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## Workplace Management Knowledge and Support for Employee Breastfeeding Practices

Elizabeth Heimer  
*Minnesota State University, Mankato*

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WORKPLACE MANAGEMENT KNOWLEDGE AND SUPPORT FOR  
EMPLOYEE BREASTFEEDING PRACTICES

By:

Elizabeth Heimer

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN  
COMMUNITY HEALTH EDUCATION

Minnesota State University, Mankato

Mankato, MN

May 2017

March 16<sup>th</sup>, 2017

Workplace Management Knowledge and Support for Employee Breastfeeding  
Practices

Elizabeth Heimer

This Thesis has been examined and approved by the following members of the  
student's committee.

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### Abstract

Breastfeeding has many benefits to both mother and child. It also happens to have benefits to workplaces who support breastfeeding. Research shows that lack of environmental support of breastfeeding at the workplace may discourage women from exclusively breastfeeding the recommended amount of time of SIX months (American Academy of Pediatrics, 2012). To investigate the management knowledge and workplace breastfeeding support services, an online survey was sent out employees in management positions at selected workplaces in Faribault, Martin and Watonwan counties in Minnesota. Of the 98 selected participants, only 16 participants completed the survey. The study aimed to discover whether there was a relationship between management knowledge of breastfeeding benefits and their workplace breastfeeding support services.

The results of this study showed a moderate positive relationship between management knowledge of breastfeeding benefits and their workplace support for breastfeeding with a correlation of,  $r(14) = .543, p = .036$ . The participants scored an average of 5.2 of six questions on the knowledge portion of the survey and an average of 4.1 out of 17 on the workplace breastfeeding support services.

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## CHAPTER 1

### Introduction

#### Introduction

Breastfeeding is a critical element in health promotion. Past studies have repeatedly proved the health benefits of extending breastfeeding for at least six months and preferably combined with soft foods up to two years (American Academy of Pediatrics, 2012). With the lack of time off for maternity leave that many women face at the workplace, mothers return to work while breastfeeding, which in turn, can impede on the breastfeeding process (American Academy of Pediatrics, 2012). The Minnesota State Statute: Nursing Mothers: 181.939 is meant to address policy, system, and environmental factors that women face at the worksite to reduce barriers to breastfeeding. The Minnesota State Statute 181.939: Nursing Mothers states that:

- (a) An employer must provide reasonable unpaid break time each day to an employee who needs to express breast milk for her infant child. The break time must, if possible, run concurrently with any break time already provided to the employee. An employer is not required to provide break time under this section if to do so would unduly disrupt the operations of the employer.
- (b) The employer must make reasonable efforts to provide a room or other location, in close proximity to the work area, other than a bathroom or a toilet stall, that is shielded from view and free from intrusion from coworkers and the public and that includes access to an electrical outlet, where the employee can express her milk in privacy. The employer would be held harmless if reasonable effort has been made.
- (c) For the purposes of this section, "employer" means a person or entity that employs one or more employees and includes the state and its political subdivisions.
- (d) An employer may not retaliate against an employee for asserting rights or remedies under this section. (Nursing Mothers, 2016, para. 1)

The topic of breastfeeding at the worksite should be further researched to understand the extent of workplace breastfeeding support services for employee

breastfeeding practices. The purpose of this study is to provide insight on the relationship between managements' knowledge on breastfeeding and workplace breastfeeding support services at Faribault, Martin & Watonwan County workplaces.

### **Benefits of Breastfeeding**

Breastfeeding has many benefits for both mother and child. The benefits for infants consist of the composition of the macronutrients in breastmilk, disease protection, the digestive enzymes for, colostrum levels, and mother-infant bonding (New York Department of Health, 2015). The benefits for mothers include mother-infant bonding, reduced risk of cancer, physiological benefits such as burning more calories to burn excess "baby weight," and financial benefits (Dermer, 2001). The significance of breastmilk is that it continues to change in nutrients as an infant grows to fit (U.S. Department of Agriculture Food and Nutrition Services, 2016). Colostrum levels will adjust to "mature milk," which has the right number of macronutrients for the growing infant, unlike formula or other substitutes (U.S. Department of Health and Human Services, 2014). Colostrum also has antibodies and nutrients to protect babies from infection (U.S. Department of Health and Human Services, 2014). Another benefit is that breastmilk provides nutrients to help an infant's digestive system (U.S. Department of Health and Human Services, 2014). In contrast, formula does not provide infants with these same components to an infant's diet. Formula, additionally, can be difficult for infants to digest due to the fact that formula is made from cow's milk (New York State Department of Health, 2010).

Research suggests that breastmilk may prevent or reduce infants' risk to the following illnesses: asthma, childhood leukemia, childhood obesity, ear infections,

eczema, diarrhea and vomiting, lower respiratory infections, necrotizing enterocolitis, Sudden Infant Death Syndrome (SIDS), and Type 2 diabetes (Jackson & Nazar, 2006).

Mothers also have many benefits. These include reduced risk of certain diseases, particularly, breast cancer. This is because when a women's body makes milk, it limits a breast's cells ability to "misbehave." According to Colditz, Baer and Tamimi (2006), breastfeeding also leads to fewer menstrual periods resulting in lower estrogen levels, which studies have shown that a woman's risk of breast cancer is related to hormones produced in the ovaries (estrogen and progesterone) (As cited in National Cancer Institute, 2016). Women have a one in eight chance of developing breast cancer and it is the leading cancer in women in the United States (CDC, 2016a). Other diseases that mothers may have a reduced risk of is ovarian cancer, type II diabetes, rheumatoid arthritis, and cardiovascular disease (American Academy of Pediatrics, 2011).

Breastfeeding also burns extra calories to help mothers to take off "baby weight" gained during pregnancy from lactations high energy use (Hatsu, McDougald, & Anderson, 2008). This can help reduce the risk of mothers becoming overweight or obese after giving birth, which in turn, reduces the risk of obesity-related health problems stated above, such as type II diabetes and cardiovascular disease (Moreno, Furtner & Rivara, 2011).

There are some physiological consequences that are beneficial for breastfeeding mothers, as well. For example, oxytocin, a hormone which is produced in the mother's body during breastfeeding, prevents hemorrhaging and uterine involutions after giving birth (Dermer, 2001). Another physiologic effect is that breastfeeding keeps mothers at amenorrhea for many months, which helps preserve the iron in the body (Dermer, 2001).

### **Problem Statement**

While initially, 89% of mothers start out breastfeeding in Minnesota, only 59% of mothers continue breastfeeding for 6 months (Centers for Disease Control and Prevention, National Center for Chronic Disease and Health Promotion, Division of Nutrition, Physical Activity and Obesity, 2014). According to The Surgeon General's *Call to Action to Support Breastfeeding* (Office of the Surgeon General, 2011), the workplace appears to be a significant barrier to breastfeeding in that mothers' state they stop breastfeeding because of an unsupportive work environment. A lack of supportive breastfeeding policies and practices implemented within worksites appears to have a great impact on the duration of breastfeeding, especially among women working in low-income positions (Office of Surgeon General, 2011). "Many women are choosing to discontinue breastfeeding early because of concerns about maintaining lactation within the work environment" (U.S. Department of Health and Human Services, Health Services and Resources (HRSA) & Maternal and Child Health Bureau, 2008, p.5).

