Cooperative learning in parental education groups – child healthcare nurses’ views on their work as leaders and on the groups

Karin Forslund Frykedal, Michael Rosander, Mia Barimani, and Anita Belin

ABSTRACT

New parents are offered parental education groups as a way to support their transition to parenthood. Interactive approaches in these groups are of importance, but studies have reported a lack of activities that support interaction. Cooperative learning is a structured method when working with groups and based on five elements essential to maximizing the cooperative potential of groups. The aim was to investigate the leadership skills of child healthcare nurses as leaders for parental education groups, their ideas about creating conditions for well-functioning groups, and what is required to achieve this. The results were analyzed and discussed using social interdependence theory as a framework and especially the five elements of cooperative learning. Further, the study used a qualitative descriptive design, and eight qualitative interviews were analyzed deductively using thematic analysis. The results showed that in their narratives the nurses display vocational knowledge and describe conditions important for their groups from a cooperative learning perspective. Nevertheless, the results indicate that the nurses had difficulty explicitly instructing parents to use their personal experiences and social skills to get groups to function effectively. Knowledge developed in the workplaces from the experience of leading groups is mostly implicit, and formal knowledge and awareness of leadership is necessary for development of the role.

KEYWORDS

Child healthcare nurses; cooperative learning; leadership; parental education groups; social interdependence theory

Introduction

Becoming a parent is a life-changing transition associated with great wonder and joy, but also with feelings of insecurity and unpreparedness for the new role (Barimani, Forslund Frykedal, Rosander, & Berlin, 2017; Deave, Johnson, & Ingram, 2008; Rosander, Berlin, Forslund Frykedal, & Barimani, 2020). Parental education groups are widely used health promoting efforts aimed at
supporting new parents and preparing them for the transition to parenthood (Barlow et al., 2012; Bryanton, Beck, & Montelpare, 2013; Gilmer et al., 2016). The focus of the current study was on child healthcare nurses functioning as leaders of these groups—a role that can be challenging (Forslund Frykedal, Rosander, Berlin, & Barimani, 2016; Lefèvre, Lundqvist, Drevenhorn, & Hallström, 2015). Creating conditions for a well-functioning group and also a learning environment that supports the new parents is not an easy task. The study addresses how child healthcare nurses approach the task of leading parental education groups. We do this by applying social interdependence theory and cooperative learning principles (Johnson & Johnson, 2009, 2017) to the nurses’ views regarding their work. Hereafter we will refer to the parental education groups as “the groups” or “parental groups” and the child healthcare nurses simply as “the nurses” or “the leaders” as their role in the groups is that of a leader.

Parents attending parental groups have emphasized their importance and described it as meaningful to meet and socialize with other parents (Berlin, Törnkvist, & Barimani, 2016; Hjälmhult, Glavin, Okland, & Tveiten, 2014; Karlström & Rising-Holmström, 2019; Lefèvre, Lundqvist, Drevenhorn, & Hallström, 2016). Many seem to prefer an interactive learning approach (Berlin et al., 2016; Forslund Frykedal & Rosander, 2015). However, several studies have reported a lack of true group activities with other participants, such as group discussions of relevant issues connected to parenthood (Berlin et al., 2016; Forslund Frykedal et al., 2015, 2020; Lefèvre et al., 2016). An important goal of parental groups is to promote a healthy transition to parenthood and thereby promote children’s health and psychosocial development (Berlin et al., 2016; Bryanton et al., 2013; Lefèvre et al., 2015). This includes a focus on knowledge and skills connected to caring for the new-born child, but also on the social interaction with other parents, as well as the relationship to one’s partner and what new parents may go through in this period.

Studies of health professionals’ views regarding parental groups have shown that they strongly believe in these groups as a support method (Lefèvre et al., 2015). There is an ambition to create parent-centered learning environments by establishing the conditions for interaction and communication between the parents (Forslund Frykedal, Rosander, Barimani, & Berlin, 2019). However, previous studies have shown that leaders often feel that they lack the pedagogical skills to be able to create well-functioning groups (Forslund Frykedal et al., 2019; Lefèvre et al., 2015). There is also often a discrepancy between what the leaders say they do and their actual behavior in the group. They do not always “walk the talk” and think they let the parents participate to a greater degree than what they actually do (Berlin, Rosander, Forslund Frykedal, & Barimani, 2018). Furthermore, the leaders rarely succeed in initiating and supporting deeper conversations between the parents (Forslund Frykedal
et al., 2020). There is a need for more interactive pedagogical practices to be able to promote parents in their parenting (Forslund Frykedal et al., 2020). One approach used to stimulate interaction and communication among parents is cooperative learning (Johnson & Johnson, 2009, 2017).

