not return to the same workplace after

maternity leave; whereas the other seven did, which imply some level of foreknowledge of support.

One interview question posed to each participant asked, "Were you aware of your workplace's support and adherence to breastfeeding practices before returning/ starting there?" In response to this question, three of the participants reported they did not have prior knowledge of the kind of support their workplace offered. One of these participants was P7 whose four children were included in this study, and who worked at three different workplaces for these four children. A conclusion drawn from this was that of these three workplaces, all of which were medical facilities, none provided her the knowledge of support she needed until she returned to work after maternity leave and when she sought for it. One participant reported learning about the workplace support from her manager, and another participant was the manager at the time and so had a good knowledge of the support. Of the three remaining participants who reported having some knowledge of support, one stated she knew there was a lactation room, and she could use it, but nothing else about her workplace's support.

The final code of note that emerged from this sub-theme was Vague Knowledge of BF Laws, which was focused on the specific laws supporting breastfeeding in the workplace or maternity leave. P4 told in response to the follow up questions on knowledge of support that she had to be the proactive researcher to learn for herself the laws and policies regarding workplace breastfeeding. P5 had a similar experience at her workplace and described it as follows when asked if she had any foreknowledge of the support or adherence to breastfeeding policies:

Vaguely. I didn't know the specifics; like I didn't know it was a paid break; so, I

knew it existed and that they had to provide a space for it that was not the

bathroom; but other than that, I hadn't really known anyone else beforehand that

was pumping at work that had any issues.

With these participants, their knowledge of workplace support was vague or non-existent

until they returned to work and learned either for themselves or from other coworkers

who knew from experience. These experiences pointed to a clear problem with a lack of

communication between employees and employers providing workplace support

information.

Theme 5, Improvement Suggestions for the Workplace, Manager, and

Organizations, developed as multiple interview responses and codes pointing to

breastfeeding best practices gained from the participants, ideas and suggestions made

throughout the interviews from both participants and me, and realizations emerged during

the data analysis process of this study. One of the interview questions posed to each

participant read as, "What things would you suggest your manager or workplace do to

improve your breastfeeding experience at work?" All eight of the participants provided

some suggestions for improvement or participated actively in the discussion with the

researcher during the interviews for what improvement ideas qualified as beneficial. As I

analyzed the responses, two sub-themes emerged, which were Change in Workplace

Modality Impacted Breastfeeding and Mothers' Suggestions.

The first sub-theme was Change in Workplace Modality Impacted Breastfeeding,

which was focused on how multiple participants found a change in the modality of their

work situation to impact their breastfeeding. In review of the eight participants'
demographic data, five worked full-time jobs during their breastfeeding experience, two
worked part-time; although, with P7 this included 3 of her 4 breastfed babies as part-time
and with one she was unemployed; and one participant a full-time student. The codes that
supported this sub-theme were Work Modality Change Improved BF Experience, Work
from Home, Short Commute Equaled Less WP Pumping and Stress, COVID Caused
Improved BF Work Situation, and Most Positive When I Had Control of WP BF.

The first and second codes of note for this sub-theme, Work Modality Change
Improved BF Experience and Work from Home were closely linked and were reviewed
simultaneously here to better illustrate the discovered underlying meanings. These two
codes were specifically associated with working from home instead of in a typical office
or building environment, which as has been mentioned previously, was a barrier to
breastfeeding duration. P6 was working part-time and due to COVID-19 had been
granted to work from home after maternity leave temporarily, having to go into the office
only once or twice a week. This schedule allowed her to pump most days of the week at
home to store up milk for when she did have to work in addition to feeding her baby
directly. She considered this modality change a positive experience. As a result of P6's
efforts and positive changes in her modality and attitude towards breastfeeding, her baby
was able to EBF up to the goal 4-6 months and was still breastfeeding at 17 months old
when the interview was conducted.

P1 was a full-time doctoral student during her breastfeeding experience and her
manager had been aware of P1's baby having latching problems and her need to pump to

provide adequate breastmilk for the baby. Thus, in response to this unique need, her manager allowed her to work primarily from home and only needed to come onto the campus when she needed to. Of this positive change in modality, P1 remarked, "if I didn't have that [home breastmilk pumping] I absolutely would not have been able to continue." P1 was able to breastfeed her baby up to 3.5 years and reach the goal 4–6-month EBF period.

The final code for review associated with this sub-theme was Most Positive When I Had Control of WP BF. The premise of this sub-theme was focused on how a change in workplace modality impacted each participant's breastfeeding experience. That modality did not have to be strictly location-based to qualify as significant or pertinent to this premise. Thus, the subject of this code was the positive effect within the workplace where the participant had more control of her situation, whether modality or otherwise, and that improved her breastfeeding experience. A key word analyzed here was 'control.' The question of whether a participant had actual control of her work circumstances or if she just perceived that she did was not the subject of this discussion, though it is acknowledged as possible. The focus of this discussion was centered around the differing types of positions the participants held within their organizations, which either gave them more flexibility to change their breastfeeding situation or to not have control over it. As some of this study's participants have commented, their managers provided some with the opportunity for a more autonomous work schedule, whether working from home full or part-time, or to modify their daily duties around their pumping needs.

In review of each of the participant's workplace occupational position and situation, only one of the participants held a management position of the eight. As was just mentioned, P6, P7, and P8 were able to work from home either full-time or on a modified part-time schedule, where they had control of their breastfeeding break times. P1 did not work from home during the beginning of her breastfeeding period but was able to have it changed to mostly from home. Of the remaining participants, P2, P4, and P5 all reported that they were not in a position to have autonomy of their schedule but due to all having supportive managers were able to typically pump when needed.

The second sub-theme of Theme 5 was Mothers' Suggestions, which was focused on what improvement suggestions and ideas were proposed by the participants during the interview in response to interview questions or as naturally occurred during the interview discussion. As was mentioned earlier in this section, all participants were posed the question during the interview about improvement suggestions. Those responses will be reviewed here along with other topics that developed naturally. The codes that supported this sub-theme were Strategies to Overcome WP Barriers, Options to Overcome WP Barriers, Alternative Pump Option to Increase Pumping Ability While Still Working, Packet of Resources, and WP Improvement Suggestions. All included codes here represented the core principle behind this sub-theme and Theme 5, which was to identify what strategies, suggestions, and ideas could be implemented to improve workplace breastfeeding experiences for future working mothers.

The first code to review for this sub-theme was Strategies to Overcome WP Barriers, which was primarily in response to P8's comments of her situation at her

workplace. Because P8 was able to work part-time from home her planning for the

workday and pumping schedule was unique. Like most workplaces and something nearly

all the participants mentioned in their interviews, meetings were a disruption to pumping

breaktime planning, and often were viewed as a barrier. P8 shared the strategy she

developed to help with meeting scheduling, stating "now when I schedule my meetings if

I know I'm going into the office I try to pump every 3 hours, so I strategically try to place

my meeting kind of around that time." As was just discussed, not all the participants had

the flexibility to modify their meeting schedules as they needed per their pumping times;

however, the suggestion remained sound as a way to look at planning for the workday.

Other strategies were mentioned by participants, but these are tied into other codes

reviewed later in this section.

The next code for this sub-theme was Alternative Pump Option to Increase

Pumping Ability While Still Working. Several participants had challenges dealing with

breastpumps that were inadequate or simply did not function to their needs. One of the

challenges reported by multiple participants dealing with breastpumps was the inability to

pump when their body needed to because they had to continue working, which for five of

the eight mothers typically meant seeing patients on a clinical floor in a medical facility.

In other words, they could not just leave their job responsibilities to go pump when they

required. Thus, the idea of alternate pump options was brought up by two participants. P4

told of how her husband had purchased for her a wearable type of pump that could be

used during working and did not have to be plugged in while in use. She reported how

she ended up not using it because the effectiveness was not what she had hoped. She did

however, remark that the type of breastpump was a great idea and could help working mothers continue completing their job duties while simultaneously pumping. P5 found relief in a similar type of wearable breastpump option but had success with it. This alternative type of wearable breastpump could be a sound suggestion for working mothers to bear in mind if they have an inflexible work schedule.

The next code was Packet of Resources, from which some responses were included within Theme 1 that discussed how HEP was distributed as part of packets. Of the eight participants, seven mentioned at least once during the interview the suggestion or in agreement that some sort of packet of resources should be provided to the working mother. The most common suggestion was that this packet should be given to the mother before leaving for maternity leave. If that does not happen, then it should be given sometime during maternity leave, and worst case, after she has returned to work following maternity leave. P1 suggested,

> Give me a packet to show me where things are. Where is the breast-pump room that is closest to me. Like, do you have any storage options? What options do you have? Like, if they just said, "here is how you contact a lactation consultant." It would be so nice if they had that info.

The remaining participants' responses were similar in summary and content of how and when such a packet should be delivered. The factor of importance of when the packet is given to the mother was brought up by two participants because of their experiences. Meaning, these two mothers received a packet of resources from their employers, but no

emphasis was placed on its importance or even valuable content, to which either mother read through it.

The final code for the sub-theme Mothers' Suggestions, was WP Improvement Suggestions. As the whole collection of all the responses was robust due to each participant offering suggestions, this section posed the summarized list. One key suggestion provided suggested educating the management team on breastfeeding policies and procedures and ensuring that organizations understand the value of adhering to breastfeeding support for employees. P2 offered these words of advice to these entities:

> I guess one way of an incentive to learn about these things [for managers], just be the retention that they would have, and the quality of life, the happier that their employees would be, the next time they are pregnant they are going to come back to your company.

P3 brought a unique perspective among the participants to this question about improvement suggestions for the workplace because she is a manager and had experience with workplace breastfeeding when she hadn't been in the management position. Some of her suggestions included: making sure there is sufficient staff to cover for mothers when they need to take pumping breaks; if the workplace does not have a clean, private lactation room then the management needs to build into the working mother's schedule additional time to leave to pump and return; have access to clean, hot water for breastpump care; and, be offered breaks in addition to pumping breaks.

One of the suggestions made by P4 centered around the extended or more permanent use of hospital-grade breastpumps to post-partum mothers. She told of how

the hospital provided her with a pump of this magnitude in the beginning, which was very helpful and helped extract much more milk than her later breast pump types she got. But the use of this hospital-grade pump was only very temporary, and she had to return it shortly after discharge from the hospital.

Finally, P8 suggested peer support and learning from other experienced working mothers. This was a valuable suggestion and one shown by research as a positive facilitator. As outlined previously in this study, McCardel and Padilla (2020) offered recommendations for employers to incorporate to improve workplace breastfeeding practices, which included providing lactation consultants or access to and having support groups both with the primary purpose to aid in the transition of working mothers returning to work and continuing to breastfeed.

Theme 6, Perceptions that Influence Breastfeeding Duration, reflected the connection of perception with attitude. With the objective of discovering how perception influenced attitude among this study's participants, two interview questions were asked, which were "Would you describe your answer to the question whether 'yes' or 'no' your perception of your workplace breastfeeding support had a positive or negative influence on your breastfeeding practice?" and "Describe your perception of how well your manager supported your decision to breastfeed during work. What did or did not go well?" The individual responses to these questions from each participant influenced the identification of two sub-themes, which were Positive Perception and Attitude, and Negative Perception and Attitude.

The first sub-theme was Positive Perception and Attitude, which focused on how a positive perception can influence attitude towards breastfeeding behavior. The codes that supported this sub-theme were, Positive Perception of WP Overall, Positive Perception of WP Support b/c Mgr, Positive Perception of WP BF b/c Controlled My Own BF, Positive Perception of WP Support d/t Laws, Longer Duration d/t Positive Perception or Experience, Nothing Was Gonna Prevent Me from WP BF, Had a Plan to BF at Work, and Positive Attitude Towards BF.

The first code of note for this sub-theme was Positive Perception of WP Overall. This code aligned strongly with the first interview question about whether the participant had a positive or negative perception of her workplace support. P3 reported having a positive perception of her workplace support because she had the flexibility to modify her daily schedule and had a plan before returning from maternity leave. P4 reported "I had more flexibility in being able to block my schedule and being able to pump and everything; so my perception was that I felt like I was going to be supported." The report from P6 regarding her perception of her workplace support was simply summarized by her as "overall positive." P7 described her experiences overall as fair to positive because she had confidence in her capability to succeed in breastfeeding and knew she would have some support from the management. Finally, P8 reported her positive perception developed from experiencing the support as a coworker herself to other working mothers. Because of the first-hand witness of the support her workplace provided to other working mothers in her office, her positive perception had been influenced.

The next code that supported this sub-theme was Positive Perception of WP Support b/c Mgr, which was aligned with the second interview question mentioned above. The question was designed to determine if any perception had developed of the support the participant's manager had provided or would provide once each had returned to work after maternity leave. When reviewing the results reported from the interviews, seven of the eight participants reported having a supportive manager, and P7 reported two of her locations' managers were supportive but one was not. So, of these participants, only one manager of the 10 locations where these working mothers in California attempted workplace breastfeeding was not supportive. Ironically, all four of P7's babies met the EBF goal of 4-6 months and overall breastfeeding goal of 6 months or longer. Two of the participants had babies unable to reach the 4–6-month EBF goal, with one of these two babies not meeting the overall breastfeeding duration goal of 6 months. Three of the 11 babies did not reach the overall breastfeeding 6-month goal. When tying this into the supportive manager connection, all the managers of these three mothers were reported as supportive. Another important factor considered was that all the participants returned to the same workplace after maternity leave except P1 who had been a student and post-doctoral resident, and the fourth location where P7 worked. Within each of these locations, the manager was the same for eight of the 10 workplaces.

