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2019

BREASTFEEDING IN THE SOCIAL CONTEXT: THE INFLUENCE OF
STEREOTYPES AND BENEVOLENT SEXISM

by

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THESIS

Presented to the Faculty of
The University of Houston-Clear Lake
In Partial Fulfillment
Of the Requirements
For the Degree

MASTER OF SCIENCE

in General Psychology

THE UNIVERSITY OF HOUSTON-CLEAR LAKE

DECEMBER, 2019

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Dedication

For my daughters, Olivia and Eleanor. May you always know your worth, live courageously, and never forget how incredibly capable you are. I will always be your biggest cheerleader.

Acknowledgements

I cannot even begin to explain how much I appreciate all the support I have received during my academic career thus far. First, I would like to thank my mentor and Chair, Dr. Amanda Johnston. Dr. Johnston, thank you for always encouraging me, for always supporting me, and for constantly challenging me to be the best version of myself. You have helped me grow both academically and personally, and I cannot put into words how much you have taught me over the years. I am immensely grateful for everything you have done for me.

I would also like to thank my Committee Member, Dr. Walther, for her assistance with this thesis project. Thank you for your support and encouragement throughout this process. Your willingness to help whenever needed, as well as your honest and detailed feedback, have helped make this thesis the best that it could be.

Additionally, thank you to my family and friends who have supported me during this time. I owe a special thanks to my mom and mother-in-law, who have helped me considerably by taking care of my girls while I was away. This allowed me to spend time focusing on my education, and I could have not done this without their help. Also, mom, thank you for your constant encouragement and for continuing to be my biggest cheerleader. I hope to always make you proud.

Finally, to my husband and daughters, thank you so much for being the most incredible inspiration and support system I could ever have. Marcos, thank you for supporting me both emotionally and financially throughout all of this, and for continuing to do so for my future endeavors. You not only make achieving my goals possible, but you encourage me and genuinely want to see me succeed. I love you, and I hope you always know how important you are to me.

ABSTRACT

BREASTFEEDING IN THE SOCIAL CONTEXT: THE INFLUENCE OF
STEREOTYPES AND BENEVOLENT SEXISM

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Despite providing numerous benefits for both mothers and babies, breastfeeding remains a non-normative means of infant feeding among mothers in the United States. Past research suggests that many women face social obstacles to breastfeeding, such as being too uncomfortable to breastfeed in public, which may hinder the duration of breastfeeding. In a pair of studies, the role of sexism, perception of gendered characteristics, and attitudes toward mothers who breastfeed in private and public were examined. In Study 1, 89 women viewed photos of a woman breastfeeding in a private location, public location while using a cover, or public location without a cover. The participants were then asked to indicate the level of communal and agentic characteristics the target possessed, as well as their attitudes toward her. While no differences in positive attitudes were found between the conditions, participants in the private condition perceived the woman as possessing a higher level of communal characteristics relative to

the other groups. Moreover, participants in the public-not covered condition perceived the target as possessing more agentic characteristics than the other groups. In Study 2, 96 mothers were grouped based on their self-reported frequency of engagement in breastfeeding behaviors by location (private, public-covered, public-not covered, and no breastfeeding), and rated their own levels of communal and agentic characteristics. Women who did not breastfeed at all were found to associate themselves with lower levels of communal characteristics compared to women who breastfed in all locations (private and public). Additionally, women were found to have the most positive attitudes toward the type of location in which they themselves engaged in breastfeeding. Armed with this knowledge, advocates and professionals alike will be more equipped to address these issues, which will ultimately lead to them being more successful in providing support to women for the initiation and continuation of breastfeeding their infants.

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CHAPTER I: INTRODUCTION

Even with a recent focus on promotion and advocacy, breastfeeding remains a non-normative means of infant feeding among mothers in the United States (Smith, 2018). While there are noted physical variables that influence the initiation and continuation of breastfeeding, such as low milk supply or discomfort, researchers are beginning to investigate and address social factors that influence a woman's choice of feeding method. One of the most cited factors that women describe as an obstacle for the continuation of breastfeeding is being too uncomfortable to engage in the behavior when others are around (Acker, 2009; Dunn, Kalich, Henning, & Fedrizzi, 2015; Smith, 2018; Ward et al., 2006). Breastfeeding regularly is vital for both milk production and infant nutrition, which means mothers may be put in the position of needing to breastfeed in a public setting (Acker, 2009; Smith, 2018). Thus, this study aimed to investigate stereotypes, sexism, and attitudes toward mothers who breastfeed publicly, from both a social- and self-perspective, in order to better understand the experience of breastfeeding mothers.

Breastfeeding Recommendations, Rates, and Benefits

Both the World Health Organization (2017a) and the American Academy of Pediatrics (2012) recommend that infants are exclusively breastfed for the first 6 months of their lives and breastfed, along with the addition of other food, for at least the first 12 months. Although rates of breastfeeding have increased in the United States since the 1970s, the most current statistics in the United States show that only 51.8% of mothers report breastfeeding their infants at 6 months (only 22.3% of these breastfed exclusively), 30.7% of mothers still breastfeeding at 12 months, and 81% of mothers ever initiating the

breastfeeding process with their newborns (Centers for Disease Control and Prevention, 2014).