**Social interdependence theory and cooperative learning**

The social interdependence theory explains what happens when individuals in a group interact with each other. It is based on social psychological research by, for example, Deutsch (1949) and Lewin (1948), but has been further developed by Johnson and Johnson (2009, 2017). It is evidence-based and meta-analytic findings based on 148 independent studies and over 17,000 participants show strong support for the theory (Roseth, Johnson, & Johnson, 2008). Social interdependence theory provides a foundation for the structured approach or method called “cooperative learning,” aimed at creating well-functioning groups (Johnson & Johnson, 2009). According to this theory, group members that have something in common, such as parenthood, develop a degree of interdependence when interacting and communicating in a group. Social interdependence is related to the perception of how one can reach one’s goals. A positive interdependence means a perception that the goals only can be achieved if the others in the group also reach theirs. This perception can create opportunities for cooperation and encourages parents to give each other support. It also creates the conditions for an increased individual accountability and shared responsibility that helps the group to function. The interdependence might also be negative. This involves a perception that one’s goals only can be achieved if others in the group fail to obtain theirs. This perception creates competition in the group and obstruction of others’ efforts. There might also be an absence of interdependence, which means that there is a perception that one’s goals are unrelated to the efforts of others. This perception will probably lead to minimal interaction between the parents. The goal is to create cooperation and positive interdependence between the parents. Based on social interdependence theory, five elements of cooperation have been proposed to maximize the cooperative potential of groups (Johnson, Johnson, & Smith, 2007). In a parental group context, these are (a) positive interdependence between the parents, (b) individual accountability to take a shared responsibility for the group task, (c) promotive interaction between the parents, (d) social skills, and (e) evaluation to promote the group processes. A positive interdependence means the parents in a group need other parents to fulfil their goals, which are learning about parenthood and being able to handle the new experience of being a parent. Individual accountability means that parents feel encouraged to participate and work with the task as they feel accountable as part of the group can opt out this group task. Promotive interaction refers to the social support in the group context that
the parents can provide for each other. Social skills are interpersonal and small group skills, such as listening and communication skills, which may enhance the degree of trust among parents. To improve all aspects described above it is also important for the group to have periodic discussions and evaluations. This is crucial for promoting relations among parents and the parent–leader relation as well as for creating a well-functioning group. Conditions for the first two elements, a positive interdependence and accountability, can be fostered by the group leader in managing how tasks are structured and performed. If successful, a promotive interaction follows. Some social skills are necessary for cooperative learning to occur. If lacking, the leader may need to encourage positive group behaviors. Finally, the initiative to evaluate the group’s work needs to come from the group leader in terms of ample time and structure for the evaluation.

New parents attending parental groups prefer an interactive learning approach (Berlin et al., 2016; Forslund Frykedal & Rosander, 2015), but previous studies have shown a lack of such activities in parental groups (Berlin et al., 2016; Forslund Frykedal et al., 2015, 2020; Lefèvre et al., 2016). Therefore, the aim of the study was to investigate the leadership skills of child healthcare nurses for parental education groups, their ideas about creating conditions for well-functioning groups, and what is required to achieve this. The results were analyzed and discussed using social interdependence theory as a framework and especially the five elements of cooperative learning.

Methods

Design

This study used a qualitative descriptive design. Qualitative interviews were analyzed deductively using thematic analysis (Braun & Clarke, 2006, 2013), with the five elements of cooperation based on social interdependence theory as an analytical tool.

Study setting

The study was carried out in Sweden where parental groups have a long tradition as a general health promotion effort offered to all new parents by Child Health Services. The groups are free of charge and led by nurses (Government Office of Sweden, 2018). A parental group consists of 5–15 new parents. Groups usually start when the child is 6 to 8 weeks old and there are often up to 8–10 group sessions during the child’s first year (National Handbook of Child Health Services, 2020a). Approximately 93% of new mothers, but only 6% of fathers (or partners), attend these groups (National Handbook of Child Health Services, 2019). The leaders’ role and
the national goals of the groups are: (a) to increase new parents’ knowledge about child development and needs and strengthen the parent-child relationship, (b) to create opportunities for continuous contact between parents and between parents and nurses, and (c) to provide insight into the societal conditions related to raising children and the parental role (Government Office of Sweden, 2008; National Handbook of Child Health Services, 2020b). Child Health Services have in addition to health promotion in parental groups two other main focuses: primary prevention including information and counseling, and secondary prevention based on health surveillance for children 0–6 years (The National Board of Health and Welfare, 2014).

**Participants**

The participants were pediatric or district nurses from Child Health Services and leaders of parental groups. About half of the participants were from larger cities and half from smaller towns in Sweden. We wanted nurses with long experience of leading parental groups and had to search for suitable participants in different settings. Thus, four of the participants were recruited through healthcare developers in two county councils. Two were recruited through a supervision training course and two were recruited through another ongoing research project. All recruitments were made by means of oral and written communication regarding the study. All participants were women. They had an estimated age span from 43 to 63 years and with an estimated work experience from 8 to 25 years.