### **Significance of Problem**

Breastmilk is an important component in an infant's early years of life and without it, infants may be at higher risk for infectious disease, asthma, obesity, diabetes, nutrition, and bonding between mother and child (Moss & Yeaton, 2014). In 2011, 79% of infants were breastfed, but only 49% of infants were still breastfeeding at six months and only 27% at twelve months (Centers for Disease Control and Prevention, National Center for Chronic Disease and Health Promotion, Division of Nutrition, Physical Activity and Obesity, 2014). The American Academy of Pediatrics recommends that

exclusive breastfeeding last at least 6 months and “continue for at least twelve months and thereafter, as long as mother and baby desires” (2012, p. 1).

Women are the fastest growing segment of the workforce and fifty-five percent of women with children under three are employed, according to the U.S. Department of Health and Human Services (2008). According to the U.S. Bureau of Labor Statistics, about 70% of mothers are currently employed (2016). Because the majority of mothers are employed outside of the home, it is important to enforce these measures for the health of mothers and infants. One-third of new mothers return to work within three months, while two-thirds of new mothers return to work within six months (Shealy, Benton-Davis & Grummer-Strawn, 2005). Many new mothers find that the work environment is not conducive towards breastfeeding due to lack of support from administration, lack of financial support, inflexible break time, and lack of a private room (Murtagh & Moulton, 2011). If the environment is not supportive to pumping, it can be difficult for mothers to express milk. If the room is not aesthetically pleasing, comfortable, and/or private, mothers may have trouble pumping, as well (Murtagh & Moulton, 2011).

### **Purpose**

The purpose of this research was to determine if management knowledge of breastfeeding benefits was related to workplace breastfeeding support services provided.

### **Questions to be Answered**

The research questions to be answered for this study are as follows:

1. What is management’s knowledge of breastfeeding benefits?

2. To what extent does management provide environmental support for breastfeeding to promote breastfeeding at the workplace, as identified by management?
3. What is the relationship between management's support for breastfeeding and their knowledge of breastfeeding benefits?

### **Limitations**

One limitation to this research was that the selected participants, managers at worksites, can be very busy and some may not find the time to do the survey. Their main goals are typically to complete their own work, which may be vast and overwhelming, as it is. Overall, the researcher only had 16 respondents with completed surveys out of the 98 surveys that were sent out, which is only a 16% response rate.

Time was another limitation to this study. The research was to be completed by the Spring of 2017, which limits time for data collection.

There was potential for the researcher to know the participants or have had previous contact with a person from the workplace, since the researcher is employed in that geographic area. This may have increased the likelihood or unlikelihood of the person filling out the survey or may have even impacted the type of responses.

Since there is a Minnesota State Statute requiring worksites to provide flexible break times and private rooms to express or pump milk, there was a potential for dishonest responses. The respondent may have answered questions in a social desirable manner.

Participants were not randomly selected in this study. The instrument also adopted from three different surveys and no pilot test was conducted.

Finally, the researcher cannot guarantee that a person in a management position had filled out the survey. The researcher tried to minimize this limitation by stating on the survey who should be filling it out (management) and then, again, asking participants to indicate their job position on the survey.

### **Delimitations**

The scope of this study was limited to the South Central Minnesota counties of Faribault, Martin, and Watonwan. The data was collected through a convenience sample chosen through listings on the city Chamber of Commerce websites during the month of February 2017, as the research had to be completed by March 2017. The types of workplaces selected were education, government and law, food management, retail, lodging, and business and finances. The choice of instrument was an online survey, so this excluded workplaces who did not have a public email.

### **Assumptions**

One assumption of this study was that the research instrument was valid because it included previously reviewed survey questions (Tanash, 2014; Thumm, 2011; and Novais & Fenick, 2015). Another assumption made was that participants answered truthfully to the questions and that the participants were representative of South Central Minnesota county worksites identified. The participants held positions of management in administration, human resources, or managers at the workplace. The participants of this study understood that their confidentiality was to be preserved and they could have withdrawn at any time from the survey with no ramifications as stated on the consent form.



### Definition of Terms

- Exclusive breastfeeding: Breastmilk only, excluding water, other liquids, and other foods (World Health Organization, 2016).
- Lower respiratory infections: Pneumonia, bronchitis, asthma, chest infection and pertussis-like symptoms (Munywoki et al., 2013, para. 5).
- Pumping: Expressing milk through a breast pump to store breast milk (CDC, 2016b).
- Management: Managers, supervisors, human resources, and administrators.
- South Central Minnesota: Minnesota counties of Faribault, Martin, and Watonwan.
- Colostrum: Sticky yellow substance low in fat, and high in carbohydrates, protein, and antibodies making it high in nutrition for newborns. Colostrum is extremely easy to digest and can help newborns pass stool (La Leche League International, 2016b).

## CHAPTER II

### Review of Literature

#### Introduction

Reentering the workplace soon after giving birth has shown to have significant effects on breastfeeding. Women who return to work within three months of giving birth are averaging at least 5 weeks less of breastfeeding duration than mothers who do not return to work within that time (Lubold, 2016). The World Health Organization (2016), recommends that women breastfeed exclusively for at least 6 months and continue for to up to two years. According to Abdulloeva and Eyler (2013), only 15% of American women adhere to this recommendation. While initially, 89% of babies start out breastfeeding in Minnesota, only 59% of mothers continue breastfeeding after 6 months (Centers for Disease Control and Prevention, National Center for Chronic Disease and Health Promotion, Division of Nutrition, Physical Activity and Obesity, 2014). According to The Surgeon Generals Call to Action to Support Breastfeeding (Office of the Surgeon General, 2011), employment is a significant barrier for breastfeeding that mothers' state they stop breastfeeding because of an unsupportive work environment. Worksites without supportive breastfeeding policies and practices appears to have a great impact on the duration of breastfeeding, especially among women working in low-income positions (Office of Surgeon General, 2011).

In 2014, the Affordable Care Act amended the Fair Labor Standards act to require that worksites provide reasonable break time and a private room, other than a bathroom, for new mothers to express milk concurrent with their break time (Nursing Mothers, 2016).

This statute was amended to ensure that new mothers working outside the home were supported during the breastfeeding process.

The *Healthy People 2020* also strives to have stronger lactation programs at workplaces. Objectives include:

- MICH-21 Increase the proportion of infants who breastfed (Office of Disease Prevention and Health Promotion, 2009).
- MICH-22 Increase the proportion of employers that have worksite lactation support programs (Office of Disease Prevention and Health Promotion, 2009).

The topics covered in this chapter are the benefits of supporting breastfeeding in mothers, infants and workplaces.

