Original Paper: Exploring Social Media Group Use Among Breastfeeding Mothers: A Qualitative Analysis

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Abstract:

Background: Breastfeeding is well known as the optimal source of nutrition for the first year of life. However, suboptimal exclusively breastfeeding rates in the US are still prevalent. Given the extent of social media use and the accessibility of this type of peer-to-peer support, the role of social networking sites in enabling and supporting breastfeeding mothers needs to be further explored. Objective: The objective of this study was the explore how social media group usage impact breastfeeding knowledge, attitudes and beliefs. Methods: Participants were recruited from one pro-breastfeeding social media group with over 6,300 members throughout the US. Online Focus Group Discussions (FGDs) were conducted with 21 women; Interviews were conducted with 12 mothers. Qualitative data were aggregated for thematic analysis. Results: Participants indicated the social media group formed a community of support for breastfeeding, with normalizing breastfeeding, empowerment for breastfeeding, resource for breastfeeding, and shared experiences in breastfeeding as additional themes. Conclusions: According to participants, social media groups can positively influence breastfeeding related attitudes, knowledge and behaviors, as well as lead to longer duration of breastfeeding. The results of this study should be taken into account when designing interventions for breastfeeding mothers.

Keywords: Social Media; Milk, Human; Breast Feeding;
Introduction

Numerous organizations, including the American Academy of Pediatrics (AAP), World Health Organization (WHO), and Academy for Breastfeeding Medicine recommend, at minimum, exclusively breastfeeding for the first 6 months of life [1-3]. While breastmilk has been well known as the optimal source of nutrition for infants for decades, research continues to accumulate on the benefits of breastfeeding for the mother-infant dyad, building an extensive scientific database of high-level research consisting of qualitative and quantitative studies.

A recent, extensive meta-review of 28 systematic reviews and meta-analyses reasserted the most known and agreed upon effects of exclusively breastfeeding for the infant: lower infectious morbidity and mortality, higher intelligence than those who are formula fed, and protection against later-in life development of overweight and diabetes, to name a few [1, 4, 5]. In addition to direct benefits of exclusively breastfeeding for the infant, there are also benefits gained by the mother from exclusively breastfeeding. These include: protection against breast cancer, delayed onset of ovulation and reduction in both ovarian and breast cancer risk [4]. A recent cost-benefit analysis for breastfeeding estimated that the “scaling up” of breastfeeding could prevent 823,000 child deaths and 20,000 breast cancer deaths per year world-wide [4]. The benefits associated with breastfeeding are essential for health promotion and disease prevention for the mother-infant dyad [6-9], which is why it is imperative for women to be able to not only attempt breastfeeding, but be successful at it.

In recent years, research around the juncture of motherhood and technology has grown significantly [10, 11]. Social media outlets have been used to spread health-related messages as well as provide a “forum” for those seeking health information. A main advantage of using social networking sites (SNSs) in regards to health information is they enable the widespread interaction of users as both receivers and providers of health information and knowledge [12]. While the amount of studies around social media use, social capital, and technology has increased, there is still much to be explored in this emerging realm- especially in regards to maternal child health.
The exponential growth of user generated content (UGC) embedded within SNS elicits a need for a further understanding of communication dynamics involved in these online forums [13]. Although numerous studies have provided a foundation for evidence of SNSs as community building and even stated the use of groups on Facebook as pathway for community interaction [11], there is a lack of knowledge in the scientific community about how breastfeeding mothers influence other mothers online and how these influences impact mother and infant health outcomes. Additionally, there exists (minimal, at best) research on how communication between breastfeeding mothers who utilize SNS supports breastfeeding. As it is well known that social relationships and support play a critical role in breastfeeding-related behaviors, social media usage is a topic of importance. [14, 15].