Research demonstrates that both mothers who breastfeed and babies who consume breastmilk receive a variety of benefits. Breastfed babies have been found to be at a reduced risk for respiratory and gastrointestinal infections, Sudden Infant Death Syndrome, and may even receive protection against allergic diseases, such as asthma, eczema, and dermatitis (Association of American Pediatrics, 2012; Ward, Merriwether, & Caruthers, 2006; World Health Organization, 2017b). Moreover, research demonstrates that infants receive developmental and psychological benefits from breastmilk (Acker, 2009). Mothers who engage in breastfeeding have a decreased risk for breast, and possibly ovarian, cancer, type 2 diabetes, and post-partum depression compared to women who do not breastfeed (World Health Organization, 2017b). Further, some research suggests that women who breastfeed experience increased levels of sensitivity toward their infants (Papp, 2013).

Obstacles to Breastfeeding

Like most people, mothers are not immune to the power of social influence. Attitudes of not only partners, but also of society more broadly, have significant implications on a mother's choice to breastfeed (Acker, 2009; Vari, et al., 2013). Research suggests that public attitudes toward breastfeeding, in general, are positive. However, public breastfeeding is generally not accepted or seen as a normative behavior, and attitudes toward those who do breastfeed in public are generally negative (Acker, 2009). While it can be argued that refraining from breastfeeding in public should not have far-reaching effects on women's breastfeeding success, the reality of the nutritional needs of infants suggests otherwise. Due to the composition of breastmilk, newborns require feedings approximately 8 times in a 24 hour period, which equates to roughly

every 2-3 hours, for the first few months of their life (Acker, 2009; Smith, 2018). In order to accommodate these demands, many mothers will likely find themselves needing to breastfeed their infants while being in a public space. Acker (2009) argues that these situations may lead “to early discontinuation of breastfeeding because of the impossibility of breastfeeding successfully without doing it in public” (p. 477). If mothers do not feel willing or able to nurse their children in public, due to either their own attitudes or their perceptions of public attitudes, meeting the demands of breastfeeding their newborns will be extremely, and unnecessarily, challenging.

In addition, the production of breastmilk operates on the principle of supply and demand. For the mammary glands to produce breastmilk, mothers must have their infants nurse regularly (Smith, 2018). As stated by Smith (2018), “if the milk is not removed from the breast, the glands will become distended and milk production will gradually cease” (p.296). Thus, regular engagement in breastfeeding behaviors, especially in the beginning stages of supply establishment, is vital for lactation success. This makes identifying factors that influence attitudes toward women who engage in public breastfeeding significant to the efforts of breastfeeding support and advocacy.

The Role of Social Perception, Sexism, and Attitudes

Role Congruity Theory

While other social factors that influence an individual’s likelihood to support public breastfeeding, such as familiarity, age, and gender, have been investigated, Acker (2009) suggests that public breastfeeding may “represent a violation of expected gender role behavior” (p. 486). In our society, the subjective content of the gendered stereotypes in which many people operate involves males possessing “masculine” traits and females possessing “feminine” traits (Diekmann & Goodfriend, 2006). Because of the historical division of labor, which involved women primarily focusing on childcare, women have

predominately been associated with communal characteristics, particularly characteristics focused on the goal of nurturing and helping others (Eagly & Wood, 1999). Alternatively, having been the hunters and providers, men have been associated with agentic characteristics, which place an emphasis on the self (Eagly & Wood, 1999). Given that women were, and still are, encouraged to be nurturing and gentle, while men, dominant and assertive, communion is perceived as an aspect of femininity and agency an aspect of masculinity.

According to Role Congruity Theory, individuals who engage in behaviors that align with the expectations of their perceived gender role will evoke positive reactions from those in the social environment (Diekmann & Goodfriend, 2006). However, those who are seen as not subscribing to the gendered expectations set forth by society receive negativity and backlash (Diekmann & Goodfriend, 2006). What has not been investigated, however, is whether individuals associate certain stereotypical characteristics with women who breastfeed based on the location in which they engage in these behaviors. Because breastfeeding publicly requires the mother to have some level of confidence and ability to assert herself if necessary, these individuals may be perceived as possessing more masculine/agentic characteristics. This could be one explanation for the negative attitudes toward mothers who engage in public breastfeeding, as the possession of masculine/agentic characteristics is not congruent with the societal expectations of the female gender role. However, women who breastfeed in private may be perceived to align with the communal/feminine expectations, which are socially normative and, as a result, evoke positive reactions.

Ambivalent Sexism

Additionally, Acker (2009) argues that, because breastfeeding is a gendered behavior, sexism likely plays a role in development and maintenance of attitudes toward

breastfeeding. Supporting this notion are findings from previous research which suggest that the endorsement of benevolent sexism moderates attitudes toward breastfeeding for men (Acker, 2009; Forbes, Adams-Curtis, Hamm, & White, 2003). Benevolent sexism is a legitimizing ideology in which women are viewed favorably but assumed to be fragile and in need of male protection (Glick & Fiske, 2001). Women who are on the receiving end of this form of sexism are argued to be those who embrace traditional gender expectations. Thus, benevolent sexism is used as a means of reward for women who maintain the existing status quo. This ideology is complementary to what Glick and Fiske (2001) describe as hostile sexism, which involves resentment toward women who do not align with gendered expectations. Together, these two forms of sexism make up the theory of ambivalent sexism, which asserts both ideologies work in concert to maintain existing gender norms (Glick & Fiske, 2001).