### **Benefits**

There are many benefits of breastfeeding to mother, child, and the workplace. Regarding breastfeeding, there are psychological, nutritional, and disease protection benefits for infants. For mothers, there are psychological, nutritional, financial, reduced risk of certain diseases, and other benefits from breastfeeding. Lastly, for the worksite, there are financial and better work engagement benefits of continued breastfeeding (National Business Group on Health, 2009). The following segments will explain the benefits of a supportive breastfeeding worksite in more detail.

**Psychological.** One of the many benefits of breastfeeding is the attachment between mother and infant. According to Britton, Britton, and Gronwaldt (2006), mothers who breastfeed with skin-to-skin contact are more sensitive in interactions with their children than those who bottle feed. The American Academy of Pediatrics (2015) states

that the skin-to-skin contact initiated while breastfeeding resembles the feeling of being in the womb for the infant (As cited in American Academy of Pediatrics, 2011). The sense of continuity may be what the infant needs to adjust properly to the new environment. Breastfeeding is also related to developmental factors in infants. Sensory and cognitive development have found to be increased for babies who are breastfed compared to babies who are bottle fed (WHO, 2016). This was determined by studying cognitive scores of infants who were breastfed and infants who were not (Raju, 2011). Infants were measured at different points in their life whose who were breastfed had a consistently higher IQ than those who were not breastfed (Raju, 2011). Sensory development is said to be “enhanced by the direct physical contact each day with the infant’s mother involving eye contact and the mother speaking to the infant which can then be reciprocated by the infant through visual, auditory, and visual cues” (Raju, 2011, para. 10).

**Nutrition.** The WHO (2016), claims that breastmilk provides the energy and nutrients infants need for the first few months of life. Infants need a complex composition of nutrients to receive optimal benefits. The macronutrients (protein, carbohydrates, and fats) in breastmilk are vital components for human growth. The composition of these macronutrients vary by preterm and term milk, with preterm milk being higher in fat and protein content (Ballard & Marrow, 2014). The macronutrients continue to change within the breastmilk after four months postpartum with the characteristics of the milk depending on “maternal body weight for height, protein intake, parity, return of menstruation, and nursing frequency” (Ballard & Marrow, 2014, para. 7).

Delaying soft foods for at least six months, as recommended by the American Academy of Pediatrics, is shown to reduce risk of childhood obesity (Moss & Yeaton,

2014). Better yet, incorporating soft foods with breastfeeding after six months decreased childhood obesity even more (Moss & Yeaton, 2014). A possible reason for this health benefit is that infants learn appetite control through breastfeeding and continue that control after cessation (Moss & Yeaton, 2014). Childhood obesity can lead to lifelong obesity, raising the risk and/or resulting in some of the most common causes of morbidity and mortality, such as cardiovascular disease, type 2 diabetes, high blood pressure, stroke, metabolic syndrome, certain cancers, sleep apnea, reproductive problems, and osteoarthritis, to name a few (Stuebe, 2009).

**Antibodies.** Newborns and infants have a very fragile immune system, so antibodies in breastmilk play an important role in disease prevention. According to La Leche League International (2016a), a child's immune system will not mature for the first few years of life. This is another reason for extending breastfeeding for mothers returning to the workplace. The immunity that the mother has against illnesses is transferred to the infant through breastmilk to protect against those same diseases. These antibodies protect from diseases, reduce infant mortality, and provide a quicker recovery during illness (WHO, 2016). According to Xavier, Rai, and Hegde (2011), there is strong evidence that some of these diseases that infants are susceptible to and protected against with antibodies in breastmilk include bacterial meningitis, bacteremia, diarrhea, respiratory tract infection, otitis media, and sepsis.

**Benefits for Mother.** Expression and storage of breastmilk for mothers also has health benefits, which can be overlooked. Breastfeeding mothers experience many short-term and long term health benefits. One of the short term benefits is that the suckling from the infant can result in contractions in the uterus, which prevents postpartum hemorrhaging

(Dermer, 2001). The return of menstrual periods is also delayed, resulting in conservation of iron sources and acting as a natural contraceptive to prevent pregnancy while breastfeeding in the first six months (Dermer, 2001).

Long term health effects for mothers are also present from breastfeeding. One of which is protection from osteoporosis later in life (Le Leche League International, 2016a). Another benefit of breastfeeding includes weight loss of weight gained during pregnancy (Stuebe, 2009). There is also a reduced risk of ovarian and breast cancers for mothers who breastfeed (Dermer, 2001).

Financial benefits for mothers are the expenses saved from breastfeeding, which include: medicine for sick infants/mothers, days off of work, and the cost of formula. The lessened financial burden from the above mentioned may be a stress reduction for families. According to Choi (2008), stress is related to financial burdens and by reducing financial burden, there can be less stress. According to the Center for Disease Control and Prevention (2015), over 2 billion dollars in medical costs could be saved if breastfeeding suggestions were met.

### **Workplace Support**

According to Jones (2002), a common reason that women stop breastfeeding is because they return to work. If a new mother feels stigmatized by employers or other employees, it may reduce her likeliness to use her break to pump her breastmilk (U.S. Department of Health and Human Services, 2014). Tengku, Ismail, Sulaiman, Wan Muda & Nik Man (2012), agreed and suggested that going back to work may not be the issue. That is, women may stop breastfeeding because they feel unsupported and stigmatized by employers and other employees. To support mothers, management needs to help mothers

be aware of their options for provided breaks and locations to pump breastmilk or breastfeed, as well as to encourage breastfeeding in the workplace (Murtagh & Moulton, 2011). Supportive management means that employers understand the needs of breastfeeding employees and are able to provide resources to breastfeeding support. Management who support breastfeeding will be kept knowledgeable about how often a mother needs to pump and will make accommodations in the work environment to support breastfeeding, including making sure that there is a sanitary and comfortable room with a sink, outlets, a chair, a lock on the door, a hospital grade pump, and other accommodating items (Abdulloeva & Eyler, 2013).

Since 2010, federal law requires employers to provide reasonable break times and places for employees to express breastmilk at work (U.S. Department of Labor, 2010). The law states the room should be private and not a bathroom stall. This law is active for all 50 states, though some states have greater protection for breastfeeding employees under their state statutes. If workplaces do not make reasonable efforts to make these accommodations, they will be held accountable for “damages” that occur, according to the U.S. Department of Labor (2010). Nursing Mothers (2016) includes the statement,

“The employer must make reasonable efforts to provide a room or other location, in close proximity to the work area, other than a bathroom or a toilet stall, that is shielded from view and free from intrusion from coworkers and the public and that includes access to an electrical outlet, where the employee can express her milk in privacy. The employer would be held harmless if reasonable effort has been made (Nursing Mothers, 2016, para. 3)”

Another dilemma is that it may not be feasible for employers to give a reasonable break time roughly every three hours (typically the time frame mothers need to express milk), because it does not coincide with normal break times or is not consistent with the

employee's normal schedule to be productive (Network for Public Health Law, 2014). Lastly, employers may need help supporting breastfeeding and there are no universal requirements for insurance to cover lactation support or breast pumps at the worksite (American Public Health Association [APHA], 2013).