**Data collection**

Eight interviews with child healthcare nurses were conducted individually by two of the authors during April to June 2019, each with a length of 30–62 minutes (in total 5 hours and 57 minutes) recorded and transcribed verbatim comprising 93 pages. The interviews were semi-structured, and the interview guide contained the following areas: (a) experiences from parental groups, (b) the purpose of groups, (c) knowledge needed for working with the groups, and (d) how they organize and manage the groups. As researchers we did not mention cooperative learning or social interdependence theory during the interviews. Instead, we wanted the nurses to describe their experiences, intentions, required knowledge, and management of the groups. By letting the nurses talk openly and unguided about their experiences we could analyze the data deductively with the five elements of cooperation in social interdependence theory as a starting point, and to investigate in what way the nurses promote cooperative learning in their groups.
Data analysis

The data were analyzed using thematic analysis (Braun & Clarke, 2006, 2013) in four steps. Thematic analysis enabled us to search for themes inductively or deductively in relation to different epistemological and ontological positions. In this study, we used deductive analysis based on the five elements of cooperation necessary for optimal cooperative learning (Johnson & Johnson, 2009, 2017).

The first two steps of the analysis was done individually by two of the authors. In the first step the whole dataset (all eight interviews) was coded using the five elements (codes). This was done by collating extracts of data relevant to each of the five codes. In the second step, the collated data from each code were grouped together and formed five comprehensive tentative themes (see Table 1 for the five elements). After each step, the two authors discussed and compared their analyses. In case their analyses were too diverse, some corrections were made in agreement.

The third step of the analysis was carried out in a collaboration between the authors. This was done by searching for refinements of each theme. Patton’s (2002) two criteria, internal homogeneity and external heterogeneity, were used for determining whether the data in each theme fit together and that the differences between the themes were clear. In this step the coherency of patterns in the data extracts for each theme were also in focus. The fourth step consisted of both authors reviewing the themes together. The result of this step became the basis for writing up the results. Throughout the whole analysis results were summarized in tables (see Table 1).

| The five elements (leader actions) | The nurses’ accounts related to the elements |
|-----------------------------------|---------------------------------------------|
| **Positive interdependence**      | Presents goals for the group                |
| Develops parents’ perception of being supportive to each other | Emphasizes that parenthood is the common denominator in the group |
|                                   | Plans, structures and pedagogical performances are important |
| **Individual accountability**     | Promotes parents’ contributions             |
| Ensures that the parents contribute to the group | Works with different subgroups within the group |
|                                   | Communicates expectations                   |
|                                   | Asks for parents’ expectations              |
| **Promotive interactions**       | Invites the parents to contribute with their own experiences |
| Promotes a trusting group climate | Creates trusting relationship                |
|                                   | Is open to diversity                        |
| **Social skills**                | Acts as a role model                        |
| Emphasizes the necessary social skills needed | Uses implicit strategies                    |
|                                   | Uses strategies that need to be interpreted by parents |
| **Group processing**             | Uses summative evaluation after the last group session |
| Instructs the parents to reflect and evaluate how the group works | Uses formative evaluation after each group session |
|                                   | Has parents communicate their needs, interests and expectations |

Table 1. CHC-nurses’ accounts of how to create conditions for well-functioning groups based on the five elements necessary to maximize CL (Johnson & Johnson, 2009, 2017).
**Results**

Using the nurses’ stories about their experiences of working with parental groups, we have analyzed their accounts related to the five elements of social interdependence theory. By doing so we could establish conditions for well-functioning groups. The results are thematized using the five elements and each of the elements describes the leaders’ expressions of their intentions for and management of their groups.

**Positive interdependence**

Almost all of the nurses clearly expressed *goals* for the groups. The most important goal for the nurses seems to have been that the parents got to know each other. It was important because it gives opportunities to network, and hopefully the parents could start meeting outside the groups, and ultimately create a network for continued interaction after all group sessions were over. This interaction creates the conditions for an exchange of experiences, and for mutual support concerning parenting. Providing information about child development was also expressed as a goal.

An important condition for a positive interdependence is to have *something in common*. In the current context the most obvious characteristic the group members had in common was that were all new parents. As one of leader expressed it: “Here are all new parents, we are all on the same level.” The leaders often encounter heterogeneous groups, parents with different backgrounds, ages, professions, interests and needs, and it seems challenging for them to develop a positive interdependence. One way to manage heterogeneity was to make it clear for the parents that the group is for everyone, and that they all could influence the content: “This group is for you. What do you want it to be about?” Thus, having an approach in which a willingness to include the parents’ perspectives and ideas is clearly conveyed, a positive interdependence can be achieved: “Listen to the parents” wishes, get them involved, make decisions together, and adapt your own ideas to the current group’.