The next code for this sub-theme Positive Perception and Attitude was Positive Perception of WP BF b/c Controlled My Own BF. An underlying construct of this code was self-efficacy. As explained previously, Coreil (2010) suggested that the perception an individual has of their own self-efficacy to perform the intended behavior is correlated

to a positive or negative attitude. Furthermore, this belief in oneself to perform a behavior can be linked to personal lived experiences (Sulaeman et al., 2018). These concepts of self-efficacy that are linked to this code were critical to discover. This discovery was critical because research had shown that intention is the driving force behind behavior, and self-efficacy to perform the behavior is a direct determinant of improved breastfeeding outcomes (Lau et al., 2018). Therefore, for the participants to have a positive perception of control over their own breastfeeding outcomes denoted a high level of self-efficacy. P3 reported that her manager was not involved in the day-to-day operations of her workplace and concluded that "he didn't have an impact. I believe that breastfeeding at work became my choice, not the choice of my manager." Of her workplace situation, P4 reported that "in my particular role, I had more flexibility in being able to block my schedule and being able to pump and everything." P5 reported how she utilized her time charting and doing computer work at her own desk to pump. This type of positive flexibility and private space was not available to all participants, but P5 used it to her advantage and stated how she felt comfortable not ever needing to use the actual lactation room instead of her desk area. Lastly, P7 had a very supportive manager in her third workplace, where her schedule allowed her to be part-time from home, and when she was at the worksite, could modify her pumping schedule however she needed. P7 relayed how her manager stated, "whatever you need," which gave her positive self-control.

The code, Longer Duration d/t Positive Perception or Experience, emerged from comments P4 had made during her interview. She remarked how she had set a goal for

breastfeeding her son to at least 6 months and hoping even to make it a full 1 year. Then, she recalled learning about the recommendations for breastfeeding duration and changed her goals. She recalled "then it kind of changed once I actually learned the WHO recommends 2 years; and then the AAP now changed it to 2 years." At the time of the interview, she was still breastfeeding this child at 14 months. She then reported how her supportive workplace and network at home enabled her to have a "successful journey and able to have my son and currently still breastfeeding and pumping at work." Her positive perception of her experience to that point and her gained knowledge gave her improved motivation to exceed her initial intentions.

The next code in support of this sub-theme was Nothing Was Gonna Prevent Me from WP BF, which was centered around the concept of attitude and self-control over actions. Three of the participants had responses that influenced this code. P4 had reported that her manager and workplace were supportive overall. But despite this, her determination, and preset goals to accomplish breastfeeding were not dependent on that support. She warned of her breastfeeding success, "I would have no matter what; even if they would not have been supportive, I would have figured it out." P5 was confident in her understanding of what she needed to do in order to be successful in her breastfeeding and of the support she would receive from her workplace, that she reported "so there really wasn't much I needed from HR; or that I wanted from them." Lastly, P7 explained how at her second workplace, where she breastfed two of her babies, and where her manager was not very supportive, that "because I was very much pro-BF, so it didn't

affect it." Meaning, her experience and determination to breastfeed her children outweighed any anxiety or hinderance her workplace's lack of support offered.

The final code of this sub-theme was Positive Attitude Towards BF. The purpose behind RQ2 was to identify how a working mother's attitude towards her workplace breastfeeding support influenced her behavior to breastfeed up to the 6-month goal. The concepts behind this code specifically focused on comments from the participants where their expressed positive attitude may have impacted their breastfeeding behavior, or at least their attitude towards that behavior. The participant comments included here were found to be pertinent.

After being asked during the interview how P4 felt about other women who chose to breastfeed at work, her positive attitude was expressed. She commented, "I think it's great and there is one other person right now and we both support each other and work well with each other, like if we need to accommodate pumping times or anything like that." This extensive comment from P4 showcased her positive attitude towards workplace breastfeeding even to the point that inconveniences like sharing a lactation space with another breastfeeding woman was seen as encouraging and great.

When P8 was asked at the end of her interview if she had any final insights to add about her workplace breastfeeding experience, she provided positive comments that showcased her attitude. She stated, "I know this is impossible, but I think the fact that I literally heard and saw other women pump that made me think 'OK I can do this;' it kind of gave me that encouragement and that confidence." The conclusion made by P8

portrayed the significance of how a positive attitude and positive support can influence improved behaviors, which in these cases was workplace breastfeeding endeavors.

The second sub-theme for Theme 6, was Negative Perception and Attitude, which equated the significance of perception to attitude and intention to breastfeed but on the contrasting side, where a negative perception leads to a negative attitude and outcome. The codes that emerged from within this sub-theme were Negative WP Perception, WP BF a Hard Choice, Intimidating, Negative Attitude Caused Neg Perception of Other Women Taking Advantage, Negative Feelings & Emotions about BF Situation, Longer Duration Caused Negative Attitude, and Negative Attitude Towards BF. Pertinent responses from the participants that influenced the emergence of these codes will be reviewed.

The first code of this sub-theme was Negative WP Perception. In review of the responses from the participants about their perceptions of their workplaces' support, out of the 10 workplaces, two participants reported a negative response and one participant a neutral one. P7 had commented that with her third and fourth babies, though each was while she was working at a different workplace, her attitude had become somewhat more negative. She explained in the interview that she was highly motivated to achieve her breastfeeding duration goals; the negativity came from all the additional factors that accompanied workplace breastfeeding, such as the breastpump equipment and cleaning, scheduling in pump breaktimes, and so on. In the cases where two participants had slightly negative attitudes towards their workplace breastfeeding, these locations also were where the managers had been reported by the participants to be less than supportive.

The next code for this sub-theme was Negative Feelings & Emotions about BF Situation. In relation to maternity leave time and having enough time to establish a solid routine with breastfeeding and the challenges with breastfeeding a new baby, P6 told of how she had to return to work just beyond 3 months after delivery. Of this challenge she stated:

> In my previous experiences, I have delt with parents that have had to work sooner than the 3 or 4 months that we get, so I know that that itself is challenging, often times they are not even establishing breastfeeding.

One of the significant barriers pointed out in the research towards a longer duration and successful workplace breastfeeding, is a short or shortened maternity leave (CDC, 2019-a; Fernández-Cañadas Morillo et al., 2017; Steurer, 2017).

P1 expressed how her negative feelings and emotions, particularly stress and anxiety, were the result of workplace discomforts and unknowns. She explained how the times she had pumped at work she felt awkward and weird due to the lactation room situation, and how she felt there were just so many potential problems with everything involved in pumping at work. P2 had similar stresses and anxiety, but her feelings stemmed more from other coworkers in her workplace. She explained that she felt that when she would take her pumping breaks, her coworkers were assuming she was not contributing equally to her job duties. She explained her feelings as, "I feel people were 'oh she's in there again' or something; like I wasn't working enough or maybe; those kind of, I don't know, just uncomfortable." This pressure and stress from what she perceived from coworkers added to the challenges of workplace breastfeeding.

The next code for this sub-theme was Longer Duration Caused Negative Attitude. As mentioned, numerous times throughout this study, a longer breastfeeding duration is a goal and recommendation among global and national health organizations and associated with improved benefits for the mother and baby (Amiel Castro et al., 2017; Bartick et al., 2017; ODPHP, n.d.-a; Pounds et al., 2017; WHO & UNICEF, 2019). This code emerged as a result, however, of several participants reporting how despite the benefits and reasons to reach a longer duration, there are some minor negative aspects to consider for the mother. P1 had such feelings, and after breastfeeding her baby for over three and a half years, she had this to conclude, "sometimes you just get touched out and you just don't want anything touching [you], mechanical or otherwise." P7 had breastfed four children by the time she completed the interview for this study and had similar feelings about such a long duration with her four children. Finally, P2 made a similar comment about duration, saying "didn't like personally to do it for very long." This had been P2's first child and first breastfeeding experience, which had been fraught with challenges and cessation earlier than she had hoped.

The final code for this sub-theme Negative Perception and Attitude, was Negative Attitude Towards BF. With the myriad of challenges and obstacles that can be faced trying to accomplish workplace breastfeeding, apprehension and anxiety towards its undertaking could be expected and likely felt by most working mothers. P1 was a new mother, and this had been her first breastfeeding experience. Thus, she did not know personally what to expect. Her skeptical outlook was somewhat expected as she expressed, "there is so much that can wrong." As her workplace breastfeeding experience

continued and she became more successful, she still had feelings of apprehension, stating, "I didn't really want to do it longer, but I thought it was important." Ultimately, because of the workplace positive support she had received from her manager, she exclaimed about other women choosing to breastfeed at work, "I would continue to support women doing that in the workplace."

Summary

The aim in conducting this qualitative phenomenological research was to explore the shared experiences of eight working mothers who lived and worked during their breastfeeding experience in the state of California. The purpose was to discover how HEP of workplace breastfeeding support influenced these mothers' knowledge of workplace breastfeeding accommodations and benefits, and to understand how this knowledge impacted their perception, attitude, and experience (Monteiro et al., 2017). The additional purpose was to explore how each mother's perception of workplace breastfeeding support influenced her attitude towards her breastfeeding experience (ODPHP, n.d.-a; Schafer et al., 2017).

The two research questions that guided this study focused on the influence and impact of a Californian working mother's perception of workplace breastfeeding support from her previous, current, or future workplace, and how this affected her attitude to continue breastfeeding towards the 6-month breastfeeding goal. In this chapter, the results of this study were described and presented. The chapter included a report of demographics, the data collection process, the data analysis steps, a thorough review of the trustworthiness components, and the sub-themes and codes that influenced the

discovery of the themes. In Chapter 5, the interpretation of the findings, limitations of

this study, recommendations, and implications are discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

Breastfeeding offers numerous health and other benefits to the infant, mother, environment, workplace, economy, and potential implications on positive social change (Bartick et al., 2017; Brahm & Valdés, 2017; Hardison-Moody et al., 2018). The United States government has recommended goals for breastfeeding outcomes, such as 6-months for any continued breastfeeding (ODPHP, n.d.; WHO & UNICEF, 2019). This timeframe has been linked to evidence indicating infant and maternal health parameters are enhanced the longer breastfeeding practice continues (Amiel et al., 2017; Bartick et al., 2017). When considering breastfeeding parameters, the United States breastfeeding metrics have been below goal levels in most states (CDC, n.d.-a, 2020-a). The state of California has shown improvements above national averages in part due to improved breastfeeding legislation and policies (CDC, 2020-a; NCSL, n.d.). Determining what barriers continue to hinder mothers from reaching national goals has been paramount, and as such yielded numerous research on these topics. Evidence has indicated that returning to work for the breastfeeding mother is a major barrier to reaching these optimal goals (CDC, 2019-c; Jantzer et al., 2018; "The Public Health Benefits of Breastfeeding," 2017).

Research regarding barriers to breastfeeding duration has suggested that perception of workplace breastfeeding support correlates to the intention to continue breastfeeding once a woman has returned to work (CDC, 2019-c; Leon et al., 2019; Schafer et al., 2017). It remained unclear, however, whether perception of workplace support impacts a working mother's experience in reaching the 6-month breastfeeding goal or beyond (ODPHP, n.d.-a; WHO & UNICEF, 2019). Moreover, it was unclear

whether a California working mother, in a state where improved breastfeeding laws and legislation have made things better, was influenced by her perception and attitude of workplace support (Albarracín & Wyer, 2000; Bradford et al., 2017). Equally important and noteworthy was the consideration of any research on whether the reception of HEP about workplace breastfeeding support to the working mother would impact her workplace breastfeeding experiences. Considering these unknown factors, a meaningful gap existed in the field, positing a need to determine whether perception of workplace breastfeeding support or the reception of any HEP regarding workplace breastfeeding leads to attitudinal changes and has any influence on a working mother's breastfeeding.

In this qualitative study, the shared experience of breastfeeding while working or attempting to breastfeed while working was the phenomenon. Ultimately, by discovering the relationship between workplace support, a mother's perception and attitude, the reception of important HEP related to breastfeeding in the workplace, and the whole breastfeeding experience, expectations of how to support workplace breastfeeding efforts can be better developed and adhered to.

This study included eight participant mothers who had a total of 11 babies, all of whom were breastfed while the mother was working in California within the past 7 years. Each participant was interviewed in a semi-structured interview using videoconferencing.

From the interview data collected and analyzed, six main themes emerged and have been linked to the theoretical framework constructs. In Chapter 4, I explained how the six main themes aligned with the two research questions for this study. In this

chapter, I will review how the key findings discovered from this study relate to the constructs of the TRA.

The TRA was the theoretical framework used for this study. The TRA was correctly used because a person's intention to engage in a particular behavior is a direct determinant of that behavior (Lau et al., 2018). The TRA constructs explain that behavioral beliefs, or perception, influence a person's attitude, which lead to behavioral intention; whereas normative beliefs influence subjective norms that lead to behavioral intention. Both construct pathways can lead to behavior and action.

The key findings of this study include the following. First, workplaces did not provide consistently or with effective timing the correct workplace breastfeeding HEP to the working mothers, and those participant mothers who did receive any had to proactively retrieve it themselves, primarily from the medical facility where they delivered their baby. Second, having a plan to breastfeed at work, no matter when the plan was developed and set into motion, was a positive facilitator towards a positive attitude, intention, and behavior to breastfeed at work. Third, when the mother had some knowledge, however acquired, about the benefits of breastfeeding, whether for the baby, herself, or other factors, it acted as a facilitating force to improve her breastfeeding duration. Fourth, mothers had positive behavioral beliefs of their workplace support when they left for maternity leave having some knowledge of the workplace support amenities. Fifth, working from home, even if part time or on a reduced schedule, caused a positive attitude towards workplace and overall breastfeeding, and made it easier to achieve goal durations. Sixth, a positive attitude towards workplace breastfeeding was enough to have

positive behaviors and outcomes, sustaining an attitude of confidence and self-efficacy to be able to overcome workplace obstacles or challenges. Seventh, when workplaces either provided or lacked sufficient help and support, had a supportive or unsupportive manager, or did not offer any help at all, for mothers leaving on or returning from maternity leave, the influenced beliefs and subsequent perceptions were respectively positive or negative towards workplace breastfeeding behavior. And eighth, the facilitating effect of positive manager or coworker support was even more significant when the manager or coworker was a mother who had also experienced workplace breastfeeding.

Interpretation of the Findings

In this section, I present interpretations of each key finding based on current research. The purpose is to discuss whether the key finding confirms or disconfirms what the research currently suggests, and if the finding extends knowledge into the field surrounding workplace breastfeeding and how the two research questions of this study are connected. Analysis and interpretation of how these findings support the TRA constructs of this study will also be reviewed.