The U.S. Health Sources and Services Administration created a resource kit for workplace breastfeeding support services for employers to assist them in overcoming some of the barriers (U.S. Department of Health and Human Services, 2014). These breastfeeding support services kits include policy guidance, workplace breastfeeding assessment forms, timelines for implementation of lactation support programs, promotional items for breastfeeding, and resource guides on how to receive further help or services (U.S. Department of Health and Human Services, 2014). Employers can support breastfeeding at the workplace by advertising their breastfeeding policy, being aware of new and soon-to-be mothers, and providing information on best techniques for breastfeeding/nutritional information on the importance of breastmilk, paid leave, and how to best store breastmilk. According to Skafida (2012), more flexible working conditions and breastfeeding support policies relate positively with breastfeeding duration.

Workplace breastfeeding support services doesn't only involve policy, system, and environmental support. It also requires the mother to prioritize breastfeeding. There may be an ethical dilemma that mothers must decide to be "the good mother" or "the good worker." This dilemma can be mitigated by workplaces that support mothers who breastfeed. The workplace designated room for breastfeeding/lactation and flexible policies to allow breacktime for new mothers may help combine these two ideas of "the



good mother” and “the good worker” (Payne & Nicholls, 2009). Other potential supports to increase rates of breastfeeding duration for working mothers are more flexible hours and/or offer onsite childcare (Lubold, 2016).

**Financial Benefits for Workplaces.** Employers also see benefits when they support breastfeeding mothers. It has been found that the payoff for breastfeeding support services is significant, including more satisfied and loyal employees, as well as, cost savings (U.S. Department of Health and Human Services, 2008). These costs include keeping experienced employees employed, reduction in sick time given to both mom and dad for their infant’s illness, and lower health care and insurance costs (U.S. Department of Health and Human Services, 2008). These cost savings could be a major benefit to worksites, since present and healthy employees contribute to workplace productivity (U.S. Department of Health and Human Services, 2008). Supporting new mothers can also enhance the organization’s public image (United States Breastfeeding Committee, 2016).

**Employee Attitudes.** Previous evidence supports that breastfeeding mothers may fear fellow employee reactions of breastfeeding at the workplace (Brown, Poag & Kasprzycki, 2001). However, Suyes, Abrahams, and Labbok (2008), found the contrary. Their research on employees’ attitudes of breastfeeding support found supportive attitudes of employees towards women breastfeeding at the workplace. It was also found that exposure to a co-worker who had breastfed previously correlated with positive attitudes towards breastfeeding support services at the workplace (Suyes, Abrahams & Labbok, 2008).

## Summary

This review of literature highlights the recommended support workplaces need to increase breastfeeding rates for working mothers. For workplaces offering flexible hours, supportive policies and social supports, and a designated area for women to lactate, breastfeeding employees report higher rates of breastfeeding duration (CDC, 2005). The chapter covered the benefits of breastfeeding for mothers, children, and workplaces. For women, this included the psychological impact, physiological impact, financial impact, and disease prevention. Benefits for infants included nutrition, disease prevention, psychological impact, and developmental affects. Lastly, for workplaces, benefits include financial benefits, worker productivity and employee loyalty.

## CHAPTER III

### Methodology

#### Introduction

This chapter describes the methodology of the research design, the data collection instrument, the data collection techniques and analysis, and ethical considerations. In this research, a survey was used to measure whether there was a relationship between management knowledge of breastfeeding benefits and workplace breastfeeding support services.

#### Research Design

This study used a cross-sectional quantitative design to measure employer knowledge of breastfeeding and workplace breastfeeding support services. The research aimed to determine if there was a link between the independent variable (knowledge of breastfeeding support) and the dependent variable (workplace breastfeeding support services).

The researcher utilized a convenience sample using listings from the cities' chamber of commerce. The researcher only used workplaces with public emails. The study's sample included managers at workplaces from South Central Minnesota, which includes the counties of Faribault, Martin, and Watonwan. The chosen categories of workplaces from the chamber of commerce listings include education institutions, government and law centers, retail, food management, lodging, and business and financial institutions. The researcher emailed an invitation to participate in the study to the public email addresses and requested that the email be forwarded to the appropriate

manager. In the email invitation, the researcher then introduced the scope of the study and presented the consent form prior to the survey.

### **Data Collection Instrument**

The instrument that was used for the study was a survey developed by the researcher using questions from prior surveys (Tanash, 2014; Novois & Fenick, 2013; (Thumm, 2011). The survey had six questions assessing breastfeeding. The knowledge questions included true, false or unsure questions. The highest possible score in this section was six and the lowest was zero. The purpose of adding the “unsure” option was to try to eliminate the possibility of participants guessing the answer if they did not know. An incorrect answer and an unsure answer were both coded as incorrect. A sample question from this section of the survey was, “breastmilk contains all essential nutrients for an infant child.”

To measure breastfeeding support services offered to employees at the workplace, participants were asked to select from a list of the breastfeeding support services offered to their employees. Employee options included paid maternity leave, private room to pump/breastfeeding, and access to a lactation consult to name a few.

An additional support service question included asking participants about the breastfeeding benefits provided through company insurance. Options included covers breastfeeding equipment, breastfeeding services, and one of the above. The highest possible score for the entire support section was 17 and the lowest was zero.

The survey responses were confidential and anonymous. This was stated on the survey and the consent form. At the end of the survey, information was included on how to seek additional assistance on workplace breastfeeding support services referring

participants to the Statewide Health Improvement Services, which provides free assistance and funding. The survey took approximately ten to fifteen minutes to complete with eleven questions. See Appendix D for survey

### **Data Collection Techniques and Data Analysis**

The data was collected during a two-week period in February 2017. The limited timeframe for data collection was due to the submission date of the research project (April, 2017). The researcher found workplace public email addresses from each cities' Chamber of Commerce in Faribault, Martin, and Watonwan counties. The researcher then sent out an introductory email to each workplace stating the purpose of the survey and a link to access the survey. An online consent form was included at the beginning of the survey and stated that by completing the survey, the participant consented. The survey identified that staff in management positions were requested to complete the survey. The participants completed and submitted their surveys online via Minnesota State University, Mankato Qualtrics software. Confidentiality and anonymity was ensured by keeping these results private through the Qualtrics system, where only the researcher could access data.

The descriptive data was processed using SPSS statistical analysis using frequencies and measures of central tendency to evaluate knowledge and workplace breastfeeding support services questions, while a Pearson correlation was used to evaluate the relationship between knowledge and workplace breastfeeding support services.

### **Ethical Considerations**

This research on breastfeeding support was subject to ethical considerations. Participants were informed that, “The risks you will encounter as a participant in this research are not more than experienced in your everyday life.” Participants electronically read the consent form for their acceptance of the research terms. The purpose of this was so that participants understood that they can quit at any time, were informed that their answers were confidential, anonymous, and used solely for research purposes. By completing the survey, the participants indicated consent.