The most important way for the nurses to create a positive interdependence in the groups seemed to be the way they *planned, structured and performed pedagogically in the groups*. There were many accounts of these aspects in the data. Some nurses planned the location and time for the groups’ meetings so the parents could continue to socialize over a snack or lunch after the session had ended. Scheduling the group sessions more frequently in the beginning to make it easier for the parents to get to know each other was another strategy for achieving positive interdependence. An additional strategy was to ask the parents to create a Facebook or WhatsApp group to give them opportunities to see each other outside the group. Finally, there were examples of pedagogical tools or methods used to create cohesion and positive interdependence, such
as small-group discussions combined with presentations of the discussions in the whole group, for example, discussions based on “emotion cards” (i.e., photos or drawings that illustrate certain everyday events connected to parenthood). These cards were used as a pedagogical tool to encourage parents to reflect and to promote discussions. Furthermore, films on certain topics (e.g., breastfeeding, child development) were also used as a starting point for discussions. The films provide knowledge about parenting and in the discussions common everyday applications could fuel the interaction.

**Individual accountability**

There were many accounts of how the nurses get the parents involved and contributing to the group. They let us know that it was not always so easy to make the parents feel comfortable and to get them to start talking, but since active parents was a prioritized goal for all nurses, they tried hard to reach it. The nurses’ strategy could be not to answer a question from a parent directly, but instead to be silent for a while giving opportunities for others to join in. There were also example of bouncing the question back to the group saying “What do you think about this?” or directed to a specific parent: “You seem to have read a lot about this. What are your thoughts and what have you read?” Also, sharing one’s own personal experience as a mother to encourage the parents to do the same seemed to be a common strategy.

Pedagogical tools and strategies were also used to achieve parent participation. One example was the use of subgroups. Usually the leader gives an assignment such as a question to discuss and then: “I divide [the parents] into smaller groups that can talk about an issue. After a little while I collect their thoughts and gather the whole group to discuss based on this.” Other strategies involved letting parents interview each other. One of the nurses said that she usually uses open questions to create a discussion: “What are your thoughts on that? And then reflect back to the group to get more discussion.”

Another strategy was to explicitly communicate expectations to make the parents understand that they all have a responsibility for the group’s activity. For example: “The group leader is not a lecturer. All [of you] need to participate for this to work. In that way the tone is set from the beginning, which is important!” Another way to communicate expectations was to emphasize the purpose of the group at the very beginning and ask for the parents’ expectations for the group. To underline the importance of secrecy, some of the nurses conveyed this very clearly from the start: “What we talk about in this room stays in the room, and sharing is not an absolute requirement.” No matter the strategies used there is a fine line between making individual accountability salient and contributing to feelings of insecurity in the group, so all these strategies need to be handled with care.
Promotive interaction

The leaders talked about the importance for parents in the groups to share experiences through conversation and to have opportunities to talk about parenting—also things that are difficult to talk about, “such as feelings of tiredness, insufficiency, sadness, frustration and thoughts about what you have embarked on.” This lets the parents see that they are not alone as parents, which help to “normalize” perceived hardship connected to parenthood. There is a desire to generate a trusting relationship in the group so that the parents dare to support each other in a promotive and supportive interaction. The leaders’ strategy to develop this was to be “responsive and to create a good atmosphere.” Other strategies used were to encourage the interaction and parent participation, to give the parents positive feedback, such as “That sounds interesting!” or to use non-verbal signs as a starting point for involvement, “I see that you are nodding. Is this something that you have experienced? When I see them, they open up a little more.” A strategy was to bounce the questions back to the group together with open questions and to use follow-up questions. For the leaders, repeatedly inviting the parents to share their own experiences seems to be a very important strategy for promoting interaction in the groups.

Another strategy to promote interaction was to meet the parents based on their needs and at the same time be open to diversity. One leader articulated this issue as follows:

> It is a great responsibility as a group leader to make everyone understand that everything that comes up in the group is not suitable for everyone. Let’s say we talk about breastfeeding and sometimes I feel it almost becomes the norm to breastfeed. Then someone takes offense. I try to strengthen [that person] and see the individual, and not be too categorical, to have an open mind and to avoid taking sides.

To be able to make all parents feel included in the group is important and to achieve that one needs to be open to the fact that parents and babies are different and have an awareness of the sense of exclusion that norms such as “the importance of breastfeeding for all babies can create.”

Social skills

An important aspect of all groups is the need for some degree of social skills among the members for a group to function effectively. For the leaders, a well-functioning group is a group with “a positive atmosphere, happy and positive parents who chat, parents who are interested, listen, ask questions and interact with each other.” To achieve that is a challenge to the leaders, and they need strategies to get the parents to use their social skills. One such strategy is to use their own social skills in the group and thereby be role models, but without explicitly telling the parents the importance of communicating and being an
active listener in discussions. A difficulty with this strategy is that it is *implicit* and *needed to be interpreted* by the parents.