As previously mentioned, the TRA includes two primary constructs behind a person's intention to perform a behavior: (a) attitude and (b) subjective norms. Influences of each construct include behavioral beliefs for attitude and normative beliefs for subjective norms (see Figure 1; Blatz et al., 2020). Each finding will be evaluated based on alignment to one of the two constructs.

To guide these interpretations, the TRA constructs propose that a mother's intention to breastfeed while at work is influenced by the normative beliefs she perceives from others, the subjective norms she is motivated by based on her perceptions, the attitude she develops based on her behavioral beliefs regarding the benefits and advantages of the breastfeeding behavior, and how she perceives her self-efficacy to carry it out successfully (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975; Wood & Qureshi, 2017).

Findings Aligned to the Attitude Construct

The first key finding was that workplaces did not provide HEP to the working mothers, and those mothers who did receive any had to proactively retrieve it themselves, primarily from the medical facility where the baby was delivered. This finding aligned with the attitude construct, denoting a developed attitude based off behavioral beliefs and understanding from acquired HEP or the lack thereof. There was no current research reflecting this finding; therefore, the finding extended knowledge to the field regarding the provision of workplace HEP for breastfeeding. Research related to reception of education or materials was hinted by Pounds et al. (2017), who reported that the timing of the maternal support system, specifically right after birth, was pivotal in achieving breastfeeding success. The interpreted significance of this finding is that workplaces are not providing necessary HEP to employees, which ideally would be before maternity leave starts. This lack in provision of HEP was leading to a lack of knowledge in workplace support and a negative perception. In addition to this deficiency, when HEP was provided, it was during an ineffective time when the mother did not have full

intention to read and understand it. The significance of this finding is that workplaces develop or utilize existing HEP resources to provide to their pregnant employees leaving on maternity leave, the needed education and resources regarding their workplace breastfeeding support amenities and rights. The overall positive impact this provided HEP would have on the working mother before and after returning to the workplace cannot be understated.

The second finding was that having a plan to breastfeed at work regardless of when and how the plan was developed, was a facilitator towards a positive attitude, intention, and behavior to breastfeed at work. This finding related to the attitude construct because a mother's planning would be based off her beliefs in the effectiveness of such a plan for conducting the breastfeeding behavior, and an increased self-efficacy to carry it out. This finding was new knowledge to the field and no current research was available studying this topic. One resource highlighted in this study recommended developing a plan. That resource was the "Business Case for Breastfeeding: Employees' Guide to Breastfeeding and Working" guidebook, which recommended that the working mother practice pumping before returning to work, and talking to her manager about creating work schedules that accommodate her breastfeeding plans (OWH, n.d.; OWH, 2017). The significance of this finding is the vital need for the workplace or healthcare professionals to help working mothers develop a plan for breastfeeding before returning to work.

The third finding was when the mother had some knowledge, however acquired, about the benefits of breastfeeding, whether for the baby, herself, or other factors, it acted

as a facilitating force to improve her breastfeeding duration. This finding was aligned with attitude because the knowledge the mother acquired influenced her beliefs that the behavior was beneficial and worth carrying out. Additionally, having knowledge of other positive experiences of workplace breastfeeding would have improved her belief in her self-efficacy to achieve success. The current research did not directly confirm this finding, where studies sought to correlate knowledge acquired about benefits to outcomes, but several studies pointed out the level of education attained by the mother and acquired breastfeeding information had been identified as facilitators (Jeihooni et al., 2019; Whipps, 2017). Thus, this finding brings extended knowledge to the field. Due to the powerful impact knowledge of the various benefits of breastfeeding can have on a working mother's breastfeeding outcomes, it is critical that working mothers acquire the knowledge and understand these benefits. Workplaces have a responsibility to be an integral part of this process of knowledge provision. The utilization of the breastfeeding support HEP reviewed above would be a viable and effective option.

The fourth finding also was related to knowledge and concluded that mothers had positive behavioral beliefs of their workplace support when they left for maternity leave having some knowledge of the workplace breastfeeding support amenities. The component of this finding dealing with positive behavioral beliefs based on knowledge received before going on maternity leave was extended new knowledge to the field and unstudied. This was aligned with the attitude construct because behavioral beliefs influence an attitude towards performing a behavior and increase the person's self-efficacy to be better at that behavior. Moreover, when a working woman gained any

knowledge regarding her workplace's breastfeeding support, it influenced her behavioral beliefs in a positive manner. Studies conducted by Litwan et al. (2021), Snyder et al. (2018), and Vilar-Compte et al. (2021) validated and confirmed this finding that perceived manager and employer support influenced a positive self-belief and attitude towards breastfeeding behavior. Like the conclusion of the third finding, this finding suggests that it is imperative for employers to ensure working mothers gain any knowledge possible of their workplace's lactation support before leaving on maternity leave. This could be accomplished utilizing the breastfeeding support HEP packet mentioned above.

The fifth finding was that working from home, even if part time or on a reduced schedule, caused a positive attitude towards the workplace and overall breastfeeding, making it easier to achieve goal durations. This aligned with the attitude construct because each mother who was able to experience how working from home could directly correlate the benefits and advantages towards achieving an improved breastfeeding behavior to the changed situation compared to the workplace. Equally as effective was the improved attitude towards the behavior as the mother learned she could accomplish breastfeeding more successfully when at home. Working at home enabled the mother to set and change her breastfeeding or pumping schedule according to her or the baby's needs. This personal control over managing a flexible breastfeeding schedule was confirmed by current research (Jantzer et al., 2018; Johnson & Salpini, 2017). However, no current research was available regarding the change to working at home and its impact on a positive attitude towards overall workplace breastfeeding. The interpretation of this

finding suggests a need for working mothers to be given opportunities for extended home-based work after maternity leave concludes, which could coincide with a slow transition back into part-time or full-time working hours.

The sixth finding was that a positive attitude towards workplace breastfeeding was enough to achieve positive behaviors and outcomes, sustaining an attitude of confidence and self-efficacy to be able to overcome workplace obstacles or challenges. This finding was aligned with the attitude construct because it directly linked attitude towards a behavior to the intention and action to conduct that behavior. Likewise, this finding was overall confirmed by the current research. Amiel Castro et al. (2017) and Zhuang et al. (2019) found that a working mother's positive perception and attitude towards workplace breastfeeding support had a significant positive impact on her intentions to breastfeed after delivery. Studies also found and confirmed that a positive attitude directly facilitated both EBF and overall breastfeeding duration (Casal et al., 2017; Gebrekidan et al., 2020, 2021; Shabbir et al., 2020). However, despite all this research, no researchers have studied the direct relationship of positive behavioral belief leading to an attitude where a working mother believed no challenge or obstacle would prevent her from reaching optimal breastfeeding goals. This part of this finding was new knowledge to the field and suggested the importance for workplaces to improve breastfeeding support amenities and ensure working woman know of these to better improve positive behavioral beliefs.

Findings Aligned to the Subjective Norms Construct

The final two key findings of this study were aligned with the TRA construct subjective norms, which are influenced by a person's normative beliefs drawn from their perceptions of a behavior and others' acceptance or approval of that behavior.

The seventh finding was that when workplaces either provided or lacked sufficient help and support, had a supportive or unsupportive manager, or did not offer any help at all for mothers leaving on or returning from maternity leave, the influenced beliefs and subsequent perceptions were respectively positive or negative towards workplace breastfeeding behavior. Workplace support amenities were perceived as things like a lactation space, clean water and a sink, a refrigerator to store breastmilk, a supportive manager, or coworkers. The facilitating positive effect improved breastfeeding duration. The influence from negative or positive forces were aligned with the subjective norms construct because the working mother believed, based on her perceptions, the support was vital to her success in performing the breastfeeding behavior. Equally important was the influence of coworkers' or a manager's social pressure to perform the behavior. When that pressure was in the form of positive support, a positive perception and outcome was seen.

This finding confirmed one of the assumptions of this study, which was that a positive perception of workplace support, regardless of the quality or source of that support, would have a positive influence on workplace breastfeeding behavior and lead to increased chances of meeting the 6-month breastfeeding goal. Of the 11 babies included

in this study, eight met the goal of any breastfeeding 6 months or beyond, indicating how the participants overall had positive workplace support personnel.

The seventh finding also confirmed the current research that when a workplace provides adequate breastfeeding support, regardless of whether that support is merely believed or experienced, the effect is positive on breastfeeding outcomes. Other associated findings from the current research point out that a lactation space or room, positive support from coworkers and management, and an overall environment of positive support lend to a positive breastfeeding experience (Alnasser et al., 2018; Jantzer et al., 2018; Kim et al., 2019; Winegar & Johnson, 2017), and that not having these mechanisms of support was a barrier to breastfeeding in the workplace (CDC, 2019-c; Hilliard, 2017; Steurer, 2017). The analysis of these findings points out the critical importance that employers ensure there exists a positive support environment for breastfeeding employees, which Winegar and Johnson (2017) determined can produce up to a 75% breastfeeding continuation rate for female employees returning to work.

Additional supporting research for the seventh finding confirmed that the length of maternity leave, going on maternity leave, and its positive correlation with EBF length or overall duration were connected (CDC, 2019-a; Fernández-Cañadas Morillo et al., 2017; Monteiro et al., 2017; Rimes et al., 2019; Steurer, 2017; WHO, 2017). However, no research was available on the potential negative effects of working mothers not receiving support before leaving on maternity leave or during their leave, to where they felt unsupported.

The final finding for this study concluded that the facilitating effect of positive manager or coworker support was even more significant when the manager or coworker was a mother who had also experienced workplace breastfeeding. This finding was aligned to the subjective norm construct, because the manager or coworker, who was also a woman and in an important social position to the working mother, offered support, producing positive influence on the working mother's intentions.

In review of the positive facilitating effects, the current research confirmed this finding, where specifically perceived positive manager or coworker support were correlated with intention to breastfeed (Gebrekidan et al., 2021; Litwan et al., 2021; Zhuang et al., 2019; Vilar-Compte et al., 2021; Zhuang et al., 2018). Pounds et al. (2017) and Taylor et al. (2020) found that when the healthcare provider, manager, or coworker was a working mother herself, especially who had experienced workplace breastfeeding, this was a positive facilitator. This finding indicated the potential effectiveness of having breastfeeding support groups available within a workplace, or string of organizations. The value and benefit of breastfeeding support groups and networking has been studied with powerful findings and is one of the key steps in the Baby Friendly Hospital Initiative *Tens Steps to Successful Breastfeeding* (Baby-Friendly USA, n.d-a; Crepe, 2017; Fernández-Cañadas Morillo et al., 2017; Rudestam & Newton, 2015).

Limitations of the Study

This study had several limitations related to trustworthiness which occurred from the execution, data collection, and analysis through its completion. Issues of trustworthiness were inherently present due to this being a qualitative research study,

which focused on beliefs, perceptions, and attitudes (Creswell & Creswell, 2018). To combat any limitations related to trustworthiness, I incorporated the following processes and methods.

During data collection and analysis, transparency of the research methods and interview protocols using triangulation validated the study's credibility and enhanced my trustworthiness in the results (Patton, 2015). Rapport and trust between the participants and myself were built prior to and during the interviews to aid in developing themes during the data collection process. To enhance transparency and trust, both before and during the interviews I reviewed in detail the study purpose, my background and personal family breastfeeding experiences, and the reasons behind why I was studying the topic of breastfeeding. Participants were given adequate time to respond to all interview questions and provide feedback and follow-up responses. At the conclusion of each interview, I read back over the interview responses to confirm if there were any corrections, additions, or clarifications. Data analysis results were provided to my research committee for review and interpretation.

To improve validity, I confirmed consistency across the participant interviews to ensure accuracy in the inclusion criteria, the data analysis methods were followed, the processes and steps were guided by the two research questions only, and the research protocols were maintained. For enhancing transferability, the demographic questions were guided by the TRA constructs, two research questions, and with the purpose to discover commonalities shared among the working mothers regarding the phenomenon of

workplace breastfeeding perception. By collecting commonalities among the participants, results and implications can be transferred (Ravitch & Carl, 2016).

To improve trustworthiness in the dependability and confirmability of the study methods and findings, I precisely documented the research procedures, incorporated triangulation principles, and conducted member checks and audit trails as part of a quality assurance process; not to mention, disclosed up front to each participant in the Written Consent letter and Interview Protocol my background, personal experiences related to my wife and children breastfeeding, values, gender, work history, and objectivity (Creswell & Creswell, 2018; Patton, 2015).

An additional limitation to this study was the phenomenological qualitative research design, which inherently limited population diversity and randomization; in part, because this approach was by design more generalized (Patton, 2015). To account for this, participants were selected by a strategy of purposeful selection, which included a narrow inclusion criterion for those working mothers who shared the experience of returning to employment while striving to continue breastfeeding. The participants also had to have worked within the state of California during their breastfeeding experience and within the previous 7 years. This criterion limited the representation of all mothers across the United States, who might have likewise shared a similar breastfeeding phenomenon. The study included eight participants, which limited representation of a more diverse population of women.

Some research has pointed out that the TRA has limitations, to potentially include other variables influencing a person's intentions, like fear, mood, and threats (Lau et al.,

2018; Rogelberg, 2007). Despite these limitations, the TRA remained the most aligned theoretical framework for use with this study (Ajzen, 1991; Dhauvadel et al., 2019; Lau et al., 2018).

Other limitations identified in this study included a lack of racial, age, and occupational-type diversity. Inclusion criteria for this study did not specify any of these categories; thus, maintaining neutral diversity as an underlying goal. This study's participants were all married and living with the father of the breastfed baby. This limited the representation of single mothers or mothers living with a person other than the baby's father. The demographic questions of the interview contained an answer option of "Prefer not to answer/say" or "Other" so participants could either choose not to answer or provide a more precise explanation of their situation. This study also did not have any participants who were unemployed or who had attempted to return to work but then chose not to for any reason related to breastfeeding. Also not included were any participants who had chosen not to breastfeed after returning to work but instead utilized formula feeding.