Furthermore, the use of virtual communities within SNSs for knowledge sharing is only recently being studied [16]. Individual’s personal values can often serve as motivation for knowledge sharing in the absence of personal familiarity or assumptions of direct reciprocity, indicating social capital plays a significant role to knowledge contribution within the online realm [17]. Despite growth in literature regarding knowledge sharing within SNS, current research on breastfeeding-related behaviors and outcomes within the realm of SNS is narrow; focusing on extrinsic motivators, already known benefits of breastfeeding, or familial or partner support. There exists immense opportunity for recently emerged technologies, such as social media groups on SNSs to provide interaction, support and information to breastfeeding mothers. Yet, to date, there exists very little information regarding breastfeeding mothers’ use of social media groups and its’ impact on knowledge, attitudes and behaviors. To address this gap, the proposed study aims to leverage mothers’ attitudes and behaviors of social media usage to understand effects on breastfeeding outcomes.

The qualitative findings shared here are part of a mixed methods study to comprehensively explore mothers’ use of social media groups and the impact of said use on breastfeeding-related knowledge, attitudes and beliefs and outcomes. The goal of the qualitative phase of the study is to gain meaningful, in-depth insight into the mindset of mothers. The following research question guided the qualitative strand of the study: How does social media group usage support breastfeeding mothers?
Methods

The results of the qualitative strand of this study were used to guide the development of a tool to assess breastfeeding mothers’ social media group use and breastfeeding-related attitudes, knowledge, and outcomes. Participants were selected purposefully through a snowball sampling design. Women who were members of a Facebook pro-breastfeeding social media group were recruited via a post on the group wall in the fall of 2017. This group was selected due the large number of members (>6300), their “pro-breastfeeding” approach, and accessibility to the group (US-based). Study participation was limited to women who were pregnant and intended to breastfeed, were currently breastfeeding, or who had recently weaned their infant in the past 3 years.

After screening for inclusion criteria, eligible participants were asked to participate in one of three online focus group discussions (FGDs) and/or one-on-one interviews. Of the 37 women recruited for online FGDs or interviews, all were eligible to participate. However, only 33 participants consented. A total of twenty-one participants participated in the online FGDs, and 12 mothers participated in interviews. There were four mothers who participated in both the online FGDs and interviews. After informed consent was obtained, online FGD participants were randomized into either the first, second, or third online FGD. Participants were then added to a secret online group and asked to complete a demographic questionnaire prior to participating in the online FGDs. The Online FGDs were asynchronous and participants were given four days to read and respond to the initial post, as well as to respond to and interaction with others in the group. Detailed methodology, including reflection on the utilization of this methodology with mothers is published elsewhere [18]. The intent of the interviews was to generate greater depth on themes brought up in the online FGDs. As such, the online FGD analysis guided the development of the interview instrument. All interviews were performed after informed consent was obtained and demographic questionnaires were completed. Both online FGDs and interviews were conducted with IRB approval and oversight.
Data Analysis

Online FGDs and interview data were aggregated for analysis. The combined data transcript was then analyzed using Nvivo 10 for in-depth thematic analysis [19]. During initial coding, in-vivo coding was utilized for each phrase of the transcript, which was conducted by the researcher. A main reason for selecting an in-vivo approach to coding was to stay “true” to the data, as this approach summarizes key phrases using participants own words [20]. This approach is also advocated for within the framework approach for qualitative research analysis [20]. KS also reviewed the coded data according to each theme and created a preliminary analysis results document to be shared with participants. This member checking was conducted to verify that the researchers’ interpretation of the data was accurate. Themes were accepted by all 7 participants who were invited for member checking.

