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Supporting, failing to support and undermining breastfeeding self-efficacy: Analysis of helpline calls

Karen Thorpe[1] | Susan Danby[2] | Ceridwen Cromack[3] | Danielle Gallegos[4,5]

[1]Institute for Social Science Research, The University of Queensland, Brisbane, Queensland, Australia

[2]School of Early Childhood and Inclusive Education, Queensland University of Technology, Brisbane, Queensland, Australia

[3]School of Psychology and Counselling, Queensland University of Technology, Brisbane, Queensland, Australia

[4]Centre for Children's Health Research, Institute for Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Queensland, Australia

[5]School of Exercise and Nutrition Sciences, Queensland University of Technology, Brisbane, Queensland, Australia

Correspondence
Karen Thorpe, Institute for Social Science Research, The University of Queensland, 80 Meiers RdLong Pocket, Brisbane, Queensland, Australia 4068.
Email: k.thorpe@uq.edu.au

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Abstract

Although a complexity of factors explain early cessation of breastfeeding, the encounter of a problem is often a critical point in this decision. For this reason, breastfeeding self-efficacy, a mother's evaluations of her ability to successfully overcome challenges, is an effective target in interventions to sustain breastfeeding. This study examined factors affecting the success of one such intervention, reactive telephone support. Across a 4-week period, recordings of all calls to a nurse-staffed parent helpline in Queensland, Australia were made. Of these calls, 60 were from mothers encountering a breastfeeding problem. Using a standard protocol, each call was scored for trajectories of mother's breastfeeding self-efficacy from opening to close of call. Calls showing an upward trajectory were defined as *supporting* (53%), those with no change were defined as *ineffective* (25%), and those with downward trajectory as *undermining* (22%). Using trajectory scores, case exemplars were purposively selected for detailed analysis of interactional sequences to identify strategies that distinguished outcome. The supportive call was distinguished by information sharing, mutual trust and respectful relationships, and personalized affirmation and advice. The ineffective call focused on technical aspects of breastfeeding, whereas the undermining call made moral judgements of mother's behaviour. The findings identify interactional quality of telephone support, not simply provision, as the key success factor in reactive telephone support. The findings also present interactional quality as a potential explanation for inconsistent outcomes in evaluation of reactive telehealth interventions to support breastfeeding.

KEYWORDS

breastfeeding problems, breastfeeding self-efficacy, breastfeeding support, interactional qualities, social interaction analysis, telehealth, telephone helplines

1 | INTRODUCTION

Breastfeeding benefits infant development and the health of infants and mothers (Global Breastfeeding Collective, 2018). The Global Breastfeeding Collective of the World Health Organization (WHO) and UNICEF (2018) identifies optimal practice as duration into the second year of life with exclusive feeding until 6 months. Yet, comprehensive evidence from this report also indicates that current achieved breastfeeding rates, across the range of high-income nations, fall far short of this goal. The reasons for breastfeeding cessation are complex and related to physical, social, and cultural impediments but typically are precipitated by breastfeeding difficulty (perceived poor milk supply and sore nipples) rather than informed choice (Rozga, Kerver & Olson, 2014; Colombo et al., 2018; Hornsby, Gurka, Conaway, & Kellams, 2019).

A range of interventions have been developed to improve duration of breastfeeding by increasing resilience in overcoming breastfeeding difficulties (Meedya, Fernandez, & Fahy, 2017). One major strategy is the use of telephone support services, both *proactive* and *reactive* (McFadden et al., 2017). Proactive supports are scheduled preventative support services, whereas reactive support is provided when a difficulty is encountered that threatens continuation of breastfeeding. Reactive support affords opportunity for immediate, and out-of-hours, contact at critical times of challenge (Thomson & Crossland, 2013), yet the effectiveness of this medium in supporting breastfeeding does not necessarily match its promise. Reactive telephone services have not been found to be as effective as proactive support services or face-to-face supports (Lavender, Richens, Milan, Smyth, & Dowswell, 2013; McFadden et al., 2017). In this paper, we ask whether the interactional characteristics of reactive telephone support affects maternal breastfeeding self-efficacy and, thereby, intervention success.

1.1 | Self-efficacy as a framing for breastfeeding intervention

Self-efficacy is an individual's evaluations of their ability to successfully execute a given behaviour and affects their propensity to persist when faced with challenge (Bandura, 1986). Across a range of contexts, self-efficacy has been identified as among the strongest psychological predictors of breastfeeding duration (Brockway, Benzies, & Hayden, 2017; Meedya et al., 2017). Breastfeeding self-efficacy has been found to have distinct yet interdependent, cognitive, emotional, and behavioural components that together influence a woman's confidence in her ability to successfully breastfeed and respond positively to a breastfeeding problem (Brockway et al., 2017). For example, women with low breastfeeding self-efficacy have been found to report experiencing frequent critical or self-deprecating cognitions about their capacity to nourish their infant (Entwistle, Kendall, & Mead, 2010), resulting in perceptions of poor milk supply, one of the most frequently cited reasons for cessation of breastfeeding (Hauck, Fenwick, Dhaliwal, Butt, & Schmied, 2011).