Consistent with the premise of Glick and Fiske's (2001) theory that these forms of sexism relate to beliefs about gender norms, past research also demonstrates that men who endorse high levels of benevolent sexism evaluate women who breastfeed as aligning more with traditional expectations and even believe them to be better mothers (Forbes et al., 2003). Additionally, positive attitudes toward women who privately breastfeed are slightly increased among benevolently sexist males relative to women and men scoring low in terms of benevolent sexism (Acker, 2009). Critically, both studies demonstrate that men high on benevolent sexism had significantly more negative attitudes toward women breastfeeding in public compared to both other men and women who did not publicly breastfeed (Acker, 2009; Forbes et al., 2003). Hostile sexism was not found to have any significant influence on attitudes toward breastfeeding mothers (Acker, 2009; Forbes et al., 2003). This suggests that men who endorse benevolent

sexism may have more positive attitudes toward women who breastfeed, specifically in private, as they adhere to socially endorsed ideas of the traits women should possess.

Purpose of the Research

In a pair of studies, I examined the social- and self-perceptions of women who breastfeed in public. In Study 1, I examined the social perceptions, specifically the perceived communal/feminine and agentic/masculine characteristics, of women who breastfeed in public. In Study 2, I considered the role of self-possessed benevolent sexism and the self-perceptions of own communal/feminine and agentic/masculine characteristics on the location in which mothers chose to engage in breastfeeding. While past research has defined public breastfeeding as simply whether or not the woman engages in breastfeeding behaviors in a public location, I suggest that it is important to make the further distinction between breastfeeding in public while using a cover and breastfeeding in public without the use of a cover. Thus, I included conditions for public covered and public uncovered in both Studies 1 & 2.

From a role congruity perspective, in Study 1 I hypothesized that women who breastfeed in public (both covered and not covered) would be perceived as less communal, but more agentic, than women who breastfeed in private. I expected these findings to be more extreme for women who breastfeed in public and do not use a cover, relative to women who engage in breastfeeding in public while using a cover. Consistent with perceiving women who breastfeed in public as agentic, more than communal, I predicted that people will report less positivity toward these women as well.

CHAPTER II:
STUDY 1 METHOD

Participants

Participants included 89 University of Houston-Clear Lake students (22 men, 59 women, 8 other), recruited from the university's Participant Pool. All participants received course credit for their participation. Participants ranged from 19 to 59 years of age, with the median age being 24 (four participants declined to provide their age). Thirty-eight participants were Hispanic/Latinx (42.2%), 23 White (non-Hispanic) (25.6%), 11 Asian (12.2%), 9 Black/African American (10%), 8 Biracial (8.9%), and 1 other (1.1%).

Procedures

Prior to the beginning of the online study, participants were presented with an informed consent document. The document explicitly stated that the study was about breastfeeding, and participants were given the opportunity to decide whether or not they would like to continue with the study. Those who chose to continue were first presented with the Ambivalent Sexism Inventory (Glick & Fiske, 2001). Following this, the participants completed a short measure unrelated to the current study, the Need for Cognitive Closure (Webster & Kruglanski, 1994), in order to reduce demand characteristics. Following this filler task, participants were shown a photo of a woman breastfeeding her child in one of the two locations (public or private), with the public condition being split into two different sub-conditions: *public-covered* and *public-not covered*.

In the *public-not covered* group, participants viewed a photo of a woman breastfeeding her child while sitting on a bench in a public park. Participants in the *public-covered* group viewed a photo of a woman breastfeeding on a bench in a shopping

mall. In the *public-covered* condition both the woman's entire torso and the baby were covered with a blanket. The woman presented in the *public non-covered* condition is breastfeeding without any cover, while sitting on a bench in a public park. The target has her shirt pulled down; thus, having a portion of her breast exposed. Both the top portion as well as the inner side of one of the target's breasts are visible. In the *private* group, the woman in the photo was breastfeeding her child alone and in her own home, specifically on a couch in what appears to be a living room. Similar to the woman presented in the *public non-covered* condition, the target's shirt is pulled down and the top portion of one of her breasts is also visible.

After viewing the photo, individuals were asked to complete the characteristic assignment measure. While completing this task, the photo was accessible at the top of the page; thus, participants had the opportunity to view the photo at all points during the completion of this measure. Because the target in the photo's sex was salient (breastfeeding is a behavior only women can engage in), allowing individuals to view the photo and subsequently respond to the measure without access to the photo may result in participants forgetting the location of the target's behavior and responding based solely on the target's sex. This could be problematic, as it would not be clear whether the responses were due to beliefs about the location of the woman engaging in the breastfeeding behavior or simply the participant's existing gender-role stereotypes. Allowing the participants to view the photo for the entirety of the measure ideally increased the likelihood that participants did, in fact, rate the woman based on the location of the behavior and not solely her sex. Following the characteristic assignment measure, participants were asked to evaluate the woman in the photo in terms of the level of positivity. Participants were then asked questions regarding their attitudes toward breastfeeding in general and their overall attitudes toward public breastfeeding (both

covered and not covered). Lastly, participants completed a demographic questionnaire (e.g., gender, ethnicity, parenthood status).