Results

At the time of enrollment, two women were currently pregnant, 26 women were currently nursing, and 5 had weaned their child in the past 3 years. Other socio-demographic characteristics of participants are shown in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>N(%) or Mean(Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>29.7 (23-40)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>3 (9.1%)</td>
</tr>
<tr>
<td>American Indian</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>29 (87.9%)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>High School Diploma/Some college</td>
<td>12 (36.4%)</td>
</tr>
<tr>
<td>Bachelor’s Degree (4-year)</td>
<td>10 (30.3%)</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>7 (21.2%)</td>
</tr>
<tr>
<td>Professional Degree (JD,MD)</td>
<td>3 (9.1%)</td>
</tr>
<tr>
<td>Working Status</td>
<td></td>
</tr>
<tr>
<td>Full or Part-time</td>
<td>28 (84.8%)</td>
</tr>
<tr>
<td>Not Working</td>
<td>5 (15.1%)</td>
</tr>
<tr>
<td>Type of Birth</td>
<td></td>
</tr>
<tr>
<td>Vaginal or VBAC</td>
<td>24 (72.7%)</td>
</tr>
<tr>
<td>C-section</td>
<td>9 (27.3%)</td>
</tr>
<tr>
<td>Infant Never Admitted to NICU</td>
<td>33 (100%)</td>
</tr>
<tr>
<td>Interaction with Social Media Group</td>
<td>33 (100%)</td>
</tr>
<tr>
<td>Ask Questions</td>
<td>24 (72.7%)</td>
</tr>
<tr>
<td>Give Advice</td>
<td>24 (72.7%)</td>
</tr>
<tr>
<td>Does Not Interact Regularly</td>
<td>7 (21.2%)</td>
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and pumping, with twelve percent (n=4) exclusively breastfeeding (infant only feeds at the breast), and only three percent (n=2) exclusively pumping (infant only receives breastmilk from bottles). When asked how long they had been in the pro-breastfeeding social media group, most (57.6%) had been in the group more than 12 months, with 12.1% and 30.3% being in the group between 6 to 12 months and less than 6 months, respectively. Interaction with the group varied; 24 participants said they give advice and ask questions regularly within the group and 7 stated they do not interact regularly. For those who do not interact regularly, participants reported they searched in the group before posting or had recently weaned their infant as reasons why they were not currently active with the group.

Participants’ attitudes, behaviors, and experiences with social media groups while breastfeeding were analyzed. The analysis resulted in one overarching theme of Community, with the following supporting themes: (1) Normalizing breastfeeding; (2) Empowerment for breastfeeding; (3) Resource for breastfeeding; and (4) Shared experiences in breastfeeding. These themes are elaborated on in detail below, providing quotes from participants to further harmonization and understanding.

**Normalizing breastfeeding**

A large majority of posts were discussing how stigmatized breastfeeding still is, both on social media and in the real world. The stigma or fear of judgement extended beyond the realm of the public sphere and into the mothers’ families. Participants described the process as “isolating. Breastfeeding is still taboo in public. Sometimes our husbands or significant others or family members aren’t supportive.”

The theme of unsupportive friends and/or family members reigned throughout both online FGDs and KI interviews:

> Attitudes from friends and family definitely impacted my breastfeeding relationship. I felt unwanted a lot when visiting my in-laws and almost stopped nursing several times because of it. I feel like their attitudes also made me act unfairly towards my daughter. I often wouldn’t let her control how long the session lasted because I knew they would come and ask if we were done yet.
While a majority of mothers felt like their friends and family were not supportive of breastfeeding, there were a few who reported their friends and family were supportive:

I do however have one friend who has done nothing but encourage and support me. Her attitude helped me feel secure in my decisions until I decided to wean and she encouraged me to continue. She was still supportive when I went through with it though.

Again, most participants felt that breastfeeding was still stigmatized, especially certain aspects of breastfeeding or how a mother chose to breastfeed (e.g. exclusively breastfeeding, exclusively pumping, or supplementing while breastfeeding). One participant commented:

A breastfeeding barrier that seems to be the most common for me is unsupportive people. Whether that's from comments on social media posts on breastfeeding, a family member, or a stranger giving me the side eye while nursing in public

In addition to breastfeeding, mothers mentioned breastfeeding in public, exclusively pumping, continued breastfeeding (past 12 months), co-sleeping, nursing at night and supplementing while breastfeeding as all having their own “taboo”. As one participant states:

Women are afraid of being shamed for breastfeeding. Whether it's for not being covered properly or the age of the child. I for one have experienced negative comments from some regarding nursing my 15 month old. Because of this, I don’t readily advertise or discuss my breastfeeding relationship outside of the groups.

It was discussed that within the group, most mothers felt like the group itself tried to normalize breastfeeding for mothers. This included expectations- what to expect in the beginning of the breastfeeding relationship, during the weaning process, and everything in between. The group was described as providing participants the opportunity to “understand what to expect and what's ‘normal’” and “feel that, as with anything else in life, if expectations are properly set, everyone will be more
satisfied with the experience.” This information sharing generated positive outcomes within the mothers’ experiences and overall approach of the activity:

It affects my attitude because it helps me know what to expect and, if I know what to expect and what's "normal", I am better able to accept what's going on. For example, knowing that cluster feeding is a normal thing, it didn't stress me out and cause frustration.