Additional limitations to this study included a lack of any participants that returned to work and were unable to breastfeed due to lack of workplace support, lack of an admitted positive attitude, or due to a negative perception. This study also lacked participant mothers who did not have a plan to breastfeed at work because their perception of workplace support was negative. No participants were part of the study who were unable to take maternity leave due to their employer or because of the type of occupation they held, or those who were not provided the opportunity to take at least a 3-

to 6-month maternity leave because they wanted to or had to make money. Finally, this study lacked participants that had very poor or no workplace positive experiences, despite the support or not; all this study's participants reported overall positive perceptions and attitudes, even though not all were supported. The Recruitment Flyer specifically invited any of these varying degrees of working mothers to participate.

The final limitation acknowledged of this study was related to the participants trying to recall memories, feelings, and thoughts about perceptions, attitudes, and behaviors that in some cases were several years passed.

Recommendations

In this phenomenological qualitative study, eight participants were included, with 11 babies of the participants who were breastfed. Though this met the participant sample size goal of the study, one recommendation is that a qualitative study be conducted using a larger sample from a more diversified geographical distribution to determine a broader scope of the impact the two research questions would have on workplace breastfeeding outcomes. A larger population being represented is necessary because breastfeeding is a public health concern and needs further improvement, not just in California, but across all the United States (Bartick et al., 2017; "The Public Health Benefits of Breastfeeding," 2017). This study invited participants from a work-related network platform, such as LinkedIn and various state organizations, where the likelihood of finding working mothers was more prevalent. A broader recruitment pattern and platform would be beneficial to capture a wider diversity of working and non-working mothers who experience breastfeeding challenges related to the workplace. To enhance representation

of all types of working women, or women who are not working, inclusion criteria should be expanded to invite a more diverse racial, working class, and types of reasons for not breastfeeding into the study.

It is also important for other researchers to explore some of the concerns highlighted by the mothers in this study. One such concern was the lack of HEP provided by workplaces in the state of California, even when the type of workplace is centered on education for the public. A primary recommendation to help solve this concern is to have resource or informational packets prepared and ready to distribute to working mothers before, during, and after they complete maternity leave. Another concern related to this lack of HEP and breastfeeding information was the timing of when the packet of resources should be received by the working mother. The ideal timing suggested by this study's participants is right before leaving on maternity leave. This would allow the mother adequate time to read over the materials, understand her protective rights and benefits in the workplace and what she can expect upon return, and opportunity to ask her organization or breastfeeding resources any clarifying questions or concerns before returning to work. This HEP packet of resources would include education and promotion related to breastfeeding, lactation consultant resources, guides for breastfeeding at work, reviews of the laws, policies, and legislation specific to that State about workplace breastfeeding, among other important guidelines and instructions. The BCB guidebooks already published and available can serve as models for developing these packets and should even be included as part of the packet (OWH, n.d., 2017-a, 2017-b, 2017-c). By having these HEP packets prepared and administered to the working mother upon leaving

for maternity leave, the knowledge and understanding she will potentially gain can aid in the workplace breastfeeding process.

An additional recommendation learned from the findings of this study is that healthcare professionals that instruct, educate, or consult with working mothers work to motivate them to develop a detailed plan of how they will accomplish workplace breastfeeding once they return to work. It was clear from this study's findings that a plan that encompasses goals and how pumping at work can be undertaken could improve the breastfeeding intention, attitude towards accomplishing goals, and motivate the mother to succeed despite various challenges that may arise. The plan development instructions can be part of the HEP packet of resources mentioned above, or as part of the prenatal care involving medical providers. The BCB guidebook for employees includes a segment devoted to encouraging the working mother to develop a detailed plan of how she will accomplish daily breastfeeding and set goals for duration (OWH, 2017-c).

Another recommendation from this study is that medical facilities that deliver and administer post-natal care where a lactation consultant is part of the interdisciplinary team that assesses the mother and baby and helps, evaluate their protocols for the timing of this visit, and consider ensuring the lactation consultant visit is conducted as soon as possible post-delivery. Ideally, this consultation and evaluation will be completed during the first attempt to breastfeed the baby right after delivery. This would allow the lactation professional to help and assist with obstacles and provide specific follow-up later for those obstacles already seen.

Additional recommendations learned from this study include a quantitative research study be conducted to analyze how the COVID-19 situation improved breastfeeding outcomes in working mothers, who stayed home to breastfeed versus those returning to a workplace. It is also recommended that a quantitative study be conducted to determine the impact of perception and attitude on breastfeeding outcomes across all types of working mothers, and in all States. Probable research questions could be aimed to quantify how a positive or negative perception and attitude impact breastfeeding outcomes for initiation, EBF, and duration.

Another important insight from this study revealed the need for a quantitative study to explore the types of occupations within each type of industry to evaluate and rank that position's overall impact on workplace breastfeeding outcomes. By discovering these types of indices, working mothers and professionals could explore alternative work schedules, more home-based work options, or at minimum improved overall support to those specific positions, which were historically indicated to have lower outcomes. If a working mother is educated to know that she has one of these positions, she can seek out more support and help.

A quantitative study is also warranted be conducted to research the cause and effect on breastfeeding outcomes for when a working mother goes on maternity leave having received HEP or breastfeeding support and resources versus those mothers who receive none.

One insight from this study pointed out how meetings in the workplace cause disruption to pumping break times and the routine flow of achieving workplace

breastfeeding. A quantitative study should be conducted to uncover how many working mothers' breastfeeding pumping breaks are disrupted or halted with an overall summation of the effect of meetings on a mother's breastfeeding duration.

One last result from this study discovered that some participants experienced inadequate pumping break times and complained that these mandatory breaks dedicated to pumping should not count as the replacement for regular paid breaks. A quantitative study should be conducted to investigate the number of working mothers experiencing this dilemma and its overall impact on their breastfeeding outcomes.

Implications

As mentioned previously, positive social change can be described as a particular need within a population which can affect health, happiness, equal opportunity, or socioeconomic growth (Laureate Education, 2015). The findings and results from this study could contribute to positive social change in various ways. These potential positive changes will be outlined in this section.

One of the goals of this study was to discover ways that could improve the health outcomes of both infants and breastfeeding women within the United States workforce. Results of this study suggested that because workplaces may not be administering adequately or effectively breastfeeding HEP to working mothers, a critical need for organizations and workplaces to improve their process has been identified. Whether these workplaces develop and create the HEP packet of resources recommended, or use of the already available resources, such as the mentioned BCB guidebooks, is irrelevant. The provision of breastfeeding resources, information, benefits, and professional aid in the

form of a packet could have dramatic impact on positive change. By empowering the working mother with knowledge and resources to aid in her breastfeeding process, she can not only be more readily prepared to get help when needed but also grow in positive self-efficacy in her own ability to succeed. Breastfeeding outcomes could also improve as a result, which positively impacts the baby, the community, the workplace, economy, and the long-term health of the nation.

Other implications that could lead to positive social change from the findings of this study incorporate the vital need for workplaces to ensure the perception and practice of breastfeeding support is clear and received by their employees. As a positive perception can lead to positive outcomes, a positive work environment and atmosphere perceived to be supportive could prove to increase job satisfaction, less absenteeism, and improve retention, which impacts the workplace, workforce, and economy. Workplace leadership should develop evaluation measures to assess how their employees perceive support and what they can improve upon. As outlined previously in this study, the BCB guidebooks have guides for employers with multiple options for improving the workplace lactation support programs (OWH, 2017-a).

Several other important implications based on the results of this study that could impact social change include: the discovery that working mothers need more time than the minimum paid break time for pumping, and that it should not replace their regular paid breaks; that the lactation consultant initial consultation in the medical facility after birth needs to be urgent and immediate, not just before discharge from the hospital; that offering the working mother alternative work modalities, such as home-based or partially

home-based schedules, can drastically improve their breastfeeding attitude and duration; and, that coworkers and managers are vital to the working mother feeling supported, where a positive support atmosphere could mean the difference in reaching the 6-month goal for breastfeeding.

The final implication on positive social change discovered from this study relates how a positive attitude towards workplace breastfeeding could be enough to induce positive behaviors and outcomes, which promote a level of confidence and self-efficacy that can overcome any obstacle to reach a breastfeeding duration set as a goal by the mother. This implication suggests the vital need for education and knowledge for the working mother on the breastfeeding resources, workplace amenities, laws and protections in the workplace entitled to her, benefits for her, the baby, and the environment, and professional support. This also suggests a critical need for support networks and groups, whether offered at the workplace, outsourced from the health insurance company, or even just by a local community. Other positive outcomes from these suggestions could include reductions in healthcare costs, improvements in communication between healthcare professionals, and connections made for breastfeeding women to the right social networks. The HEP packet of resources discussed above would meet the suggestive implications for these improvements and could be the most effective method for workplace use.

In review of the demographic questions as part of this study's interview process, several implications are noted. All the participants graduated high school and had college degrees or higher and worked in a healthcare occupation except one. The implication was

that the participants should have a generally good understanding of human health and biology inherent to their education. Additionally, none of the participants were of a young, or inexperienced age, potentially implicating that they had been in relationships, had planned pregnancies or at minimum waited until later in life to start having children, or they had already had other children and experienced breastfeeding before, which could imply that they knew many of the challenges and how to get over obstacles. This age category could also imply that at an older age they might know they cannot have as many children, and that could mean they want to ensure their baby gets the best care possible, motivating better breastfeeding outcomes.

Regarding the workplace-related questions and implications, all participants except one returned to the same workplace after maternity leave, which could imply they knew the manager or supervisor, knew the company, and would have gone on maternity leave working with the same human resources department they returned to work under. This also implied the participants at least had some knowledge of any breastfeeding support amenities or policies. On another note, for 10 of the 11 breastfeeding experiences included in this study, the mothers were able to either be on maternity leave for 3-4 months or up to 5 months. This implied a positively supported legal atmosphere among California workplaces, where the state supported and enforced lawful length of maternity leave time. This may also have implied there was a correlation to the success in most participants in this study reaching at least 3 months or longer in their breastfeeding duration.

In view of the results of this study, it is hoped that interventions and workplace policies can be developed, which are focused on improving breastfeeding behavior within the workplace. Equally implied is that health professionals can utilize the information from this study to develop improved policies, regulations, and HEP materials designed to provide enhanced breastfeeding support in the workplace and give the mother vital knowledge about her support, benefits, and options. Additionally, by indicating the impact a mother's perception and attitude of workplace support can have on her breastfeeding behavior, employers can better understand how instrumental the degree and assessment quality of support is (Jantzer et al., 2018). Ultimately, the results of this study can be used to develop measurement tools, assessment protocols, and health education curriculum, to be used to improve workplace breastfeeding support.

Conclusion

This qualitative phenomenological study was conducted to explore the shared experiences of eight working mothers who lived and worked during their breastfeeding experiences in the state of California. Research had confirmed that breastfeeding provides numerous health and other benefits to the infant, mother, environment, workplace, economy, and potential implications on positive social change (Bartick et al., 2017; Brahm & Valdés, 2017; Hardison-Moody et al., 2018). In the United States, one of the key breastfeeding goals was that a mother strives to breastfeed her baby to at least 6 months after birth (ODPHP, n.d.; WHO & UNICEF, 2019). The 6-month duration has been positively linked to research indicating that when an infant consumes breastmilk up to at least 6 months of age, the benefits are more extensive and have a longer potential

impact on health (Amiel Castro et al., 2017; Bartick et al., 2017). The United States had overall been below goals for breastfeeding in most states (CDC, n.d.-a, 2020-a). California breastfeeding metrics have been above the national averages in part due to improved breastfeeding legislation and policies implemented in addition to national ones (CDC, 2020-a; NCSL, n.d.).

In view of these breastfeeding outcomes and because breastfeeding is a public health concern due its overall impact on health, numerous research has been conducted, which has identified among multiple others one major barrier to breastfeeding duration to be when a mother returns to work (CDC, 2019-c). Likewise, research has indicated that perception of workplace support can lead to attitude development, and have an influence on a mother's intentions, behaviors, and practice of breastfeeding continuation (Angeletti & Llossas, 2018; Bandura, 2000; Lennon & Willis, 2017; McCardel & Padilla, 2020). With all the research in mind, a gap was noted, which posited the question if perception of workplace support had any impact on a working mother's experience in reaching the 6-month breastfeeding goal (ODPHP, n.d.-a; WHO & UNICEF, 2019). Considering that the state of California was having above-average success in workplace breastfeeding behavior, the follow-up question posited if a California working mother was influenced by her perception and attitude of workplace support (Albarracín & Wyer, 2000; Bradford et al., 2017). Equally as important in these questions was the consideration of whether the reception of workplace breastfeeding-related HEP to the working mother would impact her workplace breastfeeding experiences and perception of workplace support?

From these questions, the purpose of this study was to discover how HEP of workplace breastfeeding support influenced a working mother's knowledge of workplace breastfeeding accommodations and benefits, and understand how this knowledge impacted her perception, attitude, and experience (Monteiro et al., 2017). The additional purpose was to explore how each mother's perception of workplace breastfeeding support influenced her attitude towards her breastfeeding experience (ODPHP, n.d.-a; Schafer et al., 2017).

This study utilized the hermeneutic phenomenological approach because this approach allowed for a focused discovery on how perception an individual has of a lived experience can lead to an interpretation of that event (Jarrett, 2017). For the participants in this study, the shared experience of breastfeeding while working was the phenomenon. The theoretical framework that was used to guide this study was the TRA, which was useful for this study because a person's intention to engage in a particular behavior has been shown to be a determinant of that behavior (Dhauvadel et al., 2019). The participants were interviewed using a semi-structured interview process via videoconferencing. The development of the interview and research questions were guided by the TRA. The interview questions were designed to probe the two constructs of the TRA and use primarily beliefs and perceptions to measure subjective norms and attitudes. From the interviews collected and analyzed, six main themes emerged.

In view of the two research questions guiding this study's aim and purpose, this study's findings confirmed the first research question, that the reception of HEP about workplace breastfeeding improved perception and knowledge of workplace breastfeeding

support, which in turn influenced a more positive attitude towards workplace breastfeeding behavior. An interpreted analysis of this conclusion stems from the acquired knowledge the working mother gains regarding what workplace breastfeeding support is supposed to look like, what resources and options a working mother is entitled to for help and assistance, what amenities a workplace is obligated to provide, such as lactation rooms and pumping breaktimes, and what support the mother can expect from her employer and state organization. The acquired knowledge influenced the mother's behavioral beliefs which led to an increased belief in her self-efficacy to perform workplace breastfeeding. This improved her attitude to be successful and indicated alignment to the TRA's Attitude construct.