## CHAPTER IV

### Findings

#### Introduction

The descriptive cross-sectional study aimed to investigate whether a relationship existed between management knowledge of breastfeeding benefits and workplace breastfeeding support services in Faribault, Martin, and Watonwan Counties. This research measured management knowledge of breastfeeding benefits and workplace breastfeeding support services for breastfeeding in the workplace. This chapter presents the results of the data collected through the online survey during a two-week period in February of 2017.

Of the 98 workplaces invited to participate in the study, there were 16 participants who answered the survey questions completely, while 12 participants started, but did not complete the survey. The response rate was 16%. The following sections include the findings of the research questions. First, the descriptive statistics of the management knowledge of breastfeeding benefits are presented, followed by the descriptive statistics of workplace breastfeeding support services in the workplace. The last component of this chapter describes the relationship between management breastfeeding knowledge and their workplace breastfeeding support services. Tables are included to showcase the data.

#### Findings for Research Questions

##### **Research question 1: What is management knowledge of breastfeeding benefits?**

The data collected about management knowledge of breastfeeding benefits are presented in Table 1. The six knowledge questions were reverse coded. Ninety-three

percent of the participants ( $n = 15$ ) answered, “breastmilk is more easily digested than formula” correctly. Following, 87.5% ( $n=14$ ) answered, “breastfeeding helps the uterus to return to its pre-pregnancy state more quickly” and “infant formula and breastmilk have the same benefits” correctly. Subsequently, 86.7% ( $n=14$ ) answered, “benefits of breastfeeding are limited to a specific period of time” correctly. Lastly, 81.3% ( $n=13$ ) of the participants answered the question, “breastmilk contains all the essential nutrients for a newborn child” and “breastfeeding helps mothers lose weight after pregnancy” correctly. However, one participant did comment about the question, “breastmilk is more easily digested than formula” under the “other” category that not all infants can digest breastmilk due to potential allergies or digestive issues, making this a questionable knowledge question that could be phrased better. The range of correct scores was 13 to 15 correct answers. The mean score for the knowledge index was 5.2 correct scores out of 6 questions total, with a standard deviation of 1.32. Overall, the participants scored high on knowledge questions of breastfeeding benefits.



**Table 1**

*Research Question 1: What is management knowledge of breastfeeding benefits?*

	Correct Answer <i>n</i> (%)	Incorrect Answer <i>n</i> (%)
Breastmilk is more easily digested than formula	15 (93.8)	1 (6.3)
Breastfeeding helps the uterus to return to its pre-pregnancy state more quickly	14 (87.5)	2 (12.5)
Breastfeeding helps mothers lose weight after pregnancy	15 (83.1)	1 (12.5)
Infant formula and breastmilk have the same benefits	14 (87.5)	2 (12.5)
Benefits of breastfeeding are limited to a specific period	13 (86.7)	2 (13.3)
Breastmilk contains all the essential nutrients for a newborn child	13 (81.3)	3 (18.8)

**Research Question 2: To what extent does management provide environmental support for breastfeeding to promote breastfeeding at the workplace, as identified by management?**

The management support questions included questions on breastfeeding policies, workplace support services questions, and an insurance support question. The results are presented in Table 1.2. The breastfeeding support service question checked the most was having a private room to pump/express milk with 56% ( $n=9$ ) of participants. This was followed by 50% ( $n=8$ ) of participants who checked having the option for new mothers to gradually return to work. The third highest option was to the three different options of

having a policy regarding breastfeeding support, extended maternity leave, and paid maternity leave at 35.7% ( $n=6$ ) participants stating these supports exist at their workplace. The workplace breastfeeding support service questions that received the lowest scores were the choice to bring infant to work with restrictions and onsite childcare, both with 0% ( $n=0$ ) checked yes. This was followed by the choice to bring infant to work to breastfeed only and breast pump purchase, rental, or subsidize accommodations, both with only 6.1% ( $n=1$ ) of participants who checked each of those options. The range score for these workplace breastfeeding support services questions was 0-11 out of a possible score of 17. The mean score for these questions was 4.1, with standard deviation of 2.98. See Table 2 for results.

**Table 2**

*Research Question 2: To what extent does management provide environmental support for breastfeeding to promote breastfeeding at the workplace, as identified by management?*

Breastfeeding Support Services Offered at Workplace	Yes n (%)	No n (%)
A policy regarding workplace breastfeeding accommodations	6 (37.5)	10 (62.5)
Paid maternity leave (other than disability insurance)	6 (37.5)	10 (62.5)
Extended maternity leave (more than required by the Federal Medical Leave Act)	6 (37.5)	10 (62.5)
Option to gradually return to work after maternity leave	8 (50.0)	8 (50.0)
Job sharing	4 (25.0)	12 (75.0)
Do you offer flexible worktimes	4 (25.0)	12 (75.0)
Work from home/ telecommute options	3 (18.8)	13 (81.3)
Onsite childcare	0 (0.0)	16 (100.0)
Private room to pump/breastfeeding (not a bathroom)	9 (56.3)	7 (43.8)
Breast-pump (rental/purchase/subsidize)	1 (6.3)	15 (93.8)
List of local breastfeeding resources?	2 (12.5)	14 (87.5)
Access to lactation consultant services (phone/internet/in-person)	3 (19.0)	13 (81.0)
Option to bring infant to work to breastfeed only	1 (6.3)	15 (93.8)
Option to bring infant to work (with restrictions)	0 (.00)	16 (1.0)
Other breastfeeding services	2 (12.5)	14 (.87.5)
Insurance cover breastfeeding equipment (e.g. pump kits, pumps)	4 (25.0)	12 (75.0)
Insurance cover breastfeeding services (e.g. lactation consultant services)	3 (18.8)	13 (81.3)

**Research Question 3: What is the relationship between management's support for breastfeeding and their knowledge of breastfeeding benefits?**

The mean knowledge and mean support services scores were analyzed using a Pearson correlation. The correlation analysis showed that there was a moderate positive correlation between management's knowledge of breastfeeding benefits and workplace breastfeeding support services at  $r(14) = .543, p = .036$ . In interpreting the correlation results, a positive “ $r$ ” value between .300 and .500 is considered a moderate positive correlation. A strong positive correlation would have an “ $r$ ” value between .500 and 1.0 (Australian Bureau of Statistics, 2013). The results of the Pearson correlation indicate that the more answers the participant got correct, the higher the support for breastfeeding at their workplace.

**Summary**

In summary, management knowledge of breastfeeding benefits had a positive moderate correlation with their workplace breastfeeding support services at  $r(14) = .543, p = .036$ . The questions answered most correctly for breastfeeding knowledge were “breastmilk is more easily digested than formula,” “breastfeeding helps the uterus to return to its pre-pregnancy state more quickly” and “infant formula and breastmilk have the same benefits.” The top workplace breastfeeding support services for workplace breastfeeding were having a private room to pump/express milk and the option for new mothers to gradually return to work. Managements' breastfeeding knowledge was positively associated with workplace breastfeeding support services.