Mothers felt like this normalizing within the group contributed to the success of their breastfeeding outcomes.

*Empowerment for breastfeeding*

Almost all mothers also talked about the sense of empowerment they felt from the group. They discussed this in the form of confidence, empowerment and support. For one mother, the group played a vital role in her breastfeeding relationship:

With my oldest son, I did not breastfeed at all so I knew nothing. However, I knew I wanted to breastfeed this time around, so I joined several breastfeeding groups to learn as much as I could. I felt very overwhelmed and scared, but after reading others experiences and asking questions I felt much more confident. I wasn't sure how long we'd make it, but we are at 8months and going strong!

Mothers also discussed the high level of accountability in the group for encouraging one another. Some even stated their breastfeeding duration or breastfeeding goals changed because of being in such a supportive and empowering environment. This was a common theme throughout both online FGDs and KI interviews:

At the very beginning of my breastfeeding journey I was experiencing an extreme amount of pain. I wanted so badly to quit. The support I received from a social media group was invaluable. I was encouraged to never quit on a bad day. I never quit, because of the encouragement I got [from the group].
Another topic brought up in many of the online FGDs and KI interviews was nursing in public and the group’s role in encouraging mothers to overcome this barrier. Many mothers talked about how supportive the social media group was for nursing in public, empowering and encouraging women to not be ashamed to feed their babies in public spaces, including parks, shopping centers, restaurants, and others’ homes:

I am more willing to nurse in public than I would have been without being a part of these social media groups. I am very conservative but I now have nursed my son while shopping and speaking to a sales clerk- something I would never have dreamed of until I felt empowered by all of the ladies in these groups!

Enhanced confidence was also brought up as result of being in the group, going along with the theme of empowerment. From first time mothers to experienced breast feeders, the majority of participants stated the group helped them to alleviate concerns or self-doubt they had regarding breastfeeding. Issues around having enough milk supply, supplementation of formula, use of prescription medication, and going back to work were all brought up in regards to maternal confidence. However, mothers reported the social media group helped them to feel empowered and confident around these issues after interacting with other members:

Largely because of what I was reading in [the social media group] I gained the confidence to allow my son to nurse on demand, as opposed to trying so desperately to adhere to a nursing schedule. I also decided to wait until a week or so before I go back to work to begin preparing my pumped stash. Outside of these two decisions, I have gained confidence and affirmation about the decision to nurse in general and guidance on so many questions/concerns/doubts I've had as a first-time mom.

Resource

The social media group was found to serve as a resource for breastfeeding mothers, providing real-time and accurate information for all things breastfeeding. Mothers in the study reported that just
knowing the group existed to ask questions helped to alleviate their stress. Some mothers did not know any breastfeeding mothers, so the group served as a “pool” of potential mentor mothers to ask:

It benefitted me by having a resource for which I could ask literally any question under the sun related to breastfeeding, and I would have an answer and an explanation within hours, sometimes even within minutes. The ability to post on the group with questions and the peace of mind it gave me just knowing that it was there was very meaningful for me during my journey.

This value of information was further enriched by the level of availability to mothers, unlimited by time or access restraints:

Posting on social media groups will benefit us by making solid researched information, as well as personal experience from other moms, readily accessible. With no mothers in my own family who breastfed, the number of women to whom I can ask questions is very limited. Social media broadens that pool.

Mothers reported the group was helpful at all hours of the day and night, where people could receive “real-time” answers. The real-time answers mothers reported to be helpful for sustaining their breastfeeding relationship covered a variety of topics and issues, stating “I was really concerned about how much pumped milk to leave my baby when I returned to work. People flooded me with knowledge and charts to help calm my fears and helping my return to work become easier.”