Instead of talking about the importance of using social skills, the leaders could talk about the significance of creating an open and permissive group climate, in which everybody can make their voice heard. One leader said that she initially tells the parents that they are all responsible for making sure that the group functions effectively: “The group is what you make it. Take the opportunity to share your own experiences and thoughts and talk to each other.” To use methods that make all parents participate and contribute to the discussion was another strategy. One leader described her method as follows:

I say, “I thought, we could take a moment and tell each other about our experiences” and then I give the floor to a parent. Then I say: “Once you have finished talking, forward the question”. In this way the parents get some responsibility to make sure that everyone contributes.

**Group processing**

The leaders described a few strategies for implementing evaluations; however, they were quite vaguely described and had different purposes. Some were *summative*, that is, the group’s aggregated perceptions after one group session or after all sessions were the basis for the evaluation. It is not clear if the leaders referred to a written or oral evaluation, but a quite common expression was “I usually ask [the parents] for some feedback” which indicates that it was an oral evaluation. However, most of the evaluations seem to be *formative*, that is, the leaders are continuously seeking information about how the parents have experienced the group: “I usually ask ‘How was today’s session? How was the group? Anything we need to adjust?’.” The leaders may also investigate what the parents want to discuss at the next meeting, “I ask for suggestions, new topics for the next meeting.” Only one leader was more explicit about her strategy, “I let everyone say something, one after the other, when five, ten minutes remain. ‘What did you learn today? What do you want to talk about next time?’.” Another leader said that her purpose in doing the evaluation was to examine the current situation in the group. An example could be if one parent took a lot of space, “I check with the group, what does the group want, do they want this, or how should we think about this? Can we discuss it together?”

Another strategy involves a sensitivity to what parents think and feel about the group without explicitly asking them. A downside to this strategy is that “one can be totally wrong of course.” Therefore, she occasionally says to the parents: “We do evaluations from time to time, not always, but then I get to know what was good and what was bad.” To start a group session asking for feedback on the last occasion was an additional strategy. Included in the
feedback could be talk about the group’s last discussions and what content they have agreed on for the current session, “so we all start with the same expectations.” Evaluation strategies seem to be used for the sake of the leader, for her to get information from the parents about how they have experienced the group and to be able to develop content and methods in the groups. Evaluating strategies also seem to be used for the sake of the parents, for them to communicate their, needs, interests and expectations.

**In summary**

The results contain different accounts from the nurses leading the groups and were analyzed by use of the five elements of social interdependence theory. Clearly expressed goals and parenthood as the common denominator in the group, as well as how they performed pedagogically in the groups were related to *positive interdependence*. Bouncing questions back to the group or asking open questions, working with different subgroups, or explicitly communicating expectations were strategies the nurses used related to *individual accountability*. Letting the parents share experiences through conversation to normalize parenthood, as well as being open to diversity, and making parents feel included and wanting to promote each other, were strategies that helped the leaders to create *promotive interactions* between parents in the group. The need for the parents to use their *social skills*, was mostly managed by implicit strategies such as role modeling, but that could be difficult for the parents to interpret. They also said that everyone had a shared responsibility for making the group thrive. Implementing evaluations (*group processing*) in the groups to support the group’s development does not seem to be very common, but the leaders described some formative and summative evaluation strategies.

**Discussion**

The aim of this study was to investigate child healthcare nurses’ ideas about creating conditions for well-functioning parental groups based on the five elements of cooperation in social interdependence theory. They gave examples of both their intentions and goals with the groups and how they managed to reach them by planning, structuring and using pedagogical implementation in the groups. The nurses’ educational experience concerning cooperative learning and the five elements of cooperation and how to create cohesion and interaction in a group were probably quite limited. Furthermore, we cannot say anything about how these leaders actually worked with their groups nor can we say that they managed to develop well-functioning groups. However, we believe that the leaders in their narratives displayed *vocational knowledge* to be able to work with their groups from a cooperative learning perspective. This is knowledge that they most likely have developed as their experience of
leading groups grew (Rosander, Forslund Frykedal, Barimani, & Berlin, 2021). Billet (2004) conceptualized the workplace as a learning environment and argued against a concept of learning as a merely formal process developed in educational settings. As we can see from our results, vocational knowledge seems to develop when the leaders are participating in situated work activities such as parental groups. Their learning is mediated by the activities in the groups that they are engaged in. According to Billet (2015) there are three different forms of knowledge required for work that are essential to vocational development. These forms of knowledge are intertwined and encompass what the leaders might know to be able to do and value in the groups. Billet termed these forms conceptual knowledge, which includes facts and concepts associated with their occupational domain of child healthcare nurses. This knowledge is important to be able to comprehend and explain child’s health as well as parental related conditions and appropriate care in the parental groups. The second term is procedural knowledge, that is, knowing what to do in terms of practice in the groups, from enacting single tasks like answering parents’ questions to managing more demanding aspects such as creating positive interdependence and a suitable discussion climate in the groups. The third concept, dispositional knowledge comprises attitudes, values, interest and intentions that guide, through observation and attention, the nurses’ thinking and acting in the group and thereby expand their learning.