Measures

Ambivalent Sexism Inventory

Glick and Fiske's (2001) Ambivalent Sexism Inventory (ASI) assesses individual's levels of both hostile and benevolent sexism. The measure consists of 22-items and asks participants to indicate the extent to which they agree with each statement by using a 6-point scale ranging from 0 (*disagree strongly*) to 5 (*agree strongly*). Scores for both benevolent and hostile sexism were calculated based on averaging the responses of the corresponding statements.

Assignment of Characteristics

Given the link between masculine traits and agency and feminine traits and communion, the characteristic assignment task consisted of a modified version of Bem Sex-Role Inventory (Bem, 1974). Participants were presented with a list of 18 characteristics, and were asked to indicate the likelihood that the woman in the photo shown possessed each characteristic, using a 6-point scale, ranging from 0 (*very unlikely*) to 5 (*very likely*). This list included 10 masculine/agency associated characteristics (e.g., aggressive, independent, forceful, etc.), 10 feminine/communion associated characteristics (e.g., gentle, nurturing, eager to soothe hurt feelings, etc.), as well as 5 neutral characteristics (e.g., truthful, helpful, adaptable, etc.). Responses for each list of characteristics were averaged to create the communal (Cronbach's $\alpha = 0.81$) and agentic (Cronbach's $\alpha = 0.74$) categories.

Attitudes Toward Target

Participants were asked to evaluate the target in the photo on a variety of dimensions (e.g., likability, warmth), but, of critical importance, was the rating of positivity assessed

with two questions, “What is your overall rating of the woman in the photo?” and “How did you feel toward the woman in the photo?”. Participants responded to these items using a 6-point Likert scale ranging from 0 (*very negative*) to 5 (*very positive*). Responses to the two items were averaged to create an overall rating of positivity (Cronbach’s $\alpha = 0.88$).

General Attitudes Toward Breastfeeding

Participants were asked to indicate how positive or negative they feel about breastfeeding, as well as their attitudes about breastfeeding in public. This measure included questions that measured attitudes toward both covered and not covered public breastfeeding; all questions were answered using a 0 (*very negative*) to 5 (*very positive*), where scale anchors were adjusted as appropriate for the specific question. General breastfeeding attitudes were calculated by averaging the scores of 10 items (Cronbach’s $\alpha = 0.91$). Attitudes toward public breastfeeding with the use of a cover were calculated by averaging the scores of four questions (Cronbach’s $\alpha = 0.94$), and attitudes toward public breastfeeding without the use of a cover were calculated based on the average of four questions (Cronbach’s $\alpha = 0.97$). The four questions related to public breastfeeding, with or without a cover, asked about the participant’s comfort level with the behavior, overall approval of the behavior, approval of themselves or partner engaging in the behavior, as well as if the behavior should be encouraged.

CHAPTER III:
STUDY 1 RESULTS

Although data was collected for all gender groups (men, women, and other), due to insufficient sample size, data for both men and individuals who indicated their gender as other were excluded from analyses. Only data for individuals who identified as women were included in the following analyses.

Ambivalent Sexism Inventory

Past research suggests that benevolent sexism levels for men influenced their negative attitudes toward women who breastfeed publicly, however this was not found to be consistent among women (Acker, 2009; Forbes et al., 2003). Due to the exclusion of male participants, ambivalent sexism scores were not included in analyses for Study 1.

Assignment of Characteristics

As predicted, an analysis of variance (ANOVA) indicated significant differences in the assignment of communal characteristics to the target based on location ($F(2, 58) = 4.62, p < 0.05$; Figure 1). Specifically, a Tukey post-hoc analysis found a significant difference in the assignment of communal characteristics to the target between those who viewed the woman breastfeeding in private ($M = 3.27, SD = 0.36$) and those who viewed the woman breastfeeding in public without a cover ($M = 2.83, SD = 0.43, t(58) = -3.04, p < 0.05$). That is, participants viewed the woman breastfeeding in private as more communal than the woman breastfeeding in public without a cover. As for the public but covered woman, the perceptions of this woman's communal characteristics ($M = 3.06, SD = 0.52$), although descriptively lower than the woman in the private condition and descriptively higher than the woman in the public uncovered condition, neither comparison was significant (p 's $> .25$; see Figure 1).

Additionally, there were significant differences found between the groups (private, public-covered, and public-not covered) and the assignment of agentic characteristics as well ($F(2,58) = 3.60, p < 0.05$). Similar to the findings found for the assignment of communal characteristics, a tukey post-hoc found a significant difference between those in the *private* condition and those in the *public-not covered* condition. Participants who viewed the photo with the woman breastfeeding in public without a cover ($M = 2.57, SD = 0.49$) assigned the target higher levels of agentic characteristics compared to those who viewed the photo of the woman breastfeeding in private ($M = 2.19, SD = 0.50, t(58) = 2.60, p < 0.05$). Again, although not significantly different, the mean for perceived levels of agentic characteristics among those in the *public-covered* condition ($M = 2.30, SD = 0.37$) was descriptively lower than the public-not covered group, and descriptively higher than the private group (p 's $> .45$; see Figure 1).