Intervention studies designed to build breastfeeding self-efficacy have typically measured the construct through use of self-report and applied the measure pre- and post-intervention to test association with breastfeeding outcomes (duration, exclusivity) (Tuthill, McGrath, Graber, Cusson, & Young, 2016). However, self-efficacy is modifiable and readily changes in response to ongoing experiences and supports and, therefore, is amenable to real-time measurement (Blyth et al., 2002). Accordingly, in the current study, we employ the construct of breastfeeding self-efficacy to frame the analysis of real-time interactional strategies on a telephone helpline. Across a corpus of calls presenting a breastfeeding problem, we analyse trajectories of mother's expressed breastfeeding self-efficacy from call opening to call completion. Based on these trajectories, we select three cases for detailed sequential analysis: (a) *supportive* (increasing breastfeeding self-efficacy), (b) *ineffective* (no change), and (c) *undermining* (declining breastfeeding self-efficacy).

Key messages

- Women do not always get the support they expect when contacting a reactive telephone helpline to seek breastfeeding support. Some calls are ineffective while others can actually undermine a woman's confidence. In this study, almost half of calls were not effective, 25% showed no change in breastfeeding self-efficacy, and 22% showed reduced breastfeeding self-efficacy from beginning to end of call.
- Detailed, sequential analysis of a three case examples, a representation of a supportive, an ineffective, and an undermining call was undertaken. Analyses identified that mutual respect, information sharing, and acknowledgement of thecaller's emotions achieved a co-constructed solution that built breastfeeding selfefficacy. Focusing on technical and medical advice was ineffective in improvingbreastfeeding self-efficacy, whereas moral judgement was found to undermine self -efficacy.
- Breastfeeding self-efficacy is a key factor in sustaining breastfeeding at times of challenge. Reactive telephone supports complement proactive supports. They are provided at times of high risk of precipitous breastfeeding cessation and when person-centred, can sustain breastfeeding. However, interactional qualities are critical in determining whether a call is effective. Training call-takers in interaction techniques and providing feedback on call quality may build the effectiveness of reactive telephone helpline services.

1.2 | Telephone support for breastfeeding mothers

Telephone support is presented as a viable and cost-effective means of meeting demand for health services and reducing disparities of access (McFadden et al., 2017). In the context of breastfeeding, telephone support also may function as a valuable supplementary support given that hospital stays after childbirth have significantly reduced (Goodwin, Taylor, Kokab, & Kenyon, 2018; Lavender et al., 2013; McFadden et al., 2017). The anonymity of telephone support also may be appealing to some mothers, enabling them to express their concerns without stigma. Indeed, Thomson, Crossland, Dykes, and Sutton (2012) report that 87% of callers accessing a telephone service for breastfeeding support strongly preferred, or were indifferent to, speaking to a stranger. Nonetheless, breastfeeding support delivered via telephone has limitations associated with the inability to observe either breastfeeding technique or emotional cues. Understanding the mechanisms by which telephone support can best support breastfeeding under these constraints is therefore integral to achieving optimal effectiveness.

Although proactive interventions, in which mothers receive scheduled telephone peer or professional support, are associated with improved breastfeeding outcomes, much less is known about the potential of reactive telephone support in which mothers initiate assistance at a time of crisis (McFadden et al., 2017; Trickey et al., 2018). Descriptive studies evaluating the consumer use of reactive support have established a high demand for such resources especially in the first postpartum month when vulnerability to breastfeeding cessation is high (Thomson et al., 2012). Maternal report data suggest that reactive services are reassuring, alleviate emotional stress, and foster determination to breastfeed in a time of crisis (Thomson & Crossland, 2013).

Although existing evidence identifies the potential of reactive telephone services in sustaining breastfeeding, a recent review suggests that this potential is not fully realized. McFadden et al. (2017) reports that proactive and face-to-face supports yield better outcomes than reactive telephone support. One explanation for this finding is that the effectiveness of reactive support services is moderated by the crisis context and population characteristics of those seeking reactive services. Another explanation relates to the quality of interactions and effectiveness of these in providing support within the call. Current studies evaluating telephone support have been limited in their theoretical framing and empirical approach (McFadden et al., 2017; Trickey et al., 2018). None has directly assessed the call process or measured the call outcome. Increasingly, the context and interactions that occur during breastfeeding support are recognized as central to the outcome (Leeming, Marshall, & Locke, 2017; Trickey et al., 2018). A focus on interactions in reactive telephone supports may provide direction to more effectively build women's confidence and sustain breastfeeding. The current study sought to examine this hypothesis.

2 | METHOD

2.1 | Design

We present three case studies selected from a study of a corpus of calls to a 24-hour helpline made by mothers seeking support for a breastfeeding concern (Gallegos, Cromack, & Thorpe, 2018; Thorpe, Jansen, Cromack, & Gallegos, 2018). Each case study is an exemplar of a quantitatively derived call outcome: supportive, ineffective, and undermining. Detailed inductive qualitative analyses of the three exemplars was undertaken to identify the interaction features associated with different trajectories of breastfeeding self-efficacy across the course of a call.