However, the naturalistic setting in parent education groups and how leaders perform their leadership role may be difficult to capture with qualitative interviews. Results are based on nurses’ descriptions of what they do, and we do not know how well that corresponds with what they actually do. We know from previous studies that leaders of parental groups do not always do what they say they do when leading these groups (Berlin et al., 2018). For example, many leaders described themselves as discussion leaders, but instead the leaders used their expert role most of the time, and mediated information and expert knowledge giving little time to parents for active participation (Berlin et al., 2018).

Our results indicate that the first three elements of cooperation – positive interdependence, individual accountability, and promotive interactions – were rather uncomplicated for the leaders. The fourth element, social skills, was more challenging for the leaders who found it difficult to explicitly tell the parents to use their personal experiences and social skills to get groups to function effectively. An important prerequisite for social skills to be a natural part of the group is an open supportive climate – something that requires experience as a leader to create (Rosander et al., 2021). If only trying to convey this implicitly the parents need to interpret and understand implicit leadership strategies which may be difficult. A possible explanation for this challenge may be found in an unawareness of one’s leadership role. There is a lack of formal group leadership education in Bachelor/Master Education of Science in
Nursing (Forslund Frykedal et al., 2019; Lefèvre et al., 2015) and instead the leaders need to develop their group leadership role at their workplace. Herbig and Bussing (2004) argued that knowledge acquired and developed implicitly in the workplace seems to be difficult to verbalize explicitly. Nairn, Chambers, Thompson, McGarry, and Chambers (2012) stressed the importance for health professionals to have an awareness of, and ability to, critically reflect on responsibilities in different roles. Thus, this awareness and ability are considered a quality indicator when planning and performing healthcare (Nairn et al., 2012). In a study by Forslund Frykedal et al. (2016) leaders reported being uncomfortable in their leadership role and felt they lacked competence in their professionality when managing groups and group processes. That may explain the leaders’ shortcomings in terms of clearly expressing their expectations for the participating parents. The fifth element, group processing, was vaguely described by the leaders, which indicates that informal and formal evaluations were performed deficiently. In this case parents were not fully given the opportunity to reflect on and evaluate how well the group worked. Insufficient informal and formal evaluations obstruct the improvement of content and activities in the groups and thereby impede the development of a well-functioning group (Johnson & Johnson, 2009).

**Methodological considerations**

A strength of the study was that the interviews were collected without mentioning cooperative learning or asking the nurses how they create positive interdependence in the groups to develop cohesion and interaction between the parents. Nor did we ask how they promote the five elements necessary for well-functioning groups according to the theory. Cooperative learning has been widely used within studies focusing on study groups and their members (Roseth et al., 2008). In this study we have a leader perspective and use social interdependence theory and the five elements of cooperation to guide a deductive qualitative analysis. Deductive qualitative analysis is used to test or extend a theory or model (Braun & Clarke, 2006; Hsieh & Shannon, 2005), in this case the five elements based on social interdependence theory. All elements received operational definitions in the form of short descriptions (Table 1). There was a difficulty finding accounts for the element social skills, in part due to difficulties to operationalize it in terms of the leaders’ work with the groups. Our interpretation is that there are differences between leading a formal educational group and a voluntary group with new parents. In the latter you do not talk explicitly about the importance of using the group’s skills to support the functioning of the group. Thus, through discussions after an review by two of the authors, we developed the operational definitions and increased the accuracy of the received evidence related to the element in the data (Hsieh & Shannon, 2005). We argue that the use of the five elements of cooperation throughout the analysis and
interpretation makes the findings transferable to other contexts, which is of great importance for group leaders and teaching in voluntary contexts. Furthermore, the contribution to theory development of the widely used cooperative learning and social interdependence theory in the context of leadership for parental groups constitutes an additional important strength of the study.

**Implications for practice**

This paper contribute to the clinical community with a perspective on how:

- Parental groups can get structured by using cooperative learning as a theoretical framework.
- Cooperative learning as a method can provide conditions that optimize collaboration among attending parents in groups.
- Theoretical knowledge about cooperative learning can contribute to reflective clinical practice among child healthcare nurses when performing their leadership role in parental groups.