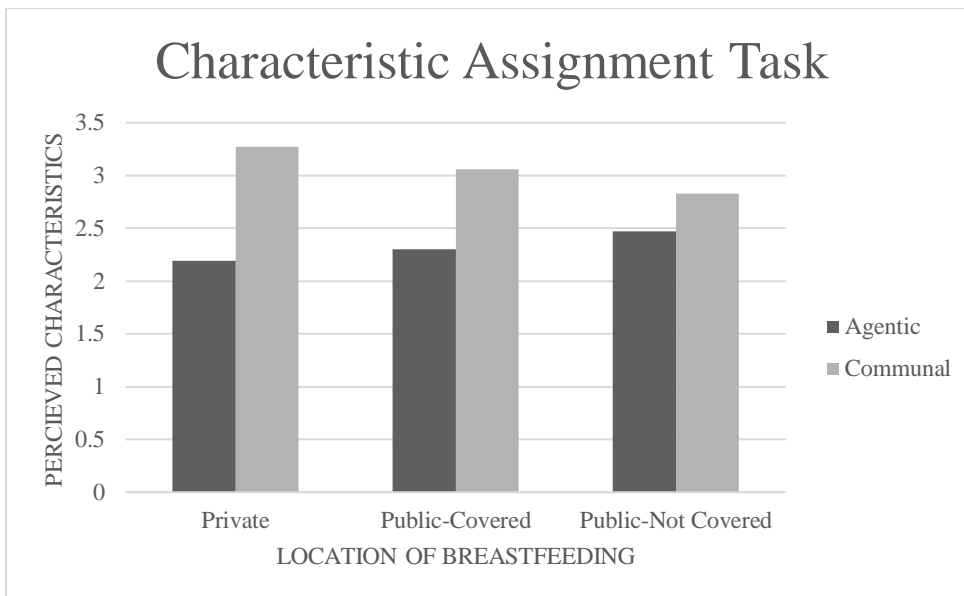


Figure 1. Perceived Levels of Agentic and Communal Characteristics of Breastfeeding Women Depending on Location

Attitudes Toward Target

Overall, there were no differences in positivity toward the target across the three conditions (private, public covered, public not covered; $F(2, 58) = 2.44, p = 0.10$).

General Attitudes Toward Breastfeeding

When examining attitudes toward breastfeeding in general, participants overall attitudes ($M = 4.59, SD = 0.58$) were significantly higher than the midpoint of the scale ($t(60) = 28.30, p < 0.001$); thus, this sample of women participants seem generally supportive of breastfeeding. However, attitudes toward breastfeeding in general ($M = 4.59, SD = 0.58$) were higher than attitudes toward both public breastfeeding while using a cover ($M = 3.23, SD = 1.70; t(60) = 6.08, p < .001$) and non-covered public breastfeeding ($M = 3.09, SD = 1.75; t(60) = 6.71, p < .001$). Further, participants did not show significant differences in attitudes toward covered public breastfeeding ($M = 3.23, SD = 1.70$) and public breastfeeding without the use of a cover ($M = 3.09, SD = 1.75; t(60) = 0.34, p = 0.73$; see Figure 2).

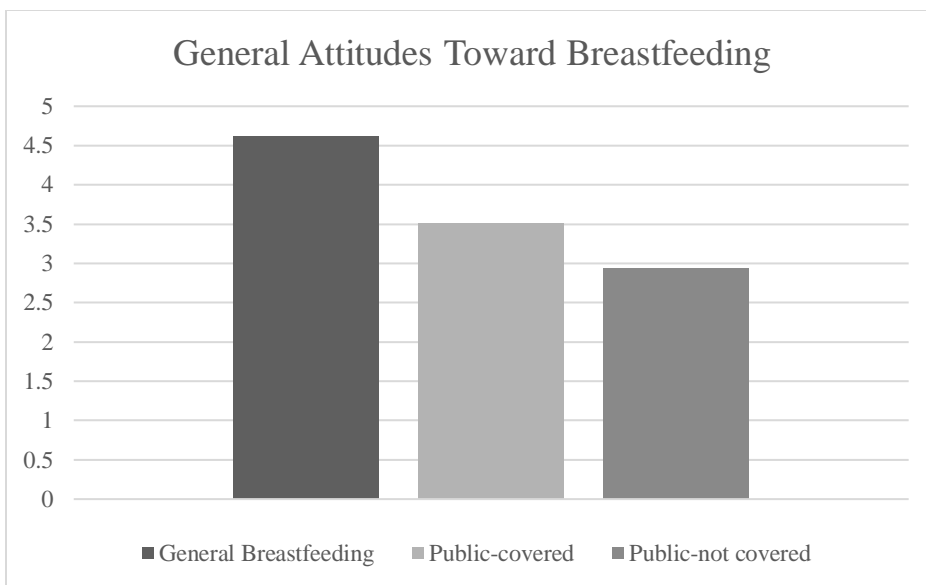


Figure 2. General Attitudes Toward Breastfeeding Depending on Location of Behaviors