2.2 | Data

Data were calls (n = 149) to a parent helpline. Call takers were 12 nurses who staffed the helpline across the 4-week period of the data collection. All participating nurses held a general nursing degree and postgraduate qualifications in midwifery and/or child health but did not have specific training in telephone support. Callers were women accessing the service for breastfeeding concerns. Although the range of callers captured the full range of social class, the majority of women (80%) calling the services with breastfeeding concerns were from more socially advantaged areas. Most (63%) occurred in the first 12-weeks postpartum. Ethical approval was obtained from Royal Brisbane Women's Hospital (Approval 4121H) with an administrative exemption from Queensland University of Technology Human Ethics Committee. Under the ethics agreement, callers were informed of the recording at commencement of the calls and both call takers and callers were able to decline the recording or withdraw a call from the study postrecording. One caller withdrew a call.

2.2.1 | Selection of breastfeeding calls

Through audible scanning of all recorded calls (N = 723) details of call duration, call content, and caller demographics were extracted. Postcodes were converted to codes of Social Economic Index for Area (ABS, 2011). Of these calls, 149 included breastfeeding content. Calls in which a minimum of 50% of the call duration focused on breastfeeding (n = 60) were individually analysed for breastfeeding self-efficacy trajectories to select case examples (Figure 1).

2.2.2 | Measurement of self-efficacy trajectories

A breastfeeding self-efficacy rating scale and coding protocol was developed with reference to Bandura's (1986) theoretical writings and published standard measures of breastfeeding self-efficacy (see Tuthill et al., 20 l6). The adaptation of measures is presented in supporting information (Appendix S1). The rating scale comprised domain-specific behavioural, cognitive, and emotional components of breastfeeding self-efficacy, each scored on a 4-point scale, in accordance with recommendation for optimizing validity (Smith, Wakely, De Kruif, & Swartz, 2003). Inter-rater reliability, across three raters, was assessed on a subset of seven calls and yielded an inter-rater concordance > 70% and Cohen's Kappa from 0.68 to 0.9 (moderate to very high) for each subscale (McHugh, 2012). Analyses demonstrated that the scale had good internal consistency (Cronbach's alpha opening = 0.85, close = 0.89) and construct validity with subscale intercorrelations sufficiently correlated but without redundancy (r = .59–.68). Opening and close of the calls were thus scored for cognitive, emotional, and behavioural breastfeeding self-efficacy.

2.2.3 | Selection of case exemplars

Measurement of call outcome was based on score change from beginning to end of call with positive scores indicating supportive (53%), negative scores indicating undermining (22%), and unchanged scores indicating ineffective (25%) calls. To ensure the selection of

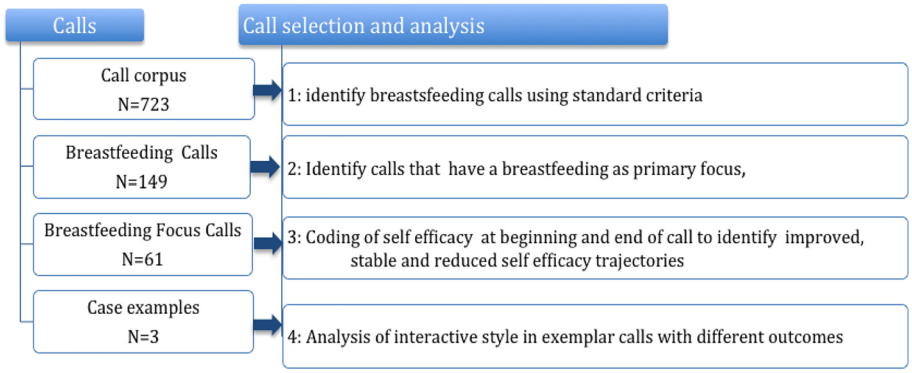

FIGURE 1 Call selection procedure

data-rich yet representative cases, intensity sampling was used to select a case exemplar of each type of call outcome (Liamputtong, 2019) from the corpus of 60 calls. For each of the three cases, breastfeeding self-efficacy scores at open and close of call are presented in Figure 2.

2.2.4 | Analysis

Each of the cases focuses on the naturally occurring talk that occurred between a mother and a nurse call taker. The calls show an unfolding of how the mother and call taker orientated to the presentation of a breastfeeding problem. A close analysis of the calls shows the ways that the presented problem was introduced and explored. Importantly, the analysis shows how the call taker and mother together produce understandings and courses of action.