The social media group was reported to be a place of support and comfort when mothers did not know what to do or where to turn. This is prevalent throughout the data, but mothers discussed how after interacting with the group (through seeking advice, reading through previous posts, or just interaction), their breastfeeding outcomes were positively impacted:

Well, when my child was going through his first growth spurt, he ate every single hour through the night. The next morning my mother-in-law expressed concern that my milk production was low or not keeping him full and asked if I wanted to supplement formula. Without the groups I'm in, I probably would’ve supplemented but because I could post and ask what to do, I found out it was completely normal and now we are on week 11 of breastfeeding.
This experience was common among participants, with outcomes stretching from basic nutrition to practical matters:

The [social media] group influenced me to still nurse as much as possible when our pediatrician recommended supplementing, they helped me know when my baby was gaining enough weight, they helped me decide how many times to pump at work, how many and what size bottles to send to daycare, etc.! I have learned so much!

Shared experiences

A common theme brought up was one aspect of the group mothers really appreciated—shared experiences. Mothers discussed they felt more trusting and able to understand the advice given within the group, as it came from other breastfeeding mothers. These mothers had gone through the same struggles and triumphs as others and were able to impart their knowledge onto others who were experiencing a similar situation:

These groups help me make decisions based on hearing experiences from a large group of women. As mothers we are constantly questing ourselves because we do not want to mess up our children. These groups help me learn from others so that I can avoid some practices that might not be as effective as others.

Also reported in the online FGDs and KI interviews was that mothers knew the value of having access to people with shared experiences. Most reported they didn’t know other mothers who were breastfeeding or had previously breastfed, so having the ability to ask advice and seek help from those who had gone through the experience in the group was a critical component of their successful breastfeeding relationship. Mothers discussed they felt the shared experiences of others both comforting and empowering at the same time, stressing that “Nothing replaces training like experience. And doctors, and nurses, receive so little training in breastfeeding. Having the group as a resource is amazing” as well as simply “realizing I am not alone, in both the struggles and successes.”
Others felt the social media groups helped them to feel more empathy and compassion for other mothers. Through shared experiences and shared struggles during the breastfeeding journey, mothers felt they were able to connect with other mothers:

I feel like I'm able to be more compassionate and have more empathy toward all moms, because through stories on the group page, I learned about moms dealing with multiple bouts of mastitis, baby biting, thrush, blebs and blisters, low pump supply, etc. Because I never experienced those things first hand, I feel like I wouldn't be as understanding toward others having difficulty because I didn't know it could be so hard for some.

**Community**

The one overarching theme discussed in the online FGDs was “community”. Participants felt like the pro-breastfeeding social media group was a place where they felt a bond with other mothers and where they were understood. Some participants noted the group brought strangers together around one topic and united them. Participants described their relationship with the group as being “always nice to have a place to go where you are ‘understood’” as well as appreciating the group’s ability to “normalize not only breastfeeding but also the troubles that surround breastfeeding moms. It brings us together!”

Participants also brought up a strong sense of confidentiality within the community and current members of the community. They felt a strong sense of trust and non-judgement from a group composed predominantly of strangers. However, participants said they would be hesitant to seek advice or help from the group if they had people they knew within the group. Co-workers, family, and even close friends were mentioned by participants within this context. As one participant shared:

I would be much less inclined to seek help from the group if I had coworkers that were also group members. I could see myself being too embarrassed to ask for help from people who know me, simply as a matter of pride.

A large portion of the discussion for both online FGDs and KI interviews integrated the trust and confidentiality within the social media group, indicating that these types of groups may be a rich place for knowledge sharing.
Discussion

The sense of community and shared experience, as well as overall support in the breastfeeding practice were major themes that emerged. Further, findings from this qualitative study elicit the notion that certain pro-breastfeeding social media groups could be considered a pillar of support for breastfeeding mothers, which is consistent with findings that mothers seek support online through social media groups [21]. As there is miniscule information on how social media groups support breastfeeding mothers, these results and findings shed light on topics not previously covered through traditional “mothering” groups and/or bring up novel areas for providing support to breastfeeding mothers.