CHAPTER IV: STUDY 1 DISCUSSION

The findings in Study 1 suggest that women perceive other women who breastfeed in private as possessing higher levels of communal characteristics, and women who breastfeed publicly without using a cover as possessing higher levels of agentic characteristics. Additionally, women's attitudes toward breastfeeding in general were overwhelmingly positive, but location for breastfeeding clearly matters. When comparing attitudes based on location, attitudes toward breastfeeding in general were significantly more positive than attitudes toward public breastfeeding (both covered and not covered), although there were no significant differences in attitudes between covered and not covered public breastfeeding.

Purpose of Study 2

While Study 1 examined perceptions of women who breastfeed, it is important to also investigate if stereotypes and sexism influence how breastfeeding and non-breastfeeding mothers perceive themselves. Acker (2009) and Forbes and colleague's (2003) findings that benevolent sexism moderates men's views of women who breastfeed publicly supports the notion that this behavior is not role congruent. Neither of those two studies found benevolent sexism to have any implications on how women perceive other women who engage in public breastfeeding (Acker, 2009; Forbes et al., 2003). With this said, both studies only approached the question from a social standpoint and did not take into account the role of benevolent sexism on breastfeeding mothers' attitudes about themselves.

According to Glick and Fiske (2001), some women endorse, and even embrace, the ideas of benevolent sexism. Although the endorsement of benevolent sexism has not

been found to moderate women's attitudes about other women breastfeeding in public, perhaps it actually influences whether or not they themselves engage in the behavior.

In line with this idea, it was hypothesized that women who themselves currently, or in the past, have engaged in public breastfeeding (covered or not covered) would endorse lower levels of benevolent sexism, perceive themselves as more masculine/agentive, and possess more positive attitudes towards public breastfeeding compared to women who only breastfeed privately. More specifically, mothers who engaged in *public-not covered* breastfeeding were predicted to endorse the lowest levels of benevolent sexism, assign themselves more masculine/agentive characteristics, and have the highest levels of positive attitudes towards public breastfeeding (both covered and not covered). Mothers who do not currently, or have never engaged, in public breastfeeding, were predicted to possess the highest levels of benevolent sexism and perceive themselves as particularly feminine/communal. Additionally, these women were anticipated to have less positive attitudes towards public breastfeeding in general, and especially public breastfeeding without the use of a cover, relative to the other women, as this behavior is not perceived to be role congruent. While hostile sexism was measured, based on past findings (Acker, 2009; Forbes et al., 2003) it was not predicted to influence the assignment of personal characteristics or personal attitudes toward breastfeeding.

CHAPTER V:
STUDY 2 METHOD

Participants

Participants included 96 women, whose ages ranged from 23 to 74 years old, with the median age being 39 (one participant declined to provide their age). Participants were recruited from Mechanical Turk, and received a small monetary compensation for their participation in the online study. Sixty-three of the participants identified as White (non-Hispanic; 76%), 9 Black/African American (9.4%), 7 Asian (7.3%), 4 Hispanic (4.2%), 2 Multi/Biracial (2.1%), and 1 American Indian (1%). Participants included women who have or currently do breastfeed, as well as mothers who have not breastfed their children.

Procedures

Similar to Study 1, participants began with the ASI and characteristic assignment task. To control for carryover effects participants may have experienced by completing either task before the other, these two items were counterbalanced among participants. Following the completion of these two items, participants completed the general attitudes toward breastfeeding measure, followed by the breastfeeding experiences questionnaire. Participants ended by completing a general demographic survey and were then debriefed.

Measures

Ambivalent Sexism Inventory.

The same Ambivalent Sexism Inventory (ASI) administered in Study 1 was given to participants in Study 2.

Assignment of Characteristics

The same characteristic assignment instrument used in Study 1 was given to these participants, but in this study the participant rated themselves.

General Attitudes Toward Breastfeeding

Similar to Study 1, attitudes toward breastfeeding in general and public breastfeeding (covered and not covered) were measured using a 6-point Likert scale.

Breastfeeding Experiences

Participants were asked to answer a variety of questions pertaining to their breastfeeding behaviors. These questions involved the number of children they have or currently breastfeed, the location in which they breastfeed, their experience with breastfeeding in public, and the ages of the children they breastfed. This measure also included questions related to the frequency and preferences related to public and private breastfeeding.

CHAPTER VI:
STUDY 2 RESULTS

For analyses, women were grouped based on their history of breastfeeding (see Table 1). Women who currently, or in the past, engaged in public breastfeeding without the use a cover, and indicated they engage or have engaged in these behaviors at least half of the time, were classified as “public-not covered”. Women who indicated that they currently or in the past have engaged in covered public-breastfeeding more often than not were categorized as “public-covered”. Women who currently or in the past only engaged in private breastfeeding were classified as “private.” Women who currently or in the past never engaged in breastfeeding were examined on an exploratory basis.