The three cases selected were transcribed in their entirety and are presented as supporting information (Appendix S2. Making these transcriptions publicly available affords the possibility for others to bring their own interpretations. Both the quality of the transcriptions and the detailed representation of the data contributes to analytic trustworthiness (Silverman, 2016). In presenting the analysis, segments are used to highlight aspects of the call and show sequences of talk moment-by-moment as it unfolds. Drawing on discourse and social interactional analysis methods (Arminen, 2019; Jones, 2015), three steps were taken: (a) close detailed reading of the data extracts, (b) seeking and discovering patterns of interaction in the data, and (c) examining how interactions occur by focusing not just on what was said but on how it was said. In this way, pauses, overlaps of talk, and cutting off another's talk all work to bring insights into the unfolding of the interaction.

3 | RESULTS

3.1 | Supportive case (duration: 6 min and 20 s)

3.1.1 | Call outcome

Analyses identified positive change in cognitive and emotional breastfeeding self-efficacy from beginning to end of call. Behavioural breastfeeding self-efficacy was high and remained unchanged. The scores suggest that across the course of the interaction, the mother became clearer in her specification of the problem and expressed more positive emotion but did not change her expressed intention to persist with breastfeeding.

3.1.2 | Problem presentation

This call commenced by presenting a problem of sufficiency of breast milk and was initially posed as a question about the possibility of

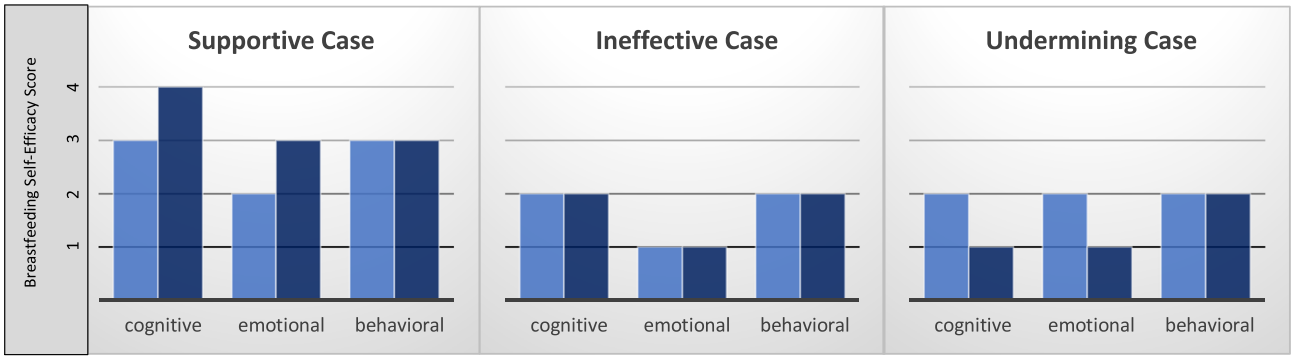

FIGURE 2 Self-efficacy scores from opening to close of interaction for "supportive," "ineffective," and "undermining" case exemplars (n = 3)

giving the baby (aged 12 days) supplementary water. The emergent concern was that the baby might be dehydrated and breastmilk insufficient. At commencement of the call, the specification of the problem is not clear.

> Mother: "Oh hey, I'm just inquiring about giving my baby water- I just don't know if this is the right number or …"
> Call taker: "yes I can help you"
> Mother: "Yeah…umm, I just, he's umm…12 days old and he ah, feeds really well at night and in the morning and everything but in the afternoon he cries and wants to feed continuously…"
> Call taker: "is he breastfed or bottle-fed?"
> Mother: "Breast fed"
> Call taker: "oh ok, yeah"
> Mother: "and ahh, when I check my milk like I know that the clear milk, you know like the watery milk that comes out first is like a watery milk for them and the real thick milk is sort of like the hind milk and that's the sort of more calories and that sought of stuff…in the afternoon I don't have very much of the ahh, the watery milk to start off with, it's more just the calorie – the ah, real thick creamy milk… umm and I've noticed that his tongue is like a cat's tongue, and his mouth is really very dry and really like, sort of like sand-papery, and he's got no fluids in his mouth or anything like that…and he's saliva is very sort of, his tongues on the inside of his mouth and it's all very dry and sticky …"

There is evidence in the commencement of the call that the call taker offers the mother interactional space to describe her concerns utilizing small short interaction devices and encourage her to continue (e.g., "ok"and "yeah") to indicate active listening (Hofmeyer et al., 2018) and authentic presence (Schmied, Beake, Sheehan, McCourt, & Dykes, 2011) that encourage the caller to fully describe her concerns.

3.1.3 | Call interactions

Across the course of the conversation, the mother and the call taker work together to specify and then solve the problem presented. After the problem presentation, the call taker utilizes a range of interactional strategies to work with the mother to diagnose the problem and provide reassurance and directions for action. Once she has listened to the mother's concern, the call taker draws upon her specific professional knowledge to ask information-seeking questions (e.g., "are his nappies wet?" or "has he gained birth weight yet?"). These diagnostic questions elicit more information from the mother allowing the call taker to make her assessment of the child's health and be confident that the baby is neither unwell nor dehydrated. The call taker next directs attention to providing support by invoking her professional knowledge of child development, first responding to the mother's concern that a dry mouth might signify dehydration.