## CHAPTER V

### Summary, Discussion, and Recommendations

#### **Introduction**

This descriptive cross-sectional study investigated sampled workplace management in Faribault, Martin, and Watonwan counties in Minnesota. The study aimed to see whether a relationship existed between management knowledge of breastfeeding benefits and their workplace breastfeeding support services. In this chapter, the summary of the methodology, results, and recommendations are presented.

#### **Summary of Research Problem**

Breastfeeding is an important health education topic, because of its many benefits to both mother and child. While support of breastfeeding at the workplace has minimal research, results of past research show that there are many benefits to supporting breastfeeding to the employer as well. This study aimed to answer three research questions:

1. What is management's knowledge of breastfeeding benefits?
2. To what extent does management provide environmental support for breastfeeding to promote breastfeeding at the workplace, as identified by management?
3. What is the relationship between management's support for breastfeeding and their knowledge of breastfeeding benefits?

#### **Summary of Method and Description of Selected Subjects.**

The researcher used a convenience sample of selected Minnesota workplaces in Faribault, Martin, and Watonwan counties. The selected population was workplace

management in the fields of education, government and law centers, retail, food management, lodging, and business and financial organizations. Management in the following positions: supervisors, managers, administration and human resources were requested to participate. The researcher identified this sample through the Chamber of Commerce websites in each county utilizing the workplaces with public email addresses. Sixteen workplaces participated in the study out of 98 selected. Of the 16, five participants answered that they had a position other than management. Therefore, this study's results should be interpreted with caution and not be generalized for the entire population that was originally studied. There are no previous studies on workplace breastfeeding support services that have been done in Faribault, Martin, and Watonwan counties in Minnesota.

### **Summary of Findings**

This study found a moderate positive relationship between employer knowledge of breastfeeding benefits and their workplace breastfeeding support services at,  $r(14) = .543, p = .036$ . In this study, participants scored high on the breastfeeding knowledge questions with a mean of 5.2 out of six questions and a standard deviation of 1.32 and moderately on the workplace breastfeeding support services questions with a mean of 4.1 out of 17 questions and a standard deviation of 2.98.

### **Conclusion**

As Table 1 shows, for the knowledge of breastfeeding benefits portion of the survey, all participants answered at least 80% of the items correct. This leads the researcher to believe that either the answers to these questions were very obvious or that management at participating workplaces are well-informed on breastfeeding benefits. In

comparison, the workplace breastfeeding support services questions seemed low compared to the knowledge, with a mean of 5.2 out of the 17 for workplace breastfeeding support services. These results support a study by Brown, Poag and Kapryzkie (2001) on employer knowledge of breastfeeding benefits, in which participants (human resource employees) also scored high on knowledge of breastfeeding benefits for women and children, but did not place as of a high priority on breastfeeding support, though support was shown in the workplaces.

One concerning result was that less than half (37.5%) of the workplaces had a written or verbal policy regarding workplace breastfeeding support services. The researcher believes this to be a very low percentage since policies help support breastfeeding mothers at the workplace. If a policy is not in place at a workplace and there is a transition in management, any workplace breastfeeding support service may not be continued or acknowledged. According to Donavon (2015), better workplace policies are needed for breastfeeding to accommodate new mothers.

The researcher also has concern that only 56.3% of workplaces surveyed had a private room (not a bathroom) to pump/breastfeed. The Minnesota State Statute 181.393: Nursing Mothers states that workplaces must make reasonable accommodation to provide new mothers with a private room, that is not a bathroom. Almost half of the workplaces surveyed may not be in compliance with the state statute. One possibility for this finding is that workplaces were not aware of or understood the state statute. Another possibility is that the statute is unclear when it states employers must make “reasonable effort” to provide this room. There are no guidelines as to what a “reasonable effort” might be, making it difficult to decipher if a workplace is or is not actually in compliance. It is

possible that participants did not clearly understand the question. “Do you currently offer a private room to pump/breastfeed (not a bathroom).” Participants could have interpreted this as having a specific room designated solely for breastfeeding, when perhaps they actually have a private room to offer to employees and are in compliance with the state statute. If employees are not inquiring about workplace breastfeeding support services, then the employer would have another reason to not providing a private room. A last thought is that perhaps the workplace does not find breastfeeding support services a priority, therefore, do not make accommodations. A University of Minnesota study by students in the School of Public Health found that in 2015, less than half of working mothers in Minnesota had access to breastfeeding facilities at the workplace (Kozhimannil, Jou, Gjerdinden & McGovern, 2016).

The lower amount of workplace breastfeeding support services was not shocking to the researcher since most of the questions asked were not required of workplaces. Many of these options seem to be more appropriate for larger corporations with more finances and full time workers, while Faribault, Martin, and Watonwan Counties are in rural Minnesota with smaller scale workplaces. Workplace breastfeeding support service options more likely to be offered at a larger worksite setting include onsite childcare, purchase/rental of a breast pump, job sharing, and lactation consultant services. Section 7(r) of the Fair Labor Standards Act – Break Time for Nursing Mothers Provision (2010) states the following about smaller workplaces,

An employer that employs less than 50 employees shall not be subject to the requirements of this subsection, if such requirements would impose an undue hardship by causing the employer significant difficulty or expense when considered in relation to the size, financial resources, nature, or structure of the employer’s business. (Fair Labor Standards Act Section 7c, 2010, para. 6).



## Recommendations

### Recommendations for Further Research

For future studies, the researcher recommends that careful consideration is given to how knowledge of breastfeeding benefits is measured. For this study, the specific knowledge question, “breastmilk is more easily digested than formula,” should be more specific. An example would be, “breastmilk is more easily digested than formula in the majority of infants.” The researcher recommends including qualitative questions on breastfeeding benefits to further understand general knowledge of management.

To assess workplace breastfeeding support services, the survey could also include additional questions, such as, “Do you offer new mothers flexible break times,” in addition to asking “Do you offer flexible work hours” This is because the Minnesota State Statute 181.939: Nursing Mothers statute also states that in addition to providing a private room, workplaces must make reasonable accommodation to give new mothers flexible unpaid break times in accordance with their usual break times (Nursing Mothers, 2016)., The research showed that only a little more than half of the participants provided a private room, not in a bathroom at 56.3%. Since this may not be in compliance of the state statute, it would be beneficial to ask why there is not a room in place. It would also be beneficial for future research to include questions on barriers to workplace breastfeeding support services to help health educators understand and combat obstacles in the way of breastfeeding support at the workplace.

Future studies should explore whether there was a difference between male and female management regarding breastfeeding knowledge benefits and providing

workplace breastfeeding support services. There was no question on the survey about gender of the participant, which could be added to the survey for future research.

Since knowledge of breastfeeding benefits was high yet supportive workplace breastfeeding support scores were low, future studies should explore the barriers to providing workplace breastfeeding support services. An example of this would be asking whether employees inquire about breastfeeding support to management, if the employees are stigmatized by other employees/management for taking break time to breastfeed or if there is a lack of awareness of the state statute and the financial breastfeeding benefits for the workplace.