Table 1

Grouping by Self-Reported Engagement in Breastfeeding Behaviors by Location

Groups	%	<i>n</i>
Private	44.8%	43
Public-covered	28.1%	27
Public-not covered	17.7%	17
None	9.4%	9

Ambivalent Sexism Inventory

Although trending in the predicted direction, there were no significant differences found in benevolent sexism levels among the four groups (private, public-covered, public-not covered, none; $F(3, 92) = 2.41, p = 0.07$). A Bonferonni post-hoc analysis showed marginal differences between women who breastfed privately ($M = 2.37, SD = 1.16$) and women who breastfed publicly with a cover ($M = 1.58, SD = 1.38; t(92) = -2.63, p = 0.06$).

Assignment of Characteristics

There was an overall effect found in the women's self-assignment of communal characteristics depending on breastfeeding group ($F(3, 92) = 9.27, p < .001$). Women who indicated they never breastfed ($M = 2.16, SD = 0.53$) assigned themselves significantly fewer communal characteristics than those who breastfed in all three locations: private ($M = 3.01, SD = 0.51$), public-covered ($M = 3.04, SD = 0.39$), and public-not covered ($M = 2.95, SD = 0.40; p$'s $< .001$). In terms of agentic characteristics, there were no significant differences found among the women in all groups ($F(3,92) = 0.25, p = 0.87$).

These findings suggest that women do not differ in terms of the level of agentic characteristics they believe they possess based on their breastfeeding behaviors, but they do differ in terms of their self-perception of the level of communal characteristics they possess based on whether they engage in breastfeeding. This aligns with previous research that people in general perceive the act of breastfeeding as communal (Acker, 2009), however this did not differ depending on breastfeeding location among this sample.

General Attitudes Toward Breastfeeding

As in study 1, all participants had significantly higher levels of positive attitudes toward breastfeeding in general ($M = 4.61, SD = 0.70$) when compared to the midpoint of the scale ($t(95) = 29.60, p < 0.001$). As in Study 1, when comparing attitudes toward breastfeeding in general and attitudes toward breastfeeding in public (both covered and not covered), the participants were significantly more positive toward breastfeeding in general (p 's < 0.001). Additionally, participants were significantly more positive toward public-covered breastfeeding ($M = 3.51, SD = 1.64$) relative to public-not covered breastfeeding ($M = 2.94, SD = 1.82; t(95) = 1.91, p < 0.05$).

When looking at differences in overall attitudes toward breastfeeding between groups, there were significant differences found ($F(3, 92) = 7.24, p < .001$). Women who indicated they have never breastfed had significantly lower positive attitudes toward breastfeeding in general compared to women who breastfed in all locations (private, public-not covered, public-covered; p 's < 0.001; see Table 2). In regard to attitudes toward public-covered breastfeeding, there were also significant differences found between the groups ($F(3, 92) = 10.10, p < 0.001$). Women who indicated they breastfed in public without a cover had significantly lower positive attitudes toward public breastfeeding with the use of a cover than those who indicated they themselves breastfed in public with a cover, those who breastfeed in private, and those who had never breastfed (p 's < 0.01).

Additionally, there were significant differences found between the groups in regard to attitudes toward public breastfeeding without the use of a cover ($F(3, 92) = 7.49, p < 0.001$). Women who breastfed publicly without a cover were significantly more positive toward public-not covered breastfeeding relative to those breastfed in private or had never breastfed at all (p 's < 0.05). Although trending in the same direction as the other findings, there was no significant difference found in attitudes toward public not-covered breastfeeding between women who themselves engaged in the behavior and those who breastfed publicly with a cover ($t(92) = -2.35, p = 0.09$). Overall, women were most positive toward the type of breastfeeding location they indicated they themselves engaged in the most.

Table 2

General Attitudes Toward Breastfeeding based on Personal Engagement in Breastfeeding Behaviors

Women Grouped by Breastfeeding Location	General Breastfeeding		Public-covered		Public-not covered	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Private	4.63 _b	0.629	3.82 _b	1.37	2.30 _b	1.64
Public-covered	4.79 _b	0.508	4.01 _b	1.31	3.23	1.75
Public-not covered	4.75 _b	0.554	1.76 _a	1.91	4.44 _a	1.33
None	3.69 _a	1.08	3.81 _b	1.20	2.31 _b	2.04

Note. For general attitudes, means of different subscripts are significant at $p < 0.001$. For public-covered, means of different subscripts are significant at $p < 0.01$. For public-not covered, means of different subscripts are significant at $p < 0.05$.

CHAPTER VII: GENERAL DISCUSSION

Study 1 examined the social perceptions of mothers who breastfeed, both in public and in private, in order to identify the possible influence of stereotypes and sexism on a woman's decision to breastfeed. Contrary to predictions, no significant differences in attitudes toward the target between conditions (public, private-covered, private-not covered) were found. However, as predicted, women in the *private* condition perceived the target in the photo as possessing higher levels of feminine/communal characteristics compared to those in the private-not covered group. Additionally, women who breastfeed publicly without a cover were associated with more masculine/agentive characteristics than the woman who breastfed privately. For both communal and agentive characteristics, the means for individuals in the private-covered condition were descriptively in the middle of those in the public-covered condition and the private, however there were no significant differences between them. These findings demonstrate the principles of role congruity theory, as women who breastfeed privately were perceived to possess characteristics that are role congruent, while women who breastfeed publicly are seen to possess less characteristics that are role congruent, particularly when they do not use a cover. Ultimately, these results suggest that women who breastfeed their children in public are being perceived as less of a "typical woman," even as they engage in a behavior that is uniquely a behavior of women.