The second research question was also answered in that yes, a working mother's perception of her workplace breastfeeding support did impact her intentional behavior to reach the breastfeeding goal of at least six months. Of the participants in this study, the women who experienced positive perceptions of their workplace support had positive attitudes and outcomes. This conclusion can be interpreted to mean that when a working mother perceives her workplace will support her breastfeeding goals after maternity leave and has proven through knowledge distribution to have lactation support in place, which perception was influenced positively or not based on the normative beliefs and social pressure from her manager or coworkers, she has more positive intention towards that breastfeeding behavior and will most likely feel confident in accomplishing her goals no matter the obstacles.

As far as whether California state laws and policies set to improve workplace breastfeeding support had any influence on this study's participants' perceptions or attitudes remains unconfirmed. The participants in this study were highly educated and had above-average knowledge of human physiology due to being primarily healthcare professionals. However, the acquired knowledge from their education and work experiences did not appear to be influenced by these laws and policies of California. In fact, most of the participants, despite their education and occupations, were overall unaware of what specific laws and policies the state of California even offered them. If the provision of HEP from workplaces was adequately acquired by these working mothers, the knowledge of these laws might have been improved? With this general dilemma in mind, the suggestion from this study to provide breastfeeding-support HEP from the workplace is further bolstered.

Eight key findings were discovered in this study. These include the following: 1) workplaces did not provide sufficient breastfeeding support HEP to the working mothers; 2) having a plan to breastfeed at work was a facilitator towards a positive attitude, intention, and behavior to breastfeed at work; 3) when the mother had some knowledge about the benefits of breastfeeding, it acted as facilitating force to improve her breastfeeding duration; 4) mothers had positive behavioral beliefs of their workplace support when they left for maternity leave having some knowledge of that support; 5) working from home, even if part time or on a reduced schedule, caused a positive attitude towards the workplace and overall breastfeeding; 6) a positive attitude towards workplace breastfeeding was enough to achieve positive behaviors and self-efficacy to overcome

obstacles; 7) when workplaces provided sufficient breastfeeding support amenities for mothers, their beliefs and perceptions were positive toward workplace breastfeeding behavior; and 8) the facilitating effect of positive manager or coworker support was even more significant when the manager or coworker was also a mother.

The summary of the suggestions from these findings include, that workplaces develop or utilize existing HEP resources to provide employees leaving on maternity leave the needed education, knowledge, and resources regarding their workplace breastfeeding support amenities, the benefits of breastfeeding, and rights; the vital need for the workplace or healthcare professionals to help working mothers develop a plan for breastfeeding before returning to work; a need for working mothers to be given opportunities for extended home-based work after maternity leave concludes; the importance for workplaces to improve breastfeeding support amenities; the critical importance that employers ensure a positive support environment for breastfeeding exists in their workplace; and, having breastfeeding support groups available within a workplace, or string of organizations, where employees can support one another and network with coworkers or managers who have also been mothers.

The findings and implications learned from this study can have a positive impact on social change in a variety of ways. The first way relates to seeking improvement in the health of infants and women, with a focus on their short- and long-term health outcomes through the provision and use of breastfeeding. Other ways include the potential empowerment a working mother can gain by acquiring knowledge and resources to educate her about laws, policies, protections, amenities, benefits, and even effective

strategies to succeed at workplace breastfeeding. The acquired knowledge can not only help her be more prepared to get assistance when needed and how, but also increase in self-efficacy in her own ability to succeed. Of a critical note is the suggestion for workplaces to ensure a positive perception of breastfeeding support is clear and received by their employees, especially prior to leaving for maternity leave. This is vital for positive social change because a positive perception of the work environment being supportive could increase job satisfaction, induce less absenteeism, and improve retention, all of which could impact the workplace, workforce, and economy.

With efforts to improve workplace breastfeeding in the United States due to its implications on the health of infants and women, it was the purpose of this study to uncover how HEP, attitude, and perception of workplace support influenced a Californian working mother's breastfeeding behavior. This study discovered the important need of providing education and resources before maternity leave to the working mother to help prepare her for breastfeeding when she returns to work. The recommended mechanism which can be utilized to accomplish the provision of education and resources is workplace breastfeeding-related HEP. The HEP resources would ideally be administered by the workplace prior to maternity leave. Through the discoveries of this study, it is hoped that more precise strategies will be developed, better educational materials designed to guide breastfeeding and improve knowledge created, and the implementation of improved laws and legislation will be undertaken, all focused on increasing workplace support for those working women and their breastfeeding efforts.

References

Ajzen, I. (1991). Theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. https://doi.org/10.4135/9781446249215.n22

Ajzen, I. (2012). The theory of planned behavior. In P. A. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 438-459). SAGE Publications. https://doi.org/10.4135/9781446249215.n22

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*. Prentice-Hall.

Albarracín, D., & Wyer, R. S., Jr. (2000). The cognitive impact of past behavior: influences on beliefs, attitudes, and future behavioral decisions. *Journal of Personality and Social Psychology, 79*(1), 5–22. https://doi.org/10.1037//0022-3514.79.1.5

Alianmoghaddam, N., Phibbs, S., & Benn, C. (2018). Reasons for stopping exclusive breastfeeding between three and six months: A qualitative study. *Journal of Pediatric Nursing-Nursing Care of Children & Families*, *39*, 37–43. https://doi.org/10.1016/j.pedn.2018.01.007

Alnasser, Y., Almasoud, N., Aljohni, D., Almisned, R., Alsuwaine, B., Alohali, R., Almutairi, O., & Alhezayen, R. (2018). Impact of attitude and knowledge on intention to breastfeed: Can mHealth based education influence decision to breastfeed exclusively? *Annals of Medicine and Surgery, 35*, 6–12. https://doi.org/10.1016/j.amsu.2018.09.007

American Academy of Family Physicians. (n.d.). *Breastfeeding (Policy statement)*.

https://www.aafp.org/about/policies/all/breastfeeding-policy-statement

American Academy of Pediatrics. (n.d.-a). *AAP policy on breastfeeding*.

http://www.aap.org/en-us/advocacy-and-policy/aaphealthinitiatives/

Breastfeeding/Pages/AAP-Policy-on-Breastfeeding.aspx

American Academy of Pediatrics. (n.d.-b). *Breastfeeding benefits your baby's immune*

system. https://healthychildren.org/English/ages-

stages/baby/breastfeeding/Pages/Breastfeeding-Benefits-Your-Babys-Immune-

System.aspx

American College of Obstetricians and Gynecologists. (n.d.). *ACOG statement of policy:*

Paid parental leave. https://www.acog.org/clinical-information/policy-and-

position-statements/

Amiel Castro, R. T., Glover, V., Ehlert, U., & O'Connor, T. G. (2017). Antenatal

psychological and socioeconomic predictors of breastfeeding in a large

community sample. *Early Human Development*, *110*, 50–56.

https://doi.org/10.1016/j.earlhumdev.2017.04.010

Angeletti, M. A., & Llossas, J. R. (2018). Workplace lactation programs in small WIC

service sites: A potential model. *Journal of Nutrition Education and Behavior*,

50(3), 307–310. https://doi.org/10.1016/j.jneb.2017.10.001

Anstey, E. H., Shoemaker, M. L., Barrera, C. M., O'Neil, M. E., Verma, A. B., &

Holman, D. M. (2017). Breastfeeding and breast cancer risk reduction:

implications for Black mothers. *American Journal of Preventive Medicine*,

53(3S1), S40–S46. http://.doi.org/10.1016/j.amepre.2017.04.024

Åkerlind, G. S. (2018). What future for phenomenographic research? On continuity and

    development in the phenomenography and variation theory research tradition.

    Scandinavian Journal of Educational Research, 62(6), 949–958.

    https://doi.org/10.1080/00313831.2017.1324899

Azad, M. B., Nickel, N. C., Bode, L., Brockway, M., Brown, A., Chambers, C.,

    Goldhammer, C., Hinde, K., McGuire, M., Munblit, D., Patel, A. L., Pérez-

    Escamilla, R., Rasmussen, K. M., Shenker, N., Young, B. E., & Zuccolo, L.

    (2021). Breastfeeding and the origins of health: Interdisciplinary perspectives and

    priorities. *Maternal & Child Nutrition*, *17*(2), Article e13109.

    https://doi.org/10.1111/mcn.13109

Babakhanian, M., Sayar, S., Faezeh Sadat Akrami, F. S., Ghazanfarpour, M., Kargarfard,

    L., Dizavandi, F. R., & Khadivzadeh, T. (2019). A systematic review of

    instruments measuring family and social support of breastfeeding mothers.

    International Journal of Pediatrics, *7*(1), 8821–8829.

    https://doi.org/10.22038/ijp.2018.33521.2959

Baby-Friendly USA. (n.d.-a). *10 steps & international code*.

    https://www.babyfriendlyusa.org/for-facilities/practice-guidelines/10-steps-and-

    international-code/

Baby-Friendly USA. (n.d.-b). *Designation process*. https://www.babyfriendlyusa.org/for-

    facilities/designation-process/

Baby-Friendly USA. (n.d.-c). *The baby-friendly hospital initiative*.

    https://www.babyfriendlyusa.org/about/

Bai, Y., Peng, C. J., & Fly, A. D. (2008). Validation of a short questionnaire to assess mothers' perception of workplace breastfeeding support. *Journal of the American Dietetic Association, 108*, 1221–1225. http://doi.org/10.1016/j.jada.2008.04.018

Baker, S. E., Edwards, R., & Doidge, M. (2012). *How many qualitative interviews is enough?* http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf

Bandura, A. (2000). Self-efficacy. In A. E. Kazdin (Ed.), *Encyclopedia of psychology* (Vol. 7., pp. 212–213). American Psychological Association. https://doi.org/10.1037/10522-094

Bartick, M. C., Schwarz, E. B., Green, B. D., Jegier, B. J., Reinhold, A. G., Colaizy, T. T., & Stuebe, A. M. (2017). Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs. *Maternal and Child Nutrition*, *13*(1). https://doi.org/10.1111/mcn.12366

Blake, J. Munoz, K. & Volpe, S. (2016). *Nutrition from science to you* (3rd ed.). Pearson Education.

Blatz, M. A., Huston, A. J., & Anthony, M. K. (2020). Influence of NICU nurse education on intention to support lactation using tailored techniques: A pilot study. *Advances in Neonatal Care: Official Journal of the National Association of Neonatal Nurses, 20*(4), 314–323. https://doi.org/10.1097/ANC.0000000000000702

Bradford, V. A., Walkinshaw, L. P., Steinman, L., Otten, J. J., Fisher, K., Ellings, A., & Johnson, D. B. (2017). Creating environments to support breastfeeding: The challenges and facilitators of policy development in hospitals, clinics, early care

and education, and worksites. *Maternal and Child Health Journal*, *21*(12), 2188–

2198. https://doi.org/10.1007/s10995-017-2338-4

Brahm, P., & Valdés, V. (2017). The benefits of breastfeeding and associated risks of

replacement with baby formulas. *Revista Chilena de Pediatría*, *88*(1), 7-14.

https://doi.org/10.4067/S0370-41062017000100001

California Breastfeeding Coalition. (n.d.-a). *California breastfeeding laws & regulations*.

https://nccd.cdc.gov/dnpao_dtm/rdPage.aspx?rdReport=DNPAO_DTM.ExploreB

yLocation&rdRequestForwarding=Form

California Breastfeeding Coalition. (n.d.-b). *Baby-friendly hospital initiative*.

https://californiabreastfeeding.org/healthcare/baby-friendly-hospital-initiative/

California Department of Public Health (CDPH). (n.d.). *Breastfeeding Initiative*.

https://www.cdph.ca.gov/Programs/CFH/DMCAH/CDPH%20Document%20Libr

ary/Communications/Profile-Breastfeeding.pdf

California Legislative Information. (n.d.). Bill Text—SB-142 Employees: Lactation

Accommodation.

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200S

B142

Casal, C. S., Lei, A., Young, S. L., & Tuthill, E. L. (2017). A critical review of

instruments measuring breastfeeding attitudes, knowledge, and social support.

Journal of Human Lactation, 33(1), 20–47.

http://doi.org/10.1177/0890334416677029

Center for WorkLife Law. (n.d.). *EXPOSED: Discrimination against breastfeeding*

workers. https://www.pregnantatwork.org/breastfeeding-report-fullpage/

Centers for Disease Control and Prevention. (n.d.-a). *DNPAO data, trends and maps: Explore by location*.

https://nccd.cdc.gov/dnpao_dtm/rdPage.aspx?rdReport=DNPAO_DTM.ExploreByLocation&rdRequestForwardingForm

Centers for Disease Control and Prevention. (n.d.-b). *Breastfeeding and infant feeding practices - Infant Feeding Practices Study II (IFPS II)*.

https://www.cdc.gov/breastfeeding/data/ifps/index.htm

Centers for Disease Control and Prevention. (2009). *Improving health literacy for older adults: Expert panel report 2009*. United States Department of Health and Human Services. https://www.hsph.harvard.edu/wp-content/uploads/sites/135/2012/09/cdc_hl_olderadults1.pdf

Centers for Disease Control and Prevention. (2017). *National immunization survey (NIS)*.

https://www.cdc.gov/breastfeeding/data/nis_data/index.htm

Centers for Disease Control and Prevention. (2019-a). *Breastfeeding and infant feeding practices - Breastfeeding*. https://www.cdc.gov/breastfeeding/data/ifps/index.htm

Centers for Disease Control and Prevention. (2019-b). *mPINC survey results: Maternity practices*. https://www.cdc.gov/breastfeeding/data/mpinc/results-tables.htm

Centers for Disease Control and Prevention. (2019-c). *The surgeon general's call to action to support breastfeeding*.

https://www.cdc.gov/breastfeeding/resources/calltoaction.htm

Centers for Disease Control and Prevention. (2020). *mPINC state reports: Maternity care*

practices. https://www.cdc.gov/breastfeeding/pdf/mpinc/states/2020/california-2020-mpinc-report-508.pdf

Centers for Disease Control and Prevention. (2020-a). *Breastfeeding report cards*. https://www.cdc.gov/breastfeeding/pdf/mpinc/states/2020/mpinc-national-report-2020-508.pdf

Centers for Disease Control and Prevention. (2020-b). *CDC and breastfeeding*. https://www.cdc.gov/breastfeeding/index.htm

Centers for Disease Control and Prevention. (2020-c). *COVID-19 and your health*. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/index.html

Chan, Z., Fung, Y., & Chien, W. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process? *Qualitative Report*, *18*(15), 1-9. http://www.nova.edu/ssss/QR/QR18/chan59.pdf

Coalition For Improving Maternity Services (n.d.). *The mother-friendly childbirth initiative*. https://birthnetwork.org/Resources/Documents/MFCI_english.pdf

Coreil, J. (2010). *Social and behavioral foundations of public health.* (2nd ed.). Sage.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Sage.

Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods* (5th ed.). Sage.

de Jersey, S. J., Mallan, K., Forster, J., & Daniels, L. A. (2017). A prospective study of

breastfeeding intentions of healthy weight and overweight women as predictors of breastfeeding outcomes. *Midwifery*, *53*, 20–27. https://doi.org/10.1016/j.midw.2017.07.002

De La Mora, A., Russell, D.W., Dungy, C.I., Losch, M., & Dusdieker, L. (1999). The Iowa Infant Feeding Attitude Scale: analysis of reliability and validity. *J Appl Soc Psychol. 29*(11):2362-2380. http://doi.org/10.1111/j.1559-1816.1999.tb00115.x

Demirci, J. R., & Bogen, D. L. (2017). An ecological momentary assessment of primiparous women's breastfeeding behavior and problems from birth to 8 weeks. *Journal of Human Lactation*, *33*(2), 285–295. https://doi.org/10.1177/0890334417695206

Dennis, C-L. (2003). The breastfeeding self-efficacy scale: psychometric assessment of the short form. *J Obstet Gynecol Neonatal Nurs*. *32*(6):734-744. https://doi.org/10.1177/0884217503258459

Dinour, L. M., Pope, G. A., & Bai, Y. K. (2017). Breast milk pumping beliefs, supports, and barriers on a university campus. *Journal of Human Lactation*, *31*(1), 156–165. https://doi.org/10.1177/0890334414557522

Dinour, L. M., & Szaro, J. (2017). Employer-based programs to support breastfeeding among working mothers: A systematic review. *Breastfeeding Medicine*, *12*(3), 121–141. http://doi.org/10.1089/bfm.2016.0182

Dinour, L. M., Rivera Rodas, E. I., Amutah-Onukagha, N. N., & Doamekpor, L. A. (2020). The role of prenatal food insecurity on breastfeeding behaviors: findings from the United States pregnancy risk assessment monitoring system.

International Breastfeeding Journal, *15*(1), 1–16. https://doi.org/10.1186/s13006-020-00276-x

Dhauvadel, A., Wagle, S., & Bhandari, T. (2019). Effects of nutrition education program in intention change for consuming healthy food among adolescents: A School-based study. *Journal of the Scientific Society*, *46*(2), 41–45. https://doi.org/10.4103/jss.JSS_22_19

Economic Policy Institute. (n.d.). *Millions of working women of childbearing age are not included in protections for nursing mothers*. https://www.epi.org/blog/break-time-for-nursing-mothers/

Employment Development Department – California. (n.d.). *Paid family leave - Mothers*. (n.d.). https://www.edd.ca.gov/disability/pfl_mothers.htm

Fernández-Cañadas Morillo, A., Duque, M. D., López, A. B. H., Miguel, C. M., Rodríguez, B. M., Prim, A. O., & Gabriel, M. A. M. (2017). A comparison of factors associated with cessation of exclusive breastfeeding at 3 and 6 months. *Breastfeeding Medicine*, *12*, 430–435. https://doi.org/10.1089/bfm.2017.0045

Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.

Fishbein, M., Ajzen, I. (2010) *Predicting and Changing Behavior: The Reasoned Action Approach*. Psychology Press.

Flynn, S. V., Korcuska, J. S., Brady, N. V., & Hays, D. G. (2019). A 15-year content analysis of three qualitative research traditions. *Counselor Education & Supervision, 58*(1), 49–63. https://doi.org/10.1002/ceas.12123

Francis, J., Eccles, M. P., Johnston, M., Walker, A. E., Grimshaw, J. M., Foy, R., Kaner, E. F. S., Smith, L., & Bonetti, D. (2004). *Constructing Questionnaires Based on the Theory of Planned Behaviour: A Manual for Health Services Researchers*. Newcastle upon Tyne, UK: Centre for Health Services Research, University of Newcastle upon Tyne.

Gay, M. C. L., Koleva, P. T., Slupsky, C. M., du Toit, E., Eggesbo, M., Johnson, C. C., Wegienka, G., Shimojo, N., Campbell, D. E., Prescott, S. L., Munblit, D., Geddes, D. T., Kozyrskyj, A. L., & InVIVO LactoActive Study Investig. (2018). Worldwide variation in human milk metabolome: indicators of breast physiology and maternal lifestyle? *Nutrients*, *10*(9). https://doi.org/10.3390/nu10091151

Gebrekidan, K., Fooladi, E., Plummer, V., & Hall, H. (2020). Enablers and barriers of exclusive breastfeeding among employed women in low and lower middle-income countries. *Sexual & Reproductive Healthcare: Official Journal of the Swedish Association of Midwives*, *25*, 100514. https://doi.org/10.1016/j.srhc.2020.100514

Gebrekidan, K., Plummer, V., Fooladi, E., & Hall, H. (2021). Attitudes and experiences of employed women when combining exclusive breastfeeding and work: A qualitative study among office workers in Northern Ethiopia. *Maternal and Child Nutrition, 17*(4). https://doi.org/10.1111/mcn.13190

Ghazanfarpour, M., Afiat, M., Babakhanian, M., Akrami, F., Kargarfard, L., Rajab Dizavandi, F., & Khadivzadeh, T. (2018). A systematic review of psychometric properties of Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF).

International Journal of Pediatrics, *6*(12), 8619-8630.

https://doi.org/10.22038/ijp.2018.33254.2935

Greene, S. W., & Olson, B. H. (2008). Development of an instrument designed to

measure employees' perceptions of workplace breastfeeding support.

Breastfeeding Medicine, *3*(3), 151-157. https://doi.org/10.1089/bfm.2008.0103

Greene, S. W., Wolfe, E. W., & Olson, B. H. (2008). Assessing the validity of measures

of an instrument designed to measure employees' perceptions of workplace

breastfeeding support. *Breastfeeding Medicine*, *3*(3), 159–163.

https://doi.org/10.1089/bfm.2007.0029

Griswold, M. K., Crawford, S. L., Perry, D. J., Person, S. D., Rosenberg, L., Cozier, Y.

C., & Palmer, J. R. (2018). Experiences of racism and breastfeeding initiation and

duration among first-time mothers of the Black Women's Health Study. *Journal*

of Racial and Ethnic Health Disparities, 5(6), 1180–1191.

https://doi.org10.1007/s40615-018-0465-2

Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied Thematic Analysis*. SAGE

Publications, Inc. https://doi.org/10.4135/9781483384436

Gurley-Calvez, T., Kapinos, K. A., & Bullinger, L. (2018). Effect of the Affordable Care

Act on breastfeeding outcomes. *The American Journal of Public Health*, *108*(2),

277–283. https://doi.org/10.2105/AJPH.2017.304108

Hahn, A., PhD, & Popan, E. M. (2020). *Theory of reasoned action (TRA)*. Salem Press

Encyclopedia.

Hardison-Moody, A., MacNell, L., Elliott, S., & Bowen, S. (2018). How social, cultural,

and economic environments shape infant feeding for low-income women: A qualitative study in North Carolina. *Journal of the Academy of Nutrition & Dietetics*, *118*(10), 1886. https://doi.org/10.1016/j.jand.2018.01.008

Harris, M. (2010). *Evaluating Public and Community Health Programs.* Jossey-Bass.

Hawkins, S. S., Noble, A., & Baum, C. F. (2018). Policy evaluation with incomplete data: assessing the Affordable Care Act breastfeeding provision. *American Journal of Public Health*, *108*(2), 164–166. https://doi.org/10.2105/AJPH.2017.304226

Hirani, S. A. A., Karmaliani, R., Christie, T., Parpio, Y., & Rafique, G. (2013). Perceived Breastfeeding Support Assessment Tool (PBSAT): Development and testing of psychometric properties with Pakistani urban working mothers. *Midwifery*, *29*(6), 599–607. https://doi.org/10.1016/j.midw.2012.05.003

Hossain, S., & Mihrshahi, S. (2022). Exclusive breastfeeding and childhood morbidity: a narrative review. *International Journal of Environmental Research and Public Health*, *19*(22), 14804. https://doi.org/10.3390/ijerph192214804

Humphreys, A. S., Thompson, N. J., & Miner, K. R. (1998). Assessment of breastfeeding intention using the Transtheoretical Model and the Theory of Reasoned Action. *Health Education Research, 13*(3), 331–341. https://doi.org/10.1093/her/13.3.331

Jantzer, A. M., Anderson, J., & Kuehl, R. A. (2018). Breastfeeding support in the workplace: the relationships among breastfeeding support, work–life balance, and job satisfaction. *Journal of Human Lactation*, *34*(2), 379–385. https://doi.org/10.1177/0890334417707956

Jarrett, D. A. (2017). *Breastfeeding Perceptions of First-Time African American Mothers*. [Doctoral dissertation, Walden University]. ScholarWorks. https://scholarworks.waldenu.edu/dissertations/3945

Jeihooni, A. K., Kashfi, S. M., & Harsini, P. A. (2019). Impact of an educational intervention on breastfeeding behaviour among pregnant women. *British Journal of Midwifery*, *27*(1), 33–42. https://doi.org/10.12968/bjom.2019.27.1.33

Karimi, Z., Mohebi, S., Afshar, N. , & Gharlipour, Z. (2019). Factors affecting exclusive breastfeeding: Theory of Planned Behavior. *Journal of Research & Health, 9*(3), 275–281. https://doi.org/10.29252/jrh.9.3.275

Keevash, J., Norman, A., Forrest, H., & Mortimer, S. (2018). What influences women to stop or continue breastfeeding? a thematic analysis. *British Journal of Midwifery*, *26*(10), 651–658. https://doi.org/10.12968/bjom.2018.26.10.651

Kim, J. H., Fiese, B. H., & Donovan, S. M. (2017). Breastfeeding is natural but not the cultural norm: a mixed-methods study of first-time breastfeeding, African American mothers participating in WIC. *Journal of Nutrition Education and Behavior, 49*(7), S151–S161. https://doi.org/10.1016/j.jneb.2017.04.003

Kim, J. H., Shin, J. C., & Donovan, S. M. (2019). Effectiveness of workplace lactation interventions on breastfeeding outcomes in the United States: An updated systematic review. *Journal of Human Lactation*, *35*(1), 100-113. https://doi.org/10.1177/0890334418765464

LaMorte, W. (2019). *The Theory of Planned Behavior*. https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories

Lau, C. Y. K., Lok, K. Y. W., & Tarrant, M. (2018). Breastfeeding duration and the

    theory of planned behavior and breastfeeding self-efficacy framework: A

    systematic review of observational studies. *Maternal & Child Health Journal,*

    22(3), 327–342. https://doi.org/10.1007/s10995-018-2453-x

Lauer, E. A., Armenti, K., Henning, M., & Sirois, L. (2019). Identifying barriers and

    supports to breastfeeding in the workplace experienced by mothers in the New

    Hampshire special supplemental nutrition program for women, infants, and

    children utilizing the total worker health framework. *International Journal of*

    Environmental Research and Public Health, *16*(4), 529.

    https://doi.org/10.3390/ijerph16040529

Laureate Education (Producer). (2015). *Social impact of a dissertation* [Video file].

    Baltimore, MD: Author.

Lee J. (2017). Supporting breastfeeding moms at work: how a doctor's note can make the

    difference. *Breastfeeding Medicine: The Official Journal of the Academy of*

    Breastfeeding Medicine, *12*(8), 470–472. https://doi.org/10.1089/bfm.2017.0107

Lennon, T., & Willis, E. (2017). Workplace lactation support in Milwaukee County 5

    years after the Affordable Care Act. *Journal of Human Lactation*, *33*(1), 214–219.

    https://doi.org/10.1177/0890334416679617

Lennon, T., Bakewell, D., & Willis, E. (2018). The breastfeeding employer supported

    time project: Using a mentor-mentee-based approach to establish workplace

    lactation support in Milwaukee County. *Journal of Human Lactation, 34*, 47–50.

    https://doi.org/10.1177/0890334417719246

Leon, L. F., Pinero, P. E., Arnedillo, S. S., Ruiz, F. C., Casado, M. R., & Benitez, L. M. (2019). Female employees' perception of breastfeeding-friendly support in a public university in Spain. *Public Health Nursing, 36*(3), 370.

Litwan, K., Tran, V., Nyhan, K., & Pérez-Escamilla, R. (2021). How do breastfeeding workplace interventions work?: a realist review. *International Journal for Equity in Health, 20*(1), 1–25. https://doi.org/10.1186/s12939-021-01490-7

Loftus, S., & Higgs, J. (2010). Researching the individual in workplace research. *Journal of Education & Work*, *23*(4), 377–388. https://doi.org/10.1080/13639080.2010.495712

Lyons, K. E., Ryan, C. A., Dempsey, E. M., Ross, R. P., & Stanton, C. (2020). Breast milk, a source of beneficial microbes and associated benefits for infant health. *Nutrients*, *12*(4), 1039. https://doi.org/10.3390/nu12041039

McCardel, R. E., & Padilla, H. M. (2020). Assessing workplace breastfeeding support among working mothers in the United States. *Workplace Health & Safety*, *68*(4), 182–189. https://doi.org/10.1177/2165079919890358

McClure, K. S. (2020). *Following ethical principles and guidelines. In Selecting and describing your research instruments*. (pp. 73–80). American Psychological Association. https://doi.org/10.1037/0000192-008

McDonald, D. R. (2019). Questionnaires and interviews in survey research. *Salem Press Encyclopedia of Health*.