Another main theme discussed in the online FGDs and interviews was normalizing breastfeeding. This included discussions on how the pro-breastfeeding social media group tried to iterate the normalcy of breastfeeding in public, exclusively pumping, continued breastfeed, co-breast sleeping, and night nursing, to name a few. Participants brought up the fact that they often felt stigmatized within the real world in regards to breastfeeding, but did not feel any stigma within the social media group. While literature has shown that the stigma associated with breastfeeding in public has been associated with lower breastfeeding rates, our results show the mothers within this social media group empower one another to overcome their fears and tackle nursing in public “breast-on”. While most mothers reported not knowing what to expect during the breastfeeding journey, almost all participants said the group helped to define realistic expectations and what “normal” means for breastfeeding mothers. Along with helping to establish and maintain expectations, this social media group was found to help “normalize” breastfeeding, having a profoundly positive impact on the breastfeeding journey.

Mothers also organically brought up the sense of empowerment for breastfeeding they received from their interaction with the social media pro-breastfeeding group, which arose as another main theme. This empowerment came to fruition in the forms of confidence, empowerment and generalized support for breastfeeding. As mentioned before, mothers felt like they did not know what to expect for breastfeeding and/or they did not know anyone who was breastfeeding or had previously breastfed to ask
questions, which made mothers feel isolated. Many mothers also mentioned their current support mechanisms (e.g. partners, families, friends, health care practitioners) did not want to or did not know how to support them in breastfeeding. There was a very high level of support and trust within this social media group, which led mothers to discussing more personal, sensitive topics as compared with other “mothering” groups. The group was very specifically empowering for nursing in public, providing awareness and support for mothers to nurse their infant whenever and wherever they may be. Mothers reported the empowerment and support received in the group helped to promote their confidence while also overcoming barriers, such as a lack of partner/family support, nursing in public and generalized low maternal confidence for breastfeeding. Mothers reported the support they received within this group to support increased maternal confidence around the following issues mothers discussed: milk supply, supplementation of formula, use of prescription medication, going back to work, and nursing on demand. Mothers even reported sharing more personal information within the group than they shared with their pediatricians or obstetricians. A key take away from this piece is the implications for online social support as a contributor to breastfeeding success.

Social media groups, in general, was found to be a resource for breastfeeding mothers. However, the degree of accuracy of information varied among social media groups. When mothers discussed the “pro-breastfeeding” social media group, they elaborated on not only the reliability of the information, but also on how much they loved having access to “real-time” information. For example, mothers were able to ask a question at 2am and get an almost immediate response from another breastfeeding mother who was up. Mothers reported this “real-time” resource as being invaluable to them- rather than having to search multiple websites for a specific answer, or wait until a pediatrician or obstetrician visit, mothers were able to get fast and valid information from a variety of people-including IBCLCs and mothers who had already experienced the issue. It is critical to discuss the rapport of the social media group when discussing social media groups as a resource for breastfeeding mothers, as this can lead to trust or distrust among the members.
Mothers reported having access to, being able to interact with, and ask questions to those who had already gone through the same struggles and triumphs during the breastfeeding relationship was an incredible asset within the pro-breastfeeding social media group. Mothers reported trusting other mothers’ advice within the pro-breastfeeding social media group more than they trusted their pediatricians or obstetricians breastfeeding-related advice. One mother elaborated on this notion, stating, “nothing replaces training like experience. And doctors, and nurses, receive so little training in breastfeeding”.

From mothers’ discussions of their interactions, it became clear that access to other breastfeeding mothers was a key supporting factor for the mother-infant dyad. It was also reported that through this interaction, mothers became more empathic and compassionate towards other breastfeeding mothers, reporting they were able to connect more with others, both inside and outside the social media group.

In a broader context, it is important to bring up the distinct differences brought up between “mom groups”, or “mothering groups” and “pro-breastfeeding groups” within the realm of social media. Mothers reported some social media groups were known for their strong, accurate advice, while other, broader groups were designated as pro-formula and shamed breastfeeding mothers. While most women had positive experiences with social media groups, not all experiences were positive, and there exists great variability in the ability of a group to support breastfeeding. One mom described her experience with social media groups, “The experience with social media regarding breastfeeding strongly depends on your social network and which group(s) you’re a member of. There was one group that I had initially joined, but later left due to the fact that I felt it put more of a negative stigma on breastfeeding, rather than normalizing it and bringing positivity to it, despite the fact that it was intended as a “pro-breastfeeding” site. Others, I’ve left due to gross mis-information and terrible advice.” This may shed light to the importance of alignment to group values as a necessary ingredient for or predictor of positive experiences and support for breastfeeding within the social media group.