> Call taker: "he wouldn't actually have any saliva …"
> Mother: "oh he wouldn't"
> Call taker: "No. They don't start to dribble until about 6 weeks, you wouldn't see that saliva like you and I have …"
> Later, the call-taker explains that unsettled behaviour is common during afternoons and that continuous feeding may signify a need for comfort rather than hunger or thirst:
> Call taker: "…what can happen in the afternoon is that they can become sort of unsettled – the little baby, and they can become you know, umm, like their behavior they might cry with wind and that sort of thing, often they might look like they want to suck all the time."
> Mother: "yeah."
> Call taker: "and often they do that just for comfort…"
> Mother: "oh, ok."

The call taker provides observable cues for the mother as reassurance that her baby is receiving enough milk.

> Call taker: "and as long as, you know you can hear the sort of gulp, suck swallowing, you know the gulping when the baby is sucking—that's your nutritive sucking ok?"
> Mother: "yep, yep"
> Call taker: "so that means you are getting fluids that way."
> At the call closing, the call taker explicitly compliments the mother on her child's health and commitment to breastfeeding and checks on the mother's emotional well-being and her perspective of the information provided.
> Call taker: "oh yeah ok … well he sounds like he is doing very well, and that you are managing very well as well with the feeding … so ahh, what do you think from what I have told you?…are you worried about anything?"
> The call taker's talk and positive assessments affirms that the call has been well received.
> Call taker: "alright, well you take care – you can ring us whenever you want"
> Mother: "alright thank you, you've been great! Bye"

Interactional strategies emerging in analysis of the supportive case are presented in Figure 3.

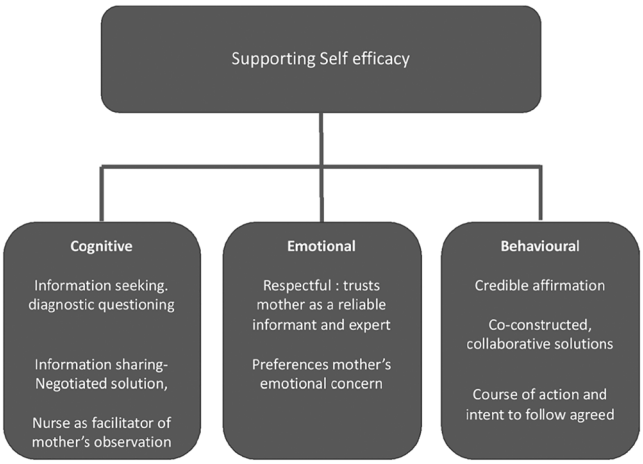

FIGURE 3 *Supportive* interaction strategies

3.2 | Ineffective case (duration: 6 min and 11 s)

3.2.1 | Call outcome

Across the call, cognitive, emotional, and behavioural breastfeeding self-efficacy remained unchanged. Importantly, the emotional presentation at call opening, rated as showing obvious signs of distress, remained unchanged.

3.2.2 | Problem presentation

The call was initiated by the mother's partner who identified two problems, "mastitis" and "baby blues," and then transferred to the mother. The call taker immediately assumed knowledge of the mother's emotional concerns, not providing interactional space for her to discuss her feelings or outline her problems. The call taker immediately preferences the problem of mastitis over emotion for discussion.

> Mother: "Hi, it's M here". (Audibly upset/flat – clearly sounds as though she has been crying).
> Call taker: "Hi how are you? Well you are miserable obviously."
> Mother: "yeah … ."
> Call taker: (abruptly) "so, umm, is the mastitis in both sides or just one side?"

3.2.3 | Call Interactions

The call was characterized by initial diagnostic questions to the mother, followed by long turns of advice from the call taker, and short interjections from the mother. Although the call taker maintained a pleasant tone, she did not address the mother's emotional concerns nor actively engage the mother in problem solving. The mother's attempts to display agency in managing her concerns were minimized by the call taker by talking over or interrupting the mother. Parental agency was not enabled through the talk. The call taker's construction of the mother as less competent was evidenced through her talk, which was produced as directive advice and not as information.

> Call taker: "how long does he suck on that one side for?"
> Mother: "ahhm, the most he will go is half an hour – someti-" (Call-taker interrupts/over talks)
> Call taker: "ok, well take him off after 20mins, and then put him on that other side. It's actually more important … often times, - is he sucking reasonably vigorously?"
> Mother: "ahmm, no – mm sometimes he -" (Call-taker interrupts/over talks)
> Call taker: "it's actually more important that you get your breast emptied then letting him suck for long periods on one side."
> Mother: "right."
> Call taker: "so generally speaking, 15-20 mins on a side -" (Mother interjects)
> Mother: "that's what he's normally doing."
> Call taker: "goodo, well get him off, and if that's what he normally does, take him off after the 15 minutes, burp him and then offer that second side."