**Conclusions**

The leaders’ experience of cooperative learning was probably quite limited. Nevertheless, they displayed in their narrative enough vocational knowledge to be able to work with their groups from a cooperative learning perspective. However, the leaders seem to be in need of more formal knowledge to promote the parents in their transition to parenthood and thereby promote children’s health and development in well-functioning parental groups. In order to create conditions for a well-functioning group and to stimulate a cooperative learning environment for expectant and new parents, the following recommendations are given:

- Provide nurses leading parental groups with formal knowledge about cooperative learning and the five elements of cooperation in social interdependence theory, and their leadership role.
- Provide opportunities for supervision and support of leaders on a regular basis to develop an awareness of their leadership role in parental groups.

**Disclosure statement**

All four authors have agreed to submission of the manuscript in this form.

**Funding**

This work was supported by the Swedish Research Council (grant # 2016-03550).
ORCID

Karin Forslund Frykedal http://orcid.org/0000-0003-1391-3346
Michael Rosander http://orcid.org/0000-0002-0202-4650
Mia Barimani http://orcid.org/0000-0002-6402-9561
Anita Belin http://orcid.org/0000-0001-9402-3315

Data availability statement

The transcribed data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Ethical considerations

Throughout the study, we adhered to the four ethical principles of the British Psychology Society (2014): respect, competence, responsibility, and integrity. The study was approved by the regional Research and Ethics Committee at Linköping University, Sweden (#2017/202-31).

References

Barimani, M., Forslund Frykedal, K., Rosander, M., & Berlin, A. (2017). Facilitating and inhibiting factors in transition to parenthood – Ways in which health professionals can support parents. Scandinavian Journal of Caring Sciences, 31(3), 537–546. doi:10.1111/scs.12367

Barlow, J., Smailgagic, N., Huband, N., Roloff, V., & Bennett, C. (2012). Group-based parent training programs for improving parental psychosocial health. Cochrane Database of Systematic Reviews, 6, Article CD002020. doi:10.1002/14651858.cd002020.pub3

Berlin, A., Rosander, M., Forslund Frykedal, K., & Barimani, M. (2018). Walk the talk: Leader behavior in parental education groups. Nursing & Health Sciences, 20(2), 173–180. doi:10.1111/nhs.12399

Berlin, A., Törnkvist, L., & Barimani, M. (2016). Content and presentation of content in parental education groups in Sweden. The Journal of Perinatal Education, 25(2), 87–96. doi:10.1891/1058-1243.25.2.87

Billet, S. (2004). Workplaces participatory practices - Conceptualising workplaces as learning environments. The Journal of Workplace Learning, 16(6), 312–324. doi:10.1108/1366562041055029

Billet, S. (2015). Readiness and learning in health care education. The Clinical Teacher, 12(6), 367–372. doi:10.1111/sct.12367

Braun & Clarke (2013). Successfulqualitiativeresearch: A practical guide for beginners. Thousand Oaks, California: Sage.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.11751/1478088706qp063oa

Bryanton, J., Beck, C. T., & Montelpare, W. (2013). Postnatal parental education for optimizing infant general health and parent-infant relationships. Cochrane Database of Systematic Reviews, 11, Article CD004068. doi:10.1002/14651858.CD004068.pub4

Deave, T., Johnson, D., & Ingram, J. (2008). Transition to parenthood: The needs of parents in pregnancy and early parenthood. BMC Pregnancy and Childbirth, 8(Article), 30. doi:10.1186/1471-2393-8-30
Deutsch, M. (1949). A theory of co-operation and competition. *Human Relations*, 2(2), 129–152. doi:10.1177/001872674900200200

Forslund Frykedal, K., & Rosander, M. (2015). The role as moderator and mediator in parent education groups – a leadership and teaching approach model from a parent perspective. *Journal of Clinical Nursing*, 24(13–14), 1966–1974. https://doi.org/10.1111/jocn.12856

Forslund Frykedal, K., & Rosander, M. (2015). The role as moderator and mediator in parent education groups – A leadership and teaching approach model from a parent perspective. *Journal of Clinical Nursing*, 24(13–14), 1966–1974. doi:10.1111/jocn.12856

Forslund Frykedal, K., Rosander, M., Barimani, M., & Berlin, A. (2019). Leaders’ limitations and approaches to creating conditions for interaction and communication in parental groups: A qualitative study. *Journal of Child Health Care*, 23(1), 147–159. doi:10.1177/136749351877311

Forslund Frykedal, K., Rosander, M., Barimani, M., & Berlin, A. (2020). Child health care nurses’ use of teaching practices and forms of knowledge episteme, techne and phronesis when leading parent education groups. *Nursing Inquiry*, 27(4), e12366. doi:10.1111/nin.12366

Forslund Frykedal, K., Rosander, M., Berlin, A., & Barimani, M. (2016). With or without the group: Swedish midwives’ and child healthcare nurses’ experiences in leading parent education groups. *Health Promotion International*, 31(4), 899–907. doi:10.1093/heapro/dav082