While this study has discussed breastfeeding mothers’ perceptions on the role of a “pro-breastfeeding” social media group for breastfeeding support, it is by no means exhaustive of all social media groups nor of all breastfeeding mothers. There is a need for future research to design and
implement an intervention using social media groups in breastfeeding mothers to see if an association with standard breastfeeding outcomes exists. Future research should focus on utilization of social media groups as a way to reach breastfeeding mothers from a clinical setting. As telemedicine has arose in recent years, one cannot help but wonder if a model of care for breastfeeding mothers using peer-support in a social media group format can be designed, implemented, and tested for efficacy. It is imperative to support breastfeeding mothers throughout the duration of the breastfeeding relationship; social media groups shows promise as an effective way to do so.

There are many strengths to this study, including the participation of breastfeeding mothers, who can be a hard-to-reach or sensitive population, the innovation approach using online FGDs, and the uniqueness of the study phenomenon. Deggs and Woodyatt have published the strengths and opportunities of online FGDs, along with others [22-26]. Further, the utilization of this methodology for this study is available online for review, which describes recommendations for including mothers in qualitative studies to yield rich data [18]. As mentioned, this study shines light on the use of social media groups as a tool for supporting breastfeeding mothers. However, while there are numerous strengths to this approach, there are also limitations to this study that must be considered.

As this is an exploratory study with a small qualitative sample from a group of mothers located mainly in the southeast, the results may not be generalizable to all breastfeeding mothers who use social media. The smaller sample size was intentional, as qualitative studies are usually small in number because of their in-depth nature. However, there are some socio-demographic characteristics of this sample, which limit the generalizability of the study. These include a higher-than average college education rate (30.3% have a master’s or professional degree), and a high Caucasian percentage (87.9%). Additionally, since online FGDs and KI interviews rely on the individuals’ perceptions and experiences of social media use and breastfeeding, and these perceptions are dependent on sample selection.

Conclusions:
Our study shows that social media can positively influence breastfeeding related attitudes, knowledge and behavior. The overarching theme of community reigned in this research, with a strong emphasis on social media groups as a way to normalize breastfeeding, to empower breastfeeding mothers, to serve as a resource for women, and to share experiences related to breastfeeding. While findings from this study are novel to the field, they reflect broader studies which identifies social media as a way to reach mothers and impact their parenting-related attitudes, beliefs and behaviors [27-30]. Further, this study specifically address a gap in the literature in regards to how social media can influence infant feeding practices, and specifically, breastfeeding [27]. In general, interaction with the social media group was reported to have a positive impact on the breastfeeding journey by way of all the main themes. As this study shows social media can have a profound impact on breastfeeding mothers in a positive way, ways to catalyze a shift in the way women receive health information must be jump-started. Future research should focus on how to health care professionals and organizations can use social media to positively influence breastfeeding attitudes, knowledge and behaviors to increase exclusively breastfeeding duration and decrease barriers or stigmas associated with breastfeeding, leading better quality of life for mother-infant dyads, including both physical and mental health outcomes.
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List of abbreviations:
AAP: American Academy of Pediatrics
WHO: World Health Organization
CBA: Cost Benefit Analysis
SNS: Social Networking Sites
UGC: User Generated Content
FGD: Focus Group Discussion

Declarations

Ethical approval: The University of Alabama Institutional Review Board approved this study (REC number: 300000306)

Consent for publication: Not applicable

Availability of Data and Material: The datasets generated and/or analysed during the current study are not publicly available as the author does not have a website to publicly display them, but are available from the corresponding author on reasonable request.

Competing interests: The Author(s) declare(s) that they have no competing interests

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Authors Contribution: KS researched literature and conceived the study. KS, RE and JL were involved in protocol development, gaining ethical approval, participant recruitment and data analysis. KS was the moderator and completed all data analysis. KS wrote the first draft of the manuscript. All authors reviewed and edited the manuscript and approved the final version of the manuscript

Acknowledgements: Not applicable