At the end of this sequence, the conversation appears to approach a consideration of the mother's well-being but is then abruptly redirected:

> Call taker: "… it's really about comfort until then and umm, and, but, maintain your fluids and rest for

yourself … (Trailing off). The other thing is, if your milks coming in at a rush –are your bras reasonably supportive but not digging in anywhere and causing any restriction?"
Mother: "I don't think so, they don't feel like it…"
Call taker: *talks over mother* … "because sometimes if you feed bub, and your bras sort of all bunched up underneath, you know it can actually impede the flow … umm, from some areas… from some ducts, and you know you really just need to make sure that you are not impeding it there at all …".
Mother: "ok".

At call completion, the mother attempts to bring focus to the ways that she can alleviate her own discomfort. The call taker answers the mother's questions but does not offer any form of encouragement or assistance.

Mother: "so I've got the cabbage leaves, will that help at all?"
Call taker: "well some women say 'Yep – they are fantastic', and some women say 'no, that they were useless', so I think when you are feeling that unwell and uncomfortable then anything's worth a try…"
Mother: "yeah …"
Call taker: "yeah …"
Mother: "so… just put those on…in between breastfeeding?"
Call taker: "yeah, yep, just out of the fridge, and often it's just that coolness too that can help, mmm."

The call taker initiated the call closure. At this time, her affect, signifying a sense of being disheartened and upset, was unchanged from the call opening. Key interactional strategies emerging in analysis of the ineffective case are presented in Figure 4.

3.3 | Undermining case (duration: 13 mins and 50 s)

3.3.1 | Call outcome

The call taker from the outset defines breastfeeding as a problem and positions the mother as the cause of the problem. The call is characterized by a series of exchanges in which the call taker interrogates the mother. The mother completes the call, giving verbal and vocal indications of frustration. The call taker does not utilize strategies to support the mother but instead challenges her account. At close, there is less clarity in specification of the problem, less confidence, and greater distress.

3.3.2 | Problem presentation

In this call, the mother presents a query about her 2-month-old baby who has had loose bowel movements over the previous 2 days. At the beginning of the call, the mother sounds audibly low in mood and anxious. The call taker is somewhat abrupt and impersonal in her response and immediately directs the questioning to focus on breastfeeding.

Call taker: "hello, how can I help."
Mother: "umm, hi, I've just got a – my babies 8 weeks old."
Call taker: "mhmm"
Mother: "and he's just the last 2 days sort of umm, crying uncontrollably, and his loose poo's, sort of umm, like water and yesterday they like – so much that it like came out of his nappy and it was just everywhere… and he's dribbling a lot as well."
Call taker: "mhmm, are you breast or bottle feeding?"
Mother: "I'm breastfeeding."

The call taker immediately focuses on two potential diagnoses.

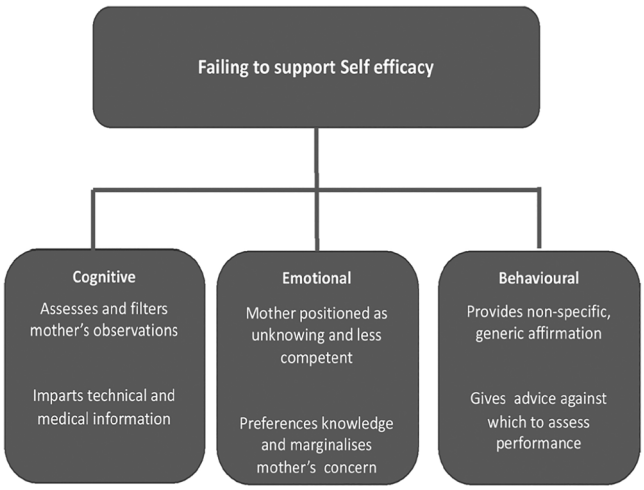

FIGURE 4 *Ineffective* interaction strategies

Call taker: "the loose poos umm, two things – has he got a bug that he has picked up from somebody or somewhere, or secondly what have you eaten that may have given him that. So what we are looking at is, how frequently are you feeding him…?"
Mother: "oh he's been crazily feeding, like he'll have a little bit, and then he'll umm you know, start crying, and then, so he'll get off it and then later on in a little bit he wants more. He just kind of, you know, is not feeding the full amount properly …"

3.3.3 | Call interactions

The interaction turns immediately to the call taker's second suggestion—that the infant's loose bowel is a reaction to the mother's diet. There is a lengthy dialogue between the mother and the call taker in which the call taker continually probes the mother to identify what she has eaten suggesting sugary foods might be to blame. The mother resists this suggestion.

Call taker: "yep. Ok so what other things have you been, have you been eating. What we are looking at is say maybe sugary things, how much say soft drink have you had recently, what about eating big meals and lots of Christmas fruit?"
Mother: "ohh, I didn't really have any sugary drinks, I had some lollies, but not like many."
Call taker: "not many, no, ok then."
Mother: "I mean nothing, I don't think that there was hugely sugary."
Call taker: "no nothing in excess."
Mother: "is it because I didn't eat maybe…for a while?"
Call taker: "no, probably not … it's more because you may have eaten lots of sugary stuff, or lots of sweet stuff."
Mother: "yeah I don't think I did"
Call taker: "no, not excessively?"
Mother: "no"

The focus briefly shifts to the mother's breastfeeding technique. The mother is not questioned further about her technique but, based on the description of the baby pulling off after a few minutes, suggests that the mother's current breastfeeding routine may be problematic.