Merkley, J. (2017). Related Bills - S.2122 - 115th Congress (2017-2018): Supporting Working Moms Act of 2017 [Webpage]. https://www.congress.gov/bill/115th-

congress/senate-bill/2122/related-bills

Mihajlovic-Madzarevic, V. (2010). *Appendix E: The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research. Clinical Trials Audit Preparation*, 233.

Miller, D. C., Salkind, N. J., Creswell, J. W., & Maietta, R. C. (2003). Phenomenology. In Handbook of Research Design & Social Measurement (pp. 151–154).

Monteiro, F. R., Buccini, G. S., Venancio, S. I., & da Costa, T. H. M. (2017). Influence of maternity leave on exclusive breastfeeding. *Jornal de Pediatria*, *93*(5), 475–481. https://doi.org/10.1016/j.jped.2016.11.016

National Conference of State Legislatures. (n.d.). *Breastfeeding State Laws*. http://www.ncsl.org/research/health/breastfeeding-state-laws.aspx

O'Connor, M., Allen, J., Kelly, J., Gao, Y., & Kildea, S. (2018). Predictors of breastfeeding exclusivity and duration in a hospital without Baby Friendly Hospital Initiative accreditation: A prospective cohort study. *Women and Birth*, *31*(4), 319–324. https://doi.org/10.1016/j.wombi.2017.10.013

Office of Disease Health and Promotion. (n.d.-a). *Healthy People 2020. Maternal, Infant, and Child Health*. https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-childhealth/objectives

Office of Disease Health and Promotion. (n.d.-b). *History of Healthy People*. https://health.gov/our-work/healthy-people-2030/about-healthypeople-2030/history-healthy-people

Office on Women's Health. (n.d.). *Breastfeeding and going back to work*.

234

https://www.womenshealth.gov/breastfeeding/breastfeeding-home-work-and-public/breastfeeding-and-going-back-work

Office on Women's Health. (2017-a). *Business Case for Breastfeeding.*

https://www.womenshealth.gov/breastfeeding/breastfeeding-home-work-andpublic/breastfeeding-and-going-back-work/business-case

Office on Women's Health. (2017-b). *Business Case for Breastfeeding – Easy Steps to Supporting Breastfeeding Employees (Guidebook).*

https://www.womenshealth.gov/files/documents/bcfb_easy-steps-to-supporting-breastfeeding-employees.pdf

Office on Women's Health. (2017-c). *Business Case for Breastfeeding Employees' Guide to Breastfeeding and Working (Guidebook).*

https://www.womenshealth.gov/files/documents/bcfb_employees-guide-to-breastfeeding-and-working.pdf

Office on Women's Health. (2017-d). *Making Breastmilk.*

https://www.womenshealth.gov/breastfeeding/learning-breastfeed/making-breastmilk

Olson, B., & Fulmer, I. (2017). *BESt: Breastfeeding and employment study survey. HipxChange*. http://www.hipxchange.org/BreastfeedingAndEmployment

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE.

Patton, S. R. (2019). *Parents' and Teachers' Perceptions of Parental Involvement.* [Doctoral dissertation, Walden University]. ScholarWorks.

https://scholarworks.waldenu.edu/dissertations/7419

Payton, C., Romney, M., Olson, B. H., Abatemarco, D. J., LaNoue, M., & Leader, A. E. (2018). Evaluation of workplace lactation support among employers in two Pennsylvania cities. *Business Horizons*. https://doi.org/10.1016/j.bushor.2018.10.002

Pounds, L., Fisher, C. M., Barnes-Josiah, D., Coleman, J. D., & Lefebvre, R. C. (2017). The role of early maternal support in balancing full-time work and infant exclusive breastfeeding: A qualitative study. *Breastfeeding Medicine*, *12*(1), 33–38. https://doi,org/10.1089/bfm.2016.0151

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Sage Publications.

Rimes, K., Oliveira, M. I., & Boccolini, C. (2019). Maternity leave and exclusive breastfeeding. *Revista De Saúde Pública*, *53*(10). https://doi.org/10.11606/s15188787.2019053000244

Rogelberg, S. (2007). *Theory of Reasoned Action/Theory of Planned Behavior*. In Encyclopedia of Industrial and Organizational Psychology (Vol. 1–2, pp. 806–807). SAGE Publications, Inc. https://doi.org/10.4135/9781412952651

Romano, J. L. (2015). *Prevention theories for behavior change. In Prevention psychology: Enhancing personal and social well-being*. (pp. 23–45). American Psychological Association. https://doi.org/10.1037/14442-003

Rubin, H. J., & Rubin, I. S. (2012). *Qualitative Interviewing: The Art of Hearing Data* (3rd ed.). SAGE.

Rudestam, K. E., & Newton, R. R. (2015). *Surviving your dissertation: A comprehensive Guide to Content and Process* (4th ed.). Sage.

Sachdeva, S. (2017). The Influence of Sacred Beliefs in Environmental Risk Perception and Attitudes. *Environment & Behavior, 49*(5), 583–600. https://doi.org/10.1177/0013916516649413

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed). SAGE.

Sánchez, C., Franco, L., Regal, P., Lamas, A., Cepeda, A., Fente, C., & Palou, M. (2021). Breast milk: a source of functional compounds with potential application in nutrition and therapy. *Nutrients*, *13*(3), 1026. https://doi.org/10.3390/nu13031026

Sathyanarayana Rao, T. S., Asha, M. R., Jagannatha Rao, K. S., & Vasudevaraju, P. (2009). The biochemistry of belief. *Indian journal of psychiatry, 51*(4), 239–241. https://doi.org/10.4103/0019-5545.58285

Schafer, E. J., Campo, S., Colaizy, T. T., Mulder, P. J., Breheny, P., & Ashida, S. (2017). First time mothers' breast-feeding maintenance: Role of experiences and changes in maternal perceptions. *Public Health Nutrition*, *20*(17), 3099–3108. https://doi.org/10.1017/S136898001700221X

Shabbir, F., Nina, H., Lim, Z. Y., Amelia, A. R., Ain, M. Z., N., Shareena, I., & Rohana, J. (2020). Expressed breast milk feeding: knowledge and attitude of employed mothers. *Medicine & Health* (University Kebangsaan Malaysia), *15*(1), 177–186.

Shepherd, L., Walbey, C., & Lovell, B. (2017). The role of social-cognitive and emotional factors on exclusive breastfeeding duration. *Journal of Human Lactation*, *33*(3), 606–613. https://doi.org/10.1177/0890334417708187

Sipsma, H. L., Ruiz, E., Jones, K., Magriples, U., & Kershaw, T. (2018). Effect of breastfeeding on postpartum depressive symptoms among adolescent and young adult mothers. *Journal of Maternal-Fetal & Neonatal Medicine*, *31*(11), 1442–1447. https://doi.org/10.1080/14767058.2017.1319351

Smith, J., Javanparast, S., & Craig, L. (2017). Bringing babies and breasts into workplaces: Support for breastfeeding mothers in workplaces and childcare services at the Australian National University. *Breastfeeding Review*, *25*(1), 45.

Snyder, K., Hansen, K., Brown, S., Portratz, A., White, K., & Dinkel, D. (2018). Workplace breastfeeding support varies by employment type: the service workplace disadvantage. *Breastfeeding Medicine: The Official Journal of the Academy of Breastfeeding Medicine*, *13*(1), 23–27. https://doi.org/10.1089/bfm.2017.0074

Spitzmueller, C., Zhang, J., Thomas, C. L., Wang, Z., Fisher, G. G., Matthews, R. A., & Strathearn, L. (2018). Identifying job characteristics related to employed women's breastfeeding behaviors. *Journal of Occupational Health Psychology*, *23*(4), 457–470. https://doi.org/10.1037/ocp0000119

Steurer L. M. (2017). Maternity leave length and workplace policies' impact on the sustainment of breastfeeding: Global perspectives. *Public health nursing* (Boston, Mass.), *34*(3), 286–294. https://doi.org/10.1111/phn.12321

Sulaeman, E.S., Murti, B., Setyawan, H., & Rinawati, S. (2018). Exclusive breastfeeding behavior model in rural central java, Indonesia: the application of theory of planned behavior. *Global Journal of Health Science*, *10*, 35.

https://doi.org/10.5539/gjhs.v10n10p35

Tangsuksan, P., Ratinthorn, A., Sindhu, S., Spatz, D. L., & Viwatwongkasem, C. (2020). Factors influencing exclusive breastfeeding among urban employed mothers: A case-control study. *Pacific Rim International Journal of Nursing Research*, *24*(1), 54–72.

Taylor, Y. J., Scott, V. C., & Danielle Connor, C. (2020). Perceptions, experiences, and outcomes of lactation support in the workplace: A systematic literature review. *Journal of Human Lactation, 36*(4), 657–672.

https://doi.org/10.1177/0890334420930696

Tenny, S., Brannan, G. D., Brannan, J. M., & Sharts-Hopko, N. C. (2020). *Qualitative Study. In StatPearls*. StatPearls Publishing.

The Public Health Benefits of Breastfeeding. (2017). *Perspectives In Public Health*, *137*(6), 307-308. https://doi.org/10.1177/1757913917734139

U.S. Breastfeeding Committee. (n.d.). *Supporting Moms at Work Act*.

https://www.usbreastfeeding.org/workplace-law-guide.html

U.S. Bureau of Labor Statistics. (2019). *Women in the labor force: a databook*.

https://www.bls.gov/opub/reports/womens-databook/2021/home.htm

U.S. Department of Health & Human Services. (n.d.). *About the ACA*.

https://www.hhs.gov/healthcare/about-the-aca/index.html

U.S. Department of Health and Human Services. (2013). *Centers for disease control and prevention strategies to prevent obesity and other chronic diseases: The CDC guide to strategies to support breastfeeding mothers and babies*.

http://www.cdc.gov/breastfeeding/pdf/BF-Guide-508.PDF

U.S. Department of Labor. (n.d.-a). *Work Hours*.

https://www.dol.gov/general/topic/workhours

U.S. Department of Labor. (n.d.-b) *Fact Sheet #73: Break Time for Nursing Mothers under the FLSA*. https://www.dol.gov/agencies/whd/fact-sheets/73-flsa-break-time-nursing-mothers

U.S. Department of Labor - *Wage and Hour Division - Section 7(r) of the Fair Labor Standards Act – Break Time for Nursing Mothers Provision*. (n.d.). https://www.dol.gov/whd/nursingmothers/sec7rflsa_btnm.htm

U.S. Health Resources & Services Administration. (n.d.). *Women's Preventive Services Guidelines*. https://www.hrsa.gov/womens-guidelines/index.html

U.S. Office of Personnel Management. (n.d.). *Guide for Establishing a Federal Nursing Mother's Program*. https://www.opm.gov/policy-data-oversight/worklife/news/2013/1/opm-publishes-new-guide-for-establishing-a-federal-nursing-mother's-program/

van Manen, M. (1990). *Researching lived experiences: Human Science for an Action Sensitive Pedagogy*. State University of New York.

Valizadeh, S., Hosseinzadeh, M., Mohammadi, E., Hassankhani, H., Fooladi, M. M., & Schmied, V. (2017). Addressing barriers to health: Experiences of breastfeeding mothers after returning to work. *Nursing & Health Sciences*, *19*(1), 105–111. https://doi.org/10.1111/nhs.12324

Vilar-Compte, M., Hernández-Cordero, S., Ancira-Moreno, M., Burrola-Méndez, S.,

Ferre-Eguiluz, I., Omaña, I., & Pérez Navarro, C. (2021). Breastfeeding at the

workplace: a systematic review of interventions to improve workplace

environments to facilitate breastfeeding among working women. *International

Journal for Equity in Health*, *20*(1), 1–21. https://doi.org/10.1186/s12939-021-

01432-3

Walden University. (n.d.). *Research ethics & compliance: Guides and FAQs*.

http://academicguides.waldenu.edu/researchcenter/orec/guides

Wallenborn, J. T., Perera, R. A., & Masho, S. W. (2017). Breastfeeding after gestational

diabetes: Does perceived benefits mediate the relationship?. *Journal of

Pregnancy*, *2017*, 9581796. https://doi.org/10.1155/2017/9581796

Walters, D. D., Phan, L. T. H., & Mathisen, R. (2019). The cost of not breastfeeding:

global results from a new tool. *Health policy and planning*, *34*(6), 407–417.

https://doi.org/10.1093/heapol/czz050

Whipps, M. D. M. (2017). Education attainment and parity explain the relationship

between maternal age and breastfeeding duration in U.S. mothers. *Journal of

Human Lactation*, *33*(1), 220–224. https://doi.org/10.1177/0890334416679385

Wienclaw, R. A. (2019). Interviews. *Salem Press Encyclopedia*.

Wood, K.M., & Qureshi, K. (2017). Facilitators and barriers for successful breastfeeding

among migrant Chuukese mothers on Guam. *SAGE Open Nursing, 3*.

https://doi.org/10.1177/2377960816688909

World Alliance for Breastfeeding Action [WABA]. (n.d.). *Employer*.

https://waba.org.my/employer/

World Health Organization. (n.d.-a). *Baby-friendly hospital initiative*.

http://www.who.int/nutrition/topics/bfhi/en/

World Health Organization. (n.d.-b). *Infant and young child feeding*.

https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding

World Health Organization (Ed.). (1981). *International code of marketing of breast-milk*

substitutes. https://www.who.int/nutrition/publications/code_english.pdf

World Health Organization & UNICEF. (2019). *Advocacy brief: Breastfeeding and*

family-friendly policies. https://www.who.int/publications/i/item/WHO-NMH-

NHD-19.23

World Health Organization & UNICEF. (2003). *Global strategy for infant and young*

child feeding.

https://iris.who.int/bitstream/handle/10665/42590/9241562218.pdf?sequence=1

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions:

epistemological, theoretical, and methodological differences. *European Journal of*

Education, 48(2), 311–325. https://doi.org/10.1111/ejed.12014

Zhuang, J., Bresnahan, M. J., Yan, X., Zhu, Y., Goldbort, J., & Bogdan-Lovis, E. (2018).