The method of distribution could have been improved by sending out a reminder email to workplaces to finish the survey to potentially receive a higher participation rate. For future research, it may be beneficial to try an in-person interview or distribute the surveys on paper copy in person, since emails can easily be deleted or sent to junk by unknown senders. This would also provide a larger selection of workplaces and not just those who have public emails. In addition, increasing the time of data collection to a month instead of only two weeks is advised. Due to time constraints, this method was not possible for the researcher during this study.

### **Recommendations for Health Education Practice**

The researcher has a few recommendations to the health profession. First, health educators can use this research and build upon the current knowledge of workplace breastfeeding support services.

Health educators can also use this information to investigate why workplaces are not following the Minnesota State Statute 181.939: Nursing Mothers and how it can be

better enforced. Health educators should continue to advocate workplace breastfeeding support services and disseminate information to employers on resources for support. Help should be offered to employers to overcome obstacles for a supportive breastfeeding environment. For breastfeeding in general, health educators have an obligation to continue to inform communities and new mothers on the benefits of breastfeeding.

Lastly, health educators can use this information to lobby for a more concise workplace breastfeeding support law regarding Nursing Mothers: 181.939 (2016). With the blurred language of “reasonable effort,” guidelines should be added to avoid confusion and lack of adherence to the law.

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**APPENDIX A**  
**CONSENT FORM**

## ONLINE/CONFIDENTIAL SURVEY CONSENT

You are requested to participate in research supervised by Dr. Amy Hedman-Robertson on breastfeeding support at the workplace. This survey should take approximately 10 minutes to complete. The goal of this survey is to understand breastfeeding support at the workplace, and you will be asked to answer questions about that topic. If you have any questions about the research, please contact Amy Hedman-Robertson at [amy.hedman@mnsu.edu](mailto:amy.hedman@mnsu.edu).

Participation is voluntary. You have the option not to respond to any of the questions. You may stop taking the survey at any time. Participation or nonparticipation will not impact your relationship with Minnesota State University, Mankato. If you have questions about the treatment of human participants and Minnesota State University, Mankato, contact the IRB Administrator, Dr. Barry Ries, at 507-389-1242 or [barry.ries@mnsu.edu](mailto:barry.ries@mnsu.edu).

Responses will be anonymous. However, whenever one works with online technology there is always the risk of compromising privacy, confidentiality, and/or anonymity. If you would like more information about the specific privacy and anonymity risks posed by online surveys, please contact the Minnesota State University, Mankato Information and Technology Services Help Desk (507-389-6654) and ask to speak to the Information Security Manager.

The risks you will encounter as a participant in this research are not more than experienced in your everyday life.

There are no direct benefits for participating. Society might benefit by the increased understanding of breastfeeding support at the workplace.

Submitting the completed survey will indicate your informed consent to participate and indicate your assurance that you are at least 18 years of age.

Please print a copy of this page for your future reference.

**MSU IRBNet ID#** 1019559

**Date of MSU IRB approval:** 1/30/17

**APPENDIX B**  
**IRB APPROVAL**



January 30, 2017 Dear Amy Hedman-Robertson:

Re: IRB Proposal entitled "[1019559-3] Workplace Knowledge and Support for Employee Breastfeeding Practices" Review Level: Level [I]

Your IRB Proposal has been approved as of January 30, 2017. On behalf of the Minnesota State University, Mankato IRB, we wish you success with your study. Remember that you must seek approval for any changes in your study, its design, funding source, consent process, or any part of the study that may affect participants in the study. Should any of the participants in your study suffer a research-related injury or other harmful outcome, you are required to report them to the Associate Vice-President of Research and Dean of Graduate Studies immediately.

The approval of your study is for five years from the approval date. When you complete your data collection or should you discontinue your study, you must submit a Closure request (see <http://grad.mnsu.edu/irb/continuation.html>). All documents related to this research must be stored for a minimum of three years following the date on your Closure request. Please include your IRBNet ID number with any correspondence with the IRB.

[IF SIGNED CONSENT FORMS ARE USED ADD THE FOLLOWING:] The Principal Investigator (PI) is responsible for maintaining signed consent forms in a secure location at MSU for 3 years following the submission of a Closure request. If the PI leaves MSU before the end of the 3-year timeline, he/she is responsible for following "Consent Form Maintenance" procedures posted online (see <http://grad.mnsu.edu/irb/storingconsentforms.pdf>).

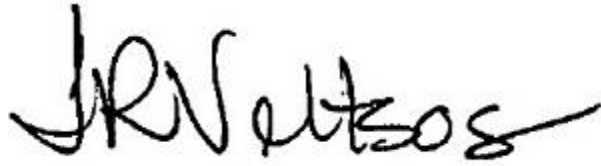
Sincerely,

A handwritten signature in cursive script, appearing to read "M. Hedman-Robertson", is positioned below a horizontal line.

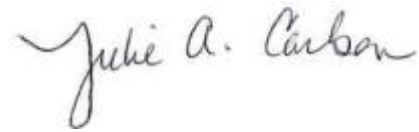


Mary Hadley, Ph.D. IRB Coordinator

- 1 - Generated on IRBNet



Jennifer Veltsos, Ph.D. IRB Co-Chair



Julie Carlson, Ed.D. IRB Co-Chair

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Minnesota State University, Mankato IRB's records.

**APPENDIX C**  
**EMAIL INVITATION**

Dear Faribault, Martin, or Watonwan County Workplace,

My name is Elizabeth Heimer and I am a graduate student at Minnesota State University, Mankato. I am inviting the manager of your workplace to participate in my research study. The research study is focused on breastfeeding support at workplaces in Martin County.

The ideal respondent to complete the survey would be an employee in workplace management such as workplace administrators, human resources, supervisors, managers, or employers. If you do not hold one of these positions, please forward this email to an appropriate colleague.

Your participation in this study is completely **voluntary**. You may refuse to participate with no penalty. In addition, you may discontinue participation at any time or decline to answer any question(s) at any time. The survey is completely **confidential** and should take approximately 10 minutes to complete.

Details regarding **Informed Consent** are provided to you on the first page of the survey. Please read the Informed Consent Document before beginning the survey.

Please click on the following link to begin the survey:

[https://mnsu.co1.qualtrics.com/SE/?SID=SV\\_3mWgz4F6DZd3hqt](https://mnsu.co1.qualtrics.com/SE/?SID=SV_3mWgz4F6DZd3hqt)

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding breastfeeding support at the workplace. If you would like a summary of the results, please contact me at heimerliz314@gmail.com. If you require additional information or have questions, please contact me or my graduate advisor using the information listed below.