Call taker: "the other thing is, with the feeding, with your breastfeeding, what you may have found is umm, that because you are feeding him quite regularly and little nibbles and things like that, you know not a good decent feed, is that he's just getting that fore milk which can be very sugary and.."
Mother: "yep, yep …" (Sounding concerned/flustered)
Call taker: "…and it's not the hind milk."
Mother: "yeah that's probably right…"
Call taker: "ok, so that could be part of the problem."
Mother: "ok … .so how do I make him drink it, because he just starts crying … and just get off it and whatever I … I try to keep him there to try and feed but he won't take it …" (becoming upset)

The interaction does not produce a shared understanding. Whereas the call taker assumes the mother only feeds 5 minutes per breast, the mother asserts the baby is pulling off. When the mother attempts to clarify, the call taker redirects the conversation back to the loose bowels and the mother's diet.

Call taker: "yep. Well that will be there for the first few minutes up to five minutes, so, what you might—if he's only drinking for 5mins on one breast and then going to the other breast …"
Mother: "oh no, I don't do that…no, I try to keep him for longer on the one breast"
Call taker: "yep, yep, how long has he had the watery poo's then?"

The conversation returns to probing the mother's diet. Eventually, when the mother became flustered and audibly very upset, the call taker brings the focus back to her feeding technique, now informing the mother that her diet is not a concern and again suggesting her feeding technique is a problem.

Mother: "so it is more something that I have eaten?"
Call taker: "yeah."
Mother: *sigh*
Call taker: "yeah, that's what I would be thinking of … but I wouldn't worry about it mum, I'd be more concerned about um, the feeding—rather than the pooing."
Mother: "ok, so what should I do about the feeding?"

Although the mother asked explicit questions about feeding, the call taker directed her responses to settling. Ostensibly in search of a clear answer as to why her baby may have loose bowel movements, the mother soon inquired as to whether this could relate to her anaemia. Discussion then returns to breastfeeding, with the call taker suggesting an explanation that is more congruent with the mother's experience.

Call taker: "oh you wouldn't think so, not the pooing, perhaps the drop in the milk supply a bit, perhaps that's it—I don't know."
Mother: "oh they said that I've got heaps—it like sprays out, I don't think it's …"
Call taker: "ok, so if its spraying out, then you know, perhaps he's just having it too quickly and its giving him wind and that's why he's unsettled and…"
Mother: "yep, yep, yep, that's more like it."

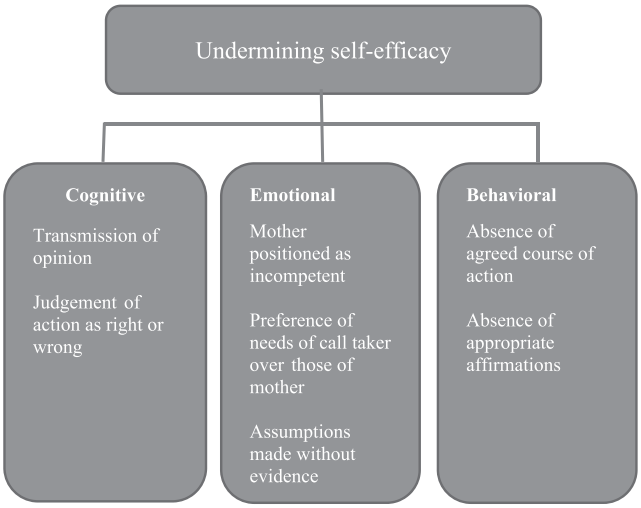

FIGURE 5 *Undermining* interactional strategies

At this point, the mother sounds more upbeat and hopeful. The call taker, however, creates further uncertainty by providing advice that is incongruent with the experiences of mother and infant.

> Call taker: "and if you've got plenty of milk and you are feeding him, he may be getting enough in that 5 or 10mins and that's what's causing the dark runny poo's."
> Mother: "oh ok, so I shouldn't be feeding him as much maybe?"
> Call taker: "well, you still need to feed him about every 3 hours. How old is he, 8 weeks?"
> Mother: "yep, he feeds more about like every 2 hours, during the night he can last every 3 hours."
> Call taker: "ok, he needs to have his feeds, spread further afield, they need to be at least every 3 hours, so he wakes up and has a feed, spends about an hour, an hour and 5 minutes awake, and then he needs to go back to bed and sleep through to the next feed, which should be at least, you know, 3 hours after you started the first feed."
> Mother: "yeah, he just screams though for milk and he tries to eat me."
> Call taker: "yep"
> Mother: "what do you do there?"
> Call taker: "if you've got plenty of milk, then he should settle for you. Ok it might just be a matter of trying to get him to settle -8 weeks- pop him in his cot, give him a rock and a pat for a few minutes."