Gilm, C., Buchan, J. L., Letourneau, N., Bennett, C. T., Shanker, S. G., Fenwick, A., & Smith-Chant, B. (2016). Parent education interventions designed to support the transition to parenthood: A realist 10 review. *International Journal of Nursing Studies*, 59, 118–133. doi:10.1016/j.ijnurstu.2016.03.015

Government Office of Sweden. (2008). Föräldrastöd – en vinst för alla. Nationell strategi för samhällets stöd och hjälp till föräldrar i deras föräldraskap. [Parental support - a profit for everyone. National strategy for society’s support and help to parents in their parenting]. SOU 2008:131. Socialdepartementet. https://www.regeringen.se/contentassets/e48e18fd326e48a4892ae0f0f311b873/foraldrastod-en-vinst-for-alla-sou-2008131

Government Office of Sweden. (2018). *En nationell strategi för ett stärkt föräldraskapsstöd* [A national strategi for strengthen parental support]. https://www.regeringen.se/informationsmaterial/2018/09/en-nationell-strategi-for-ett-starkt-foreldraskapsstod/

Herbig, B., & Bussing, A. (2004). The role of explicit and implicit knowledge in work performance. *Psychology Science*, 46(4), 408–432. doi:10.1007/978-94-017-8902-8_29

Hjälmlhult, E., Glavin, K., Okland, T., & Tveiten, S. (2014). Parental groups during the child’s first year: An interview study of parents’ experiences. *Journal of Clinical Nursing*, 23(19–20), 2980–2989. doi:10.1111/jocn.12528

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. doi:10.1177/1049732305276687

Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365–379. doi:10.3102/0013189X09339057

Johnson, D. W., & Johnson, R. T. (2017). The use of cooperative procedures in teacher education and professional development. *Journal of Education for Teaching*, 43(3), 284–295. doi:10.1080/02607476.2017.1328023

Johnson, D. W., Johnson, R. T., & Smith, K. (2007). The state of cooperative learning in postsecondary and professional settings. *Educational Psychology Review*, 19(1), 15–29. doi:10.1007/s10648-006-9038-8

Karlström, A., & Rising-Holmström, M. (2019). Parental groups during pregnancy and the child’s first year: Swedish parents experiences. *The Journal of Perinatal Education*, 28(1), 19–27. doi:10.1891/1058-1243.28.1.19
Lefèvre, Å., Lundqvist, P., Drevenhorn, E., & Hallström, I. (2015). Managing parental groups during early childhood: New challenges faced by Swedish child health-care nurses. *Journal of Child Health Care, 19*(3), 381–391. doi:10.1177/1367493513509421

Lefèvre, Å., Lundqvist, P., Drevenhorn, E., & Hallström, I. (2016). Parents’ experiences of parental groups in Swedish child healthcare: Do they get what they want? *Journal of Child Health Care, 20*(1), 46–54. doi:10.1177/1367493514544344

Lewin, K. (1948). *Resolving social conflicts*. New York: Harper.

Nairn, S., Chambers, D., Thompson, S., McGarry, J., & Chambers, K. (2012). Reflexivity and habitus: Opportunities and constraints on transformative learning. *Nursing Philosophy, 13*(1), 189–201. doi:10.1111/j.1466-769X.2011.00530.x

National Handbook of Child Health Services. (2019). *Årsrapport barnhälsovård i Stockholms län 2018* [Annual report on child health services in Stockholm county 2018]. https://vardgivarguiden.se/globalassets/kunskapsstod/bvc/bhv-rapporter/arsrapport_bhv_2018.pdf

National Handbook of Child Health Services. (2020a). *Form och metod för föräldrastöd i grupp* [Form and method for parental support in groups]. https://www.rikshandboken-bhv.se/metoder–riktlinjer/foraldrastod-i-grupp/form-och-metod/

National Handbook of Child Health Services. (2020b). *Målen för föräldrastöd i grupp* [The goals for parental education groups]. https://www.rikshandboken-bhv.se/metoder–riktlinjer/foraldrastod-i-grupp/malen-for-foraldrastod-i-grupp/

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, California: Sage.

Rosander, M., Berlin, A., Forslund Frykedal, K., & Barimani, M. (2020). Maternal depression symptoms during the first 21 months after giving birth. *Scandinavian Journal of Public Health, 140349482097796*. doi:10.1177/1403494820977969

Rosander, M., Forslund Frykedal, K., Barimani, M., & Berlin, A. (2021). Experiences from leading parental education groups: Perceived difficulties and rewards as an indication of skill acquisition. *Journal of Child Health Care, 136749352110009*. doi:10.1177/13674935211000940

Roseth, C., Johnson, D., & Johnson, R. (2008). Promoting early adolescents’ achievement and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin, 134*(2), 223–246. doi:10.1037/0033-2909.134.2.223

The National Board of Health and Welfare. (2014). *Vägledning för barnhälsovården* [Guidelines for child healthcare services]. https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/vagledning/2014-4-5.pdf