Sincerely,

Elizabeth Heimer, Student Researcher  
Tel: 507-848-7613  
Email: heimerliz314@gmail.com

Dr. Hedman-Robertson, Graduate Advisor  
Tel: 507-389-5382  
Email: amy.hedman-robertson@mnsu.edu

IRBnetID # 1019559

**APPENDIX D**  
**SURVEY**

## Workplace Breastfeeding Support Survey

### Introduction:

The purpose of this research is to understand worksite breastfeeding support. This survey is for research purposes and responses will remain confidential and anonymous. The survey is meant to be completed by workplace management, such as administrators, managers, supervisors, and human resources. Please complete the survey the best you are able by choosing your desired answer. Some answers can have multiple answers. All responses are confidential and anonymous. You may withdraw from this survey at any time.

Thank you!

### Q1. What is your job title at your workplace? (Check all that apply)

- Administrator
- Manager
- Supervisor
- Human Resources
- Other\_\_\_\_\_

**Instructions: Please read each statement and indicate if true, false, or unsure.**

**Choose one answer.**

### Q2. Breastmilk is more easily digested than formula.

- True
- False
- Unsure

**Q3. Breastfeeding helps the uterus to return to its pre-pregnancy state more quickly.**

True

False

Unsure

**Q4. Breastfeeding helps mothers lose weight after pregnancy.**

True

False

Unsure

**Q5. Infant formula and breastmilk have the same benefits.**

True

False

Unsure

**Q6. Benefits of breastfeeding are limited to a specific period.**

True

False

Unsure

**Q7. Breastmilk contains all the essential nutrients for a newborn child.**

True

False

Unsure

**Q8. Do you have a policy regarding workplace breastfeeding accommodations?**

Yes (written)

Yes (verbal)

No

**Please read the question and select all answers that apply.**

**Q9. Do you currently accommodate breastfeeding mothers by offering any of the following support services to employees?**

Paid maternity leave (other than Disability insurance)

Extended maternity leave (more than required by the Federal Medical Leave

Act)

Option to gradually return to work after maternity leave

Job sharing

Flexible work times

Work from home/ telecommute options

Onsite childcare

Private room to pump/breastfeed (not a bathroom)

Breast-pump (rental/purchase/subsidize)

- List of local breastfeeding resources
- Access to lactation consultant (phone/internet/in-person)
- Option to bring infant to work to breastfeed only
- Option to bring infant to work (with restrictions)
- Other (please describe)

**Q10. Of the following, what breastfeeding benefits does your insurance provide?**

- Covers breastfeeding equipment (e.g., pump kits, pumps)
- Breastfeeding services (e.g., lactation consultant services)
- None of the above

**Q11. Other ways your business accommodates breastfeeding employees or clients:**

**Technical Assistance:**

If interested in free technical assistance, including policy support, funding, and other resources to improve breastfeeding support at your workplace, please contact the Statewide Health Improvement Partnership at 507-848-7613 or their pages at

**Facebook:** : <https://www.facebook.com/FMWSHIP/>

**Blog:** <http://shipfmw.blogspot.com>

**References:**

**Questions 2-7 adopted from:**

Tanash, H. A. (2014). Breastfeeding knowledge, practice, attitudes, and influencing factors: Factors from a selected sample of breastfeeding mothers in Bemidji, MN. Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato. Retrieved from: <http://cornerstone.lib.mnsu.edu/cgi/viewcontent.cgi?article=1382&context=etds>

**Questions 8 & 9 adopted from:**

Thumm, J. N. (2011). A survey of workplace breastfeeding benefits in Sarasota County, Florida. University of South Florida.

**Questions 10 & 11 adopted from:**

Novais, A. P. & Fenick, D. (2013). Breastfeeding-friendly workplace award questionnaire. Rhode Island Department of Health. Retrieved from: <http://www.health.ri.gov/forms/awardsubmission/BreastfeedingFriendlyWorkplaceAwardQuestionnaire.pdf>



**APPENDIX E**  
**SURVEY PERMISSION**

## RE: Breastfeeding Friendly Workplace Questionnaire



Novais, Ana (DOH)

Thu 1/19, 9:01 AM

Durkee, Elizabeth Amy



Reply all | v

Inbox

Absolutely. Keep us posted.

Ana

Ana P. Novais, MA  
Executive Director of Health  
Director's Office  
Room 401  
Phone: (401) 222-5117  
Fax: (401) 222-6548  
Ana.novais@health.ri.gov



**From:** Durkee, Elizabeth Amy [mailto:elizabeth.durkee@mnsu.edu]

**Sent:** Wednesday, January 18, 2017 10:31 PM

**To:** Novais, Ana (DOH) <Ana.Novais@health.ri.gov>

**Subject:** Breastfeeding Friendly Workplace Questionnaire

Hello Ana,

I am a graduate student at Minnesota State University, Mankato and came across Breastfeeding Friendly Workplace Questionnaire. I was wondering if I may adapt those questions into my research survey to determine worksites supports offered for breastfeeding for my own research for the relationship of management breastfeeding knowledge and breastfeeding support at the workplace? I would be happy to use the correct citation for this and share my results with you once completed.

Regards,  
Liz Heimer

**Elizabeth Heimer, BS, CHES**

**From:** Jamee Thumm <[jamee.thumm@gmail.com](mailto:jamee.thumm@gmail.com)>  
**Sent:** Friday, November 11, 2016 9:15:26 PM  
**To:** Durkee, Elizabeth Amy  
**Subject:** Re: Breastfeeding Survey Instrument

Liz,

Thank you for reaching out! You are more than welcome to use the survey instrument I used for my project. I'd love to have a copy of your project when you are finished. I can't wait to see your results!

Please keep in touch!

Sincerely,  
Jamee

On Wed, Nov 9, 2016 at 7:08 PM, Durkee, Elizabeth Amy <[elizabeth.durkee@mnsu.edu](mailto:elizabeth.durkee@mnsu.edu)> wrote:

Hello Ms. Thumm,

I am a student at Minnesota State University, Mankato and am doing a research project on breastfeeding support at worksites in South Central Minnesota. I was wondering if it was possible if I could use the survey instrument you had used in Sarasota County, FL. It looks like you had the same results I am looking to have. If this is possible, I would love to adopt the instrument you created.

Thank you and have a great day!

Liz (Durkee) Heimer

## Re: Breastfeeding Survey



**Tanash, Hadeel A**

Thu 1/19, 11:58 AM

Durkee, Elizabeth Amy



Reply all | v

Thesis Sources

Hello Dear,

Sure, you have my permission to use the instrument. and I'm up for any help you need.

Good luck.

Hadeel Tanash

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**From:** Durkee, Elizabeth Amy  
**Sent:** Thursday, January 19, 2017 10:51:16 AM  
**To:** Tanash, Hadeel A  
**Subject:** Breastfeeding Survey

Hello again Hadeel,

Although we talked about it, I need to include your permission for my approval process for the thesis. Could you again state your permission status on me adapting your survey?

Thank you so much and I look forward to sharing my results with you!

Liz

**Elizabeth Heimer, BS, CHES**

Phone: 507-848-7613

Email: [elizabeth.durkee@mnsu.edu](mailto:elizabeth.durkee@mnsu.edu)