Keep doing the good work: Impact of coworker and community support on

continuation of breastfeeding. *Health Communication*. *34*(11), 1270–1278.

https://doi.org/10.1080/10410236.2018.1476802

Appendix A: Ten Steps to Successful Breastfeeding

The following was used from the Baby Friendly Hospital Initiative *Tens Steps to Successful Breastfeeding* (Baby-Friendly USA, n.d-a):

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.

2. Train all health care staff in the skills necessary to implement this policy.

3. Inform all pregnant women about the benefits and management of breastfeeding.

4. Help mothers initiate breastfeeding within one hour of birth.

5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.

6. Give infants no food or drink other than breastmilk, unless medically indicated.

7. Practice rooming in - allow mothers and infants to remain together 24 hours a day.

8. Encourage breastfeeding on demand.

9. Give no pacifiers or artificial nipples to breastfeeding infants.

10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth.

Source:

Baby-Friendly USA. (n.d.). *10 steps & international code*.

https://www.babyfriendlyusa.org/for-facilities/practice-guidelines/10-steps-and-international-code/

Appendix B: Interview Protocol

Interview Questions – Study Title: *Phenomenology of Workplace*

Breastfeeding Support Among Working Mothers in California

Interviewer/ Researcher: Kevin D. Cooper (Walden University Doctoral Candidate)

Interviewee: _____ (Designated Participant Non-identifier: _____)

    <u>Introductory Statement</u>: Thank you for being willing to participate in this interview and study. No personal information of yours will be used or kept in any way for the publication of this study.

    I am a doctoral student at Walden University and am focusing on Health Education and Promotion in this study. You might be wondering how or why I, a male, might be interested in the topic surrounding breastfeeding? Two main reasons are behind this study topic. First, I am married with 6 children, and my wife worked primarily full-time with all our children, with each one of those children breastfed and with differing challenges, hurdles, and successes. Thus, my wife experienced first-hand the challenges of trying to return to work and keep breastfeeding after maternity leave. This personal experience has pushed me to want to help improve the overall breastfeeding experience of working mothers which ultimately impacts the children. The second reason relates the fact that I am a Registered Dietitian and as such, my passion within my career has been focused on helping promote healthy living and improve ways to educate the future generations through our children. Research and evidence show that breastfeeding is one of the most healthy and nutritious things we can do for our children; not to mention, the benefits to the mother, the workplace, and the environment are immeasurable. All these put together has sparked my personal investment in helping improve the struggles mothers face with breastfeeding.

    The purpose behind this study relates workplace breastfeeding rates to a mother's perceptions and attitude. Literature has shown that a mother's decision to express milk while at work can be influenced by any health education promoting workplace breastfeeding and the amenities, benefits, and protections potentially available to her, and her *perception of* and *attitude towards* how the workplace supports her choice to express milk at work. Mothers returning to work will likely face the challenge of working for an organization which may or may not support breastfeeding in the workplace. Therefore, this relationship can either hinder work-breastfeeding practices, or support it. I hope to identify whether either health education or perception is having an impact on breastfeeding rates among working women in California.

Some of the questions within the interview are designed to ascertain some important factors about your background, experiences, and then similarities that you might have with the other participants. Discussing the relationships between factors you and the other participants might share can help shed light and understanding on the perception and attitude behind the workplace breastfeeding struggles so many mothers must encounter. These types of questions are typically called 'demographic' in nature. The study will not connect the answers you provide here with your personal information.

The interview should take between 45 to 75 minutes. If you need to stop the interview at any time, please let me know?

Thank you for being here. Do you have any questions before we begin?

Interview Questions:

1. Please affirm that you worked or intended to work in the state of California when you delivered and breastfed, or intended to breastfeed, at least one baby within the last 7 years. _____

2. How long ago was it when you had at least one baby mentioned in Question 1?

3. Do you feel breastfeeding is important? Please explain why or why not.

4. Can you describe the education level you have obtained?
    a. Less than high school graduate _____
    b. High school graduate _____
    c. Some college completed _____
    d. College graduate _____
    e. Some graduate school completed _____
    f. Graduate school completed _____

5. What was your age category when you delivered this most recent baby in California?
    a. Under 18yr
    b. 18-25yr
    c. 36-30yr
    d. 31-35yr
    e. 36-39yr
    f. 40yr or over
    g. Prefer not to say

6. Please describe your race
    a. Black
    b. White

      c. Hispanic
      d. Asian
      e. Bi-racial. Multi-racial
      f. Other _____
      g. Prefer not to say

7. What was your marital status when you breastfed or intended to breastfeed this baby in California?
      a. Married
      b. With the baby's father, not married
      c. Married, not with the baby's father
      d. Not with the baby's father
      e. Prefer to answer _____

8. How many children have you had? _____ How many of those children were breastfed while you were living in California?

9. What was your work or employment status when you had the baby?
      a. Employed full-time
      b. Employed part-time
      c. Employed part-time and a student
      d. Not employed
      e. Not employed and a student
      f. Prefer to not say
      g. Other _____

10. What was your occupation at the time of the workplace breastfeeding experience?

11. You mentioned you had (*fill in* ____) children. How many of those children breastfed, and for how long each? Can you briefly describe the workplace experiences with each?

12. How many of your children exclusively breastfed (EBF) up to 4-6 months? What was the primary reason the baby stopped EBF?

13. If you were working at a workplace before delivery of the baby, did you return to that same workplace after maternity leave (or the delivery of the baby)?

14. During maternity leave, did you intend to continue breastfeeding after returning to work? Please explain.

15. If you chose to not return to a workplace, can you explain why or what led to that decision?

16. How long was it after the birth of this baby that you returned to work, or would have?
    a. <3 months
    b. 3-4 months
    c. 4-5 months
    d. 5-6 months
    e. >6 months

17. In reference to the job in California relating this experience, did you have the job before starting maternity leave you returned too after, or was it a new position?

18. Due to the COVID-19 pandemic, did you work from home after completing maternity leave? And if yes, how do you feel this change in location influenced your breastfeeding goals, practices, and outcomes?

19. Can you describe your experience breastfeeding (expressing milk) while working in California?

20. After returning to work, what barriers hindered your breastfeeding practice at work?

21. Which barrier or challenge had the most impact, and can you explain why?

22. Do you feel that the COVID-19 pandemic had a positive or negative influence on your breastfeeding goals and outcomes? Please explain.

23. Would you describe your answer to the question whether 'yes' or 'no' your perception of your workplace breastfeeding support had a positive or negative influence on your breastfeeding practice?

24. After returning to work, what facilitators had a positive impact on your breastfeeding practice at work?

25. Did you have an idea or plan of how you wanted to feed your baby after returning to work? Can you explain?

26. Were you aware of your workplace's support and adherence to breastfeeding practices before returning/ starting there?

27. How did you feel about the workplace's support and adherence to these laws? Please elaborate.

28. Do you feel your manager had any impact on your decision to breastfeed at work? Please explain why.

29. Do you know if your workplace provides any Health Promotion and Education information, practices, or policies about workplace breastfeeding support to its employees? Describe your understanding.

30. Did your workplace provide any Health Promotion and Education materials or information regarding workplace breastfeeding support before, during, or after maternity leave? Describe your understanding.

31. Did the maternity facility where you delivered the baby provide any Health Promotion and Education information about workplace breastfeeding?

32. Had you worked with your workplace manager before returning to work? How would you describe your relationship with your manager?

33. How do you feel about your manager's knowledge and support of your choice to breastfeed at work?

34. Do you feel your manager had any impact on your decision to breastfeed at work? Please explain why.

35. Describe your perception of how well your manager supported your decision to breastfeed during work. What did or did not go well?

36. How do you feel about other women in the workplace who continue to breastfeed?

37. What things would you suggest your manager or workplace do to improve your breastfeeding experience at work?

38. Would you like to add any additional insights or experiences about your work-related breastfeeding?

Closing remarks: That concludes our interview. As I stated at the beginning, no personal identifiable information about you will be published in this study. Your information is completely confidential. If you think of anything else you would like to add to your interview responses, please let me know? Thank you very much for your time and willingness to share your experiences and insights about this important topic.

Appendix C: Additional Demographic Responses

Occupation at the time of the workplace breastfeeding experience

P1	PhD student
P2	State organization
P3	Bank manager
P4	Dietitian at community health facility
P5	Hospital clinical dietitian
P6	Dietitian/ Clinical health educator
P7	Hospital clinical dietitian
P8	State Public Health Dept. Program Manager

How many of children exclusively breastfed (EBF) up to 4-6 months? What was the primary reason EBF stopped?

	Y/N	Reason
P1	Y	Solids
P2	N	-
P3	Y	Solids
P4	N	0
P5	Y	Solids
P6	Y	Solids
P7	Y (x4)	Babies P7A & P7B Stopped producing; P7C Baby stopped; P7D still EBF
P8	Y	Still EBF

Returned to the same workplace after maternity leave?

P1	No, student
P2	Yes
P3	Yes
P4	Yes
P5	Yes
P6	Yes
P7	Yes
P8	Yes

Appendix D: Original Codes from First-Cycle Coding

Original Codes	
ALTERNATIVE PUMP OPTION TO INCREASE PUMPING ABILITY WHILE STILL WORKING	MIDDLE-AGED MOTHER
BARRIER TO GET APPT W/ IBCLC	MOST POSITIVE WHEN I HAD CONTROL OF WP BF
BARRIER WAS PUMP AND PUMPING EQ	NEGATIVE ATTITUDE CAUSED NEG PERCEPTION OF OTHER WOMEN TAKING ADVANTAGE
BF BENEFITS FOR BABY	NEGATIVE ATTITUDE TOWARDS BF
BF BENEFITS FOR MOTHER	NEGATIVE FEELINGS & EMOTIONS ABOUT BF SITUATION
BF GOAL TO REACH HIGH STANDARD	NEGATIVE MGR SUPPORT CAUSED POOR BF
BFH PROVIDES POSITIVE HEP	NEGATIVE PEER PRESSURE
BREASTFEEDING BENEFITS	NEGATIVE WP PERCEPTION
BREASTFEEDING COMPLICATIONS	NO PLAN FOR WP BF
COVID CAUSED IMPROVED BF WORK SITUATION	NO SUPPORT TO ASK FOR HELP
COVID CAUSED NEGATIVE ATTITUDE ABOUT BEING AT WORK PREGNANT OR BF	NOTHING WAS GONNA PREVENT ME FROM WP BF
COVID HAD NEGATIVE IMPACT ON WP BF	OPTIONS TO OVERCOME WP BARRIERS
COVID IN-PART IMPROVED BF DURATION	PACKET OF RESOURCES
DIDN'T ASK FOR SUPPORT FROM MY SUPPORT NETWORK	PEER SUPPORT
DIDN'T KNOW WAS GOING TO MANAGE ALL THE HURDLES AT WP	POSITIVE ATTITUDE TOWARDS BF

DIDN'T TALK WITH SUPPORT NETWORK ABOUT BF

POSITIVE COWORKER SUPPORT B/C WOMEN

EVIDENCE-BASED REASON TO STOP EBF

POSITIVE KNOWLEDGE OF SUPPORT BEFOREHAND

GOING TO WP WAS BARRIER TO DURATION

POSITIVE MGR SUPPORT

HAD A PLAN TO BF AT WORK

POSITIVE PERCEPION OF WP SUPPORT B/C MGR

HARD TO FOCUS ON BF SUPPORT MATERIALS WHEN PROVIDED AT POOR TIMING

POSITIVE PERCEPTION OF WP BF B/C CONTROLLED MY OWN BF

HEP - EDUCATION

POSITIVE PERCEPTION OF WP OVERALL

HEP FROM MEDICAL NOT WORK

POSITIVE PERCEPTION OF WP SUPPORT D/T LAWS

HIGHER EDUCATION

POSITIVE SUPPORT NETWORK

INTIMIDATING

POSITIVE WP EXPERIENCE B/C OF SUPPORT AMENITIES

KNOWLEDGE OF BF BENEFITS A FACILITATOR

PUMPING BREAKTIME NOT ADEQUATE

KNOWLEDGE OF BF BENEFITS MOTIVATED DURATION

REGRET FOR NOT BF LONGER

KNOWLEDGE OF WP SUPPORT FROM COWORKERS ONLY

SHORT COMMUTE EQUALED LESS WP PUMPING AND STRESS

LACK OF HEP FROM WORKPLACE

SPECIFIC JOB POSITION MADE IT EASIER TO BF AT WORK

LACK OF SUPPORT BASED ON LAWS

STRATEGIES TO OVERCOME WP BARRIERS

LACK OF SUPPORT NETWORK

VAGUE KNOWLEDGE OF BF LAWS

LACK OF WP AMENITIES TO FACILITATE BF

VAGUE KNOWLEDGE OF WP SUPPORT

LACKING KNOWLEDGE OF HOW-TO BF CORRECTLY	WORK FROM HOME
LACTATION CONSULTANT IN HOSPITAL TOOK TOO LONG TO COME	WORK MODALITY CHANGE IMPROVED BF EXPERIENCE
LACTATION CONSULTANT SUPPORT	WORKPLACE OPENLY NOT SUPPORTING ME
LACTATION ROOM POSITIVE	WORKPLACE SUPPORT
LACTATION ROOM PROBLEM/ LACKING	WP BARRIER
LATCHING PROBLEMS	WP BARRIER CAUSED UNCOMFORTABLE FEELINGS
LONG COMMUTE TO WORK CAUSED BARRIER	WP BF A HARD CHOICE
LONGER DURATION CAUSED NEGATIVE ATTITUDE	WP BF AMENITIES TO SUPPORT
LONGER DURATION D/T IMMUNITIES	WP IMPROVEMENT SUGGESTIONS
LONGER DURATION D/T POSITIVE PERCEPTION OR EXPERIENCE	WP MEETINGS CAUSED BARRIER
MEDICAL PROFESSIONAL/ FACILITY SUPPORT	WP PUMPING CAUSED CLEANING AND LOTS OF PREP MADE IT A STRESSOR
MGR POSITIVE SUPPORT FACILITATOR	WP SUPPORT BASED ON LAWS
MGR RELATES AS BF WOMAN	WP SUPPORT NOT PREPARED TO SUPPORT