Study 2 expanded on the first study by focusing on the self-perceptions of breastfeeding mothers and breastfeeding behaviors. The results demonstrated that women did differ in the assignment of communal characteristics based on breastfeeding behaviors, but not by location, as predicted. Women who did not breastfeed at all aligned

themselves with communal characteristics at significantly lower levels than women who breastfed in all locations (private, public-covered, public-not covered).

In regard to benevolent sexism, women who breastfed privately were predicted to endorse higher levels of benevolent sexism. Conversely, women who did engage in public breastfeeding in general were predicted to endorse lower levels of benevolent sexism. These hypotheses, although trending in this direction, were not supported. There were no significant differences found in benevolent sexism levels between groups.

When looking at overall attitudes toward breastfeeding, women who indicated they had never breastfed had significantly lower levels of positive attitudes toward breastfeeding in general, compared to those who breastfed (private, public-covered, public-not covered). Additionally, when looking at attitudes toward breastfeeding publicly (covered and not covered), women had the most positive attitudes toward the type of location in which they themselves engaged in breastfeeding.

Limitations and Future Directions

One of the largest limitations of Study 1 was the exclusion of men due to insufficient sample size. Additionally, ambivalent sexism was not analyzed due to the exclusion of men. In the future, it is important to examine how men perceive the levels of communal and agentic characteristics breastfeeding mothers possess based on location, in order to consider the possibility of gender differences between men and women. This would allow for a more complete understanding of how breastfeeding women, and specifically women who breastfeed publicly, are perceived, as well as the factors that contribute to such perception.

In Study 2, an unanticipated finding was that the women who did not breastfeed at all aligned themselves with lower levels of communal characteristics compared to women who did breastfeed (in all locations). While a limitation of the current study is that there

was a small group of mothers who never breastfed ($n = 9$) compared to those who did ($n = 87$), if a larger sample of mothers who have never breastfed yielded similar findings, it would be a compelling area of further investigation. Some of these mothers may have chosen not to breastfeed their children, as not all women choose to breastfeed. It is interesting, however, to think about the implications on the mental health of the percentage of women who did not breastfeed and wanted to. Because the act of breastfeeding itself is gendered (only women can engage in breastfeeding), if mothers who could not breastfeed but wanted to are found to align themselves with communal characteristics at lower rates than women who do breastfeed, does this suggest the lack of breastfeeding influences their self-perceptions of womanhood or motherhood? What implications does this then have on their mental health? Additionally, what are the factors that led to these mothers' inability to engage in the desired breastfeeding behaviors?

Another area for further examination is the implication of benevolent sexism on women's choice of location to engage in breastfeeding. While the findings for this study were not significant, they were trending toward woman who breastfeed privately having higher levels of benevolent sexism than those who breastfed publicly with a cover. It is important to investigate whether this finding is limited to this study or if there are differences in benevolent sexism between mothers who breastfeed privately and those who breastfeed publicly. If so, future research could also aim to address whether the benevolent sexism levels of mothers who breastfeed publicly remain stable before and after they engage in public breastfeeding or if breastfeeding in a public setting decreased their initial level of benevolent sexism. Given that Acker (2009) argues that benevolent sexism moderates men's attitudes toward public breastfeeding, it is important for future research to focus on attempting to investigate if this holds true for the self-perception of breastfeeding mothers as well by using a longitudinal design to examine benevolent

sexism of mothers prior to and after the birth of a child, particularly if engaging in breastfeeding.

Other factors that were not investigated in this research, but may be relevant, are the role of sexual objectification and intersectionality. Sexual objectification has been demonstrated to have implications on both the social and self-perception of mothers who breastfeed publicly (Forbes et al., 2003; Johnston-Robledo, Wares, Fricker, & Pasek, 2007). Research also notes a significant demographic discrepancy among those who engage in breastfeeding behaviors. Breastfeeding rates are highest among white, educated women who hold a middle-class status (Acker, 2009; Pitonyak, Jessop, Pittgogia, and Kovach, 2016). Both of these are important areas of future investigation.

Conclusion

These findings contribute to the growing understanding of how the social context of breastfeeding influences the way in which mothers view themselves and, ultimately, how mothers more broadly make decisions about feeding methods. Despite breastfeeding recommendations and known benefits, breastfeeding is not a normative method of infant feeding in the United States. Shifting the focus from simply individual characteristics to the social context of breastfeeding is an essential step toward gaining a more complete understanding of the factors that influence a woman's likelihood to breastfeed. Armed with this knowledge, advocates and professionals alike will be more equipped to address these issues, which will ultimately lead to them being more successful in providing support to women for the initiation and continuation of breastfeeding their infants.

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