The mother soon returns to sounding upset and confused as she fails to be heard. Nevertheless, she persists with her information seeking. The call taker then abruptly diverts the topic to ask mother's place of residence.

> Mother: "yep, and what about when he's trying to eat me, when he like, wants his food and it's not been, you know…"
> Call taker: "if he's sleeping for 2 hours"
> Mother: "he doesn't"
> Call taker: "if you get him to sleep, he will then sleep and wake and feed from you. Where are you calling from?"

At this stage, the mother was audibly upset. Without a clear solution or any direct advice provided or reassurance, the call ends. Key interactional strategies emerging in the undermining case are presented in Figure 5.

4 | DISCUSSION

Reactive telephone helplines are part of the suite of interventions available to sustain breastfeeding with attendant benefits for mother and child (McFadden et al., 2017; Thomson & Crossland, 2013). Though reactive telephone contact necessarily precludes the ability to observe feeding technique and emotional cues, the benefit is in opportunity for immediate response, including out-of-hours, at a time of crisis when risk of early breastfeeding cessation is high (Thomson & Crossland, 2013). The success of reactive telephone support, however, is not assured (McFadden et al., 2017). Our analysis of exemplars drawn from a total corpus of calls to a parenting helpline provides both rich and representative accounts of interaction quality. They show that almost half of calls did not realize their aim of providing support.

The three example helpline conversations yielded quite different outcomes for the mothers who initiated them. Our detailed analysis clearly indicates that interactional features of the call, and not simply provision of a call service, determines the value of helpline support.

Breastfeeding difficulties are complex, and the provision of advice by telephone challenging. In building a mother's breastfeeding self-efficacy, particularly at a time of crisis, the call taker is tasked not only with a technical or medical problem but with one of high emotion embedded in a social context in which opinion and moral judgements of mothers and motherhood are common (Hunt & Thomson, 2017). We identified through the cases provided that success is intricately linked to developing a *relationship of trust* that enables *joint information sharing* (cognitive task) and *respect* (emotional task) to position the mother with *agency* to determine her subsequent *actions* (behavioural task). Providing advice without affording agency is ineffective whereas moral judgements are alienating and undermining.

Our findings have clear implication for practice and training. They speak to the significance of the "human" element in provision of both breastfeeding support (Schmeid et al., 2011) and telehealth (Hunt & Thomson, 2017). Reactive support, provides a particularly salient example of the significance of building relationships. A recent Cochrane review reported that in proactive breastfeeding, peer support is more effective than professional support showing the centrality of relationship and trust (McFadden et al., 2017). In nurse-provided reactive support where, unlike proactive intervention, there is no prior relationship, the emotional quality of the call interaction is critical to effectiveness. Variation in interactional quality may explain the less consistent patterns of effectiveness of reactive support even though these are set at critical points in the decision to continue or cease breastfeeding. The value of investment in reactive call services, therefore, is dependent on the quality of the call interaction and directs attention to training (Hofmeyer et al., 2018). Further real-time research to guide specific training in reactive support may improve service effectiveness, sustain breastfeeding at time of crisis, and yield ongoing benefit for the well-being of mothers and infants.

Our study has the strength of providing, for the first time, an analysis of "real-time" interactions from a representative sample of calls seeking support for breastfeeding problems. However, there are also a number of limitations. First, our analysis was of selected individual cases that may not generalize to the experience of all mothers or all calls. In a thematic analysis of the full corpus of 60 calls, however, we also identified common features that distinguished different call outcomes (Gallegos et al., 2018). Second, given our novel approach in analysing real-time interactions, our method required adaptation of standard validated measures typically used in survey methods. Psychometric properties show reliability and construct validity, but further studies are needed to build ongoing evidence. Third, the sample derives from a largely advantaged population of women and may not generalize. Calls to the helpline may reflect higher population prevalence of breastfeeding among advantaged women but also greater reticence of disadvantaged mothers to use helpline services (Fox, 2015). Our prior analyses of the effectiveness of calls, however, shows that despite the fact that call prevalence from disadvantaged communities is lower, the effectiveness for those who call is higher (Thorpe et al., 2018). Thus, interactional strategies may have even greater clinical impact for women from disadvantaged communities, a group less likely to sustain breastfeeding.

We conclude that there is high potential in reactive telephone support, but training and provision of feedback for call takers is required to ensure effectiveness. Proactive support has been shown to be more effective than reactive support, but each serves a different function. At critical points, when women encounter a problem that may precipitate breastfeeding cessation, reactive support can make the difference.

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CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

AUTHOR CONTRIBUTIONS

KT lead the writing of the manuscript with significant input from SD, CC, and DG in refinements. Design of the study, including development of the coding protocol and reliability testing, and call selection was undertaken by KT, CC, and DGSD made specialist input into the theoretical framing and analysis of the exemplar calls.

ORCID

Karen Thorpe https://orcid.org/0000-0001-8927-4064
Susan Danby https://orcid.org/0000-0002-1944-7043
Danielle Gallegos https://orcid.org/0000-0001-5901-1909

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

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