Parent-Child Mother Goose Program Research

Results from focus groups and questionnaires

In a collaboration between Fort Saskatchewan Families First Society and the Human Ecology Department at the University of Alberta, research was conducted to examine the impact the Parent-Child Mother Goose program has on parent-child relationships.

Written by: Natasha Weber, BA, MSc.

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Executive Summary

- The purpose of this study was to examine how the Parent-Child Mother Goose promotes positive parent child relationships. The research focused on exploring parent-child relationships through attachment theory and selected factors that contribute to positive parenting approaches.
- Previous research on the PCMG study indicated that the program increases parent's knowledge, confidence, and skill. Other findings included participants feeling increase in social support and connections to the community. Other research also found that the program positively impacts children's language, social and emotional development.
- Researchers from the University of Alberta designed the current study with input from the Fort Saskatchewan Families First Society
- The study consisted of two phases:
  - Phase 1: Focus groups with current and past facilitators
  - Phase 2: Pre- and post-test questionnaires filled out by program participants
- The following are key findings from the focus groups from Phase 1:
    - Many of the program facilitators from the focus groups agreed that the program promotes parent-child relationships and bonding.
    - Several stories were shared that described current and past examples of participants gaining several benefits from the program including, bonding time with their child, confidence in their parenting ability, and increased social support.
    - Many of the facilators mentioned several factors that contributed to strengthening the parent-child relationships with program participants, including the facilitation techniques, creating a safe space to learn and develop relationships with participants and the community.
    - Facilitators spoke of successful techniques such as modeling parenting practices in a subtle, non-judgmental approach and demonstrating that nobody is perfect through their own mistakes.
    - Some facilators experienced or observed greater emotion regulation in themselves or participants after participating in the program several times. One facilators recalled a participant telling her "I sing more, I yell less."
- The following are key findings from the questionnaires:

    - Participants answered 18 questions related to attachment security in their child. No significant changes were found between pre- and post-test scores or between those who had participated in the program before versus those who had not.
    - The Parenting Sense of Competence Scale (PSOC) was filled out by participants to measure their parenting self-efficacy and satisfaction. Tests found a significant increase from pre- to post-test scores for the total scale and the self-efficacy scale.
    - Another interesting result was those who had only lived in the community for under three years had a significant increase in pre- to post-test self-efficacy scores as compared to those who had lived in the community longer.
    - To examine emotion regulation in participants, the Difficulties in Emotion Regulation Scale was used. It measured participants use of emotion strategies and impulse controls. Unfortunately, no significant differences were found in any of the analysis.
    - A final questionnaire was developed to explore specific features of the program in relation to the other measurements.
- Conclusion:
    - Results from this study and others strongly suggest that PCMG does and will continue to support parents and families raising young children by promoting positive parent-child relationships, increasing parent's confidence and emotion regulation skills and developing social support systems for parents.
    - The study does have some limitations including the lack of a comparison group and the reliance on self-report methods to measure attachment (which is typically measured through expert observations).
    - Programs, such as PCMG and community agencies like FSFFS are an excellent resource to families and communities as they provide parents the skills, knowledge, strategies, and community support, to feel confident in their parenting abilities which can ultimately positively influence the parent-child relationship and produce healthier families within the community.

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Introduction

The Community and University Research Partnership

The Executive Director of Fort Saskatchewan Families First Society (FSFFS) reached out the Human Ecology Department for research support on their Parent Child Mother Goose program. The researchers were invited to observe several program sessions and attend the program training. Researchers designed, in collaboration with FSFFS, a two-phased approach to studying the PCMG program.

Community Partner Profile: Fort Saskatchewan Families First Society is a not for profit organization that was established in 1996 that "serves families through early childhood development, parenting programs and family support." (Fort Saskatchewan Families First Society, n.d.). In 2015-2016 reporting year, FSFFS served over 950 families through their programs and services, 113 of those families participated in the PCMG program (Families First Society Fort Saskatchewan 2015-2016 Annual Report).

University Partner Profile: Natasha Weber, a Masters student with the Human Ecology Department, was the primary investigator for this study and the author of this report. Her works was supervised by Dr. Berna Skrypnek and Dr. Pushpanjali Dashora. The study presented in this report was conducted for Natasha's Master's thesis, which was successfully defended in September 2017. The full thesis can be found in the University of Alberta's depository and a copy was given to FSFFS.

The Program

Parent-Child Mother Goose has been teaching parents, grandparents and caregivers songs, rhymes and stories through oral repetition since the mid-1980s, in Canada, The United States and Australia. This program strengthens parent-child bonds and establishes positive family relationship patterns through promoting and teaching positive parenting strategies and responses (Janzen, 2001). The PCMG program consists of 10 weekly, hour long sessions, hosted by two trained, program facilitators. During these sessions, the facilitators teach, through oral repetition, age appropriate rhymes, stories, and songs to small groups of parents and caregivers with their babies or young children. Various activities accompany the teachings and the facilitators provide a relaxed, playful setting. Child minders help keep toddlers safe as they are welcome to explore and play while their parent or caregiver continues to learn with the facilitator. A follow-up phone call to the program participants is made every week by the facilitators to discuss any

questions or concerns and remind them of the next session. Fort Saskatchewan Families First Society has been hosting the PCMG program for over 15 years.

Previous Research

To date, the literature indicates that the PCMG program has a positive impact on both the parent and the child. Parents who participate in the program have reported increases to their parenting knowledge, their sense of competence and self-efficacy and an increased ability to respond appropriately to their children's behaviors (Carroll, 2005; Weis, 2006). Parents also express that the program provides them with social support and more connection to their community (Formosa, et al. 2003). Other outcomes for children include positive impacts to their social and language development (Martin, Cohen, Nerlich, & Heinz, 2004; Terrett, et al. 2012). A 2011 study found that the program increases the likelihood of children forming secure attachments to their parents over time (Scharfe, 2011). See Table 1 for a full summary of PCMG research.

Music Therapy and PCMG

Given the philosophy and teaching style of the PCMG it should be noted that research has also found connections between rhymes, lullabies, music and stories to parent-child relationship (Edwards, 2011). Research findings indicate that maternal singing can help moderate infant arousal, sustain attention, and coordinate emotions between infant and mother (Shenfield, Trehub & Nakata, 2003; Nakata & Trehub, 2004). Songs are typically accompanied by movement or activities and are most often used when playing or trying to put the baby to sleep (Burrell, 2011). Berry (2001) indicated that "Rhymes are a pleasurable way for parents to relate to their children and they serve to cement the parent-child relationship" (p.1). Repeated rhymes help cement memories of the caregiver and interactions with them which helps form lasting bonds. They also give both the child and parent opportunities to express emotions and respond to them (Berry, 2001).

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Table 1: Summary of Previous PCMG Studies or Evaluation

PCMG Literature	Summary
Evaluation of the PCMG programs in Toronto (As cited by Janzen, 2001)	Found 83% of participants continued to use the songs, rhymes and stories learned during the program at home. They also found, through observation, that an ease or calmness comes over all participants, including the children and infants, when a lullaby is sung during the program.
Vancouver based evaluation (Formosa, Heinz & Lieber, 2003)	Reported that families shared stories of feeling more connected to their community, a sense of support, and found interactions with each other enjoyable. They also found significant gains in social and symbolic language development in children whose parent(s) attended the program. The results indicated that the program helped identify children with language and developmental challenges, who were then referred to the appropriate support service
(Carrol, 2005)	Through interviewing parents who participated in the program, the study aimed to determine the program's effects on parent's perceptions of their parenting practices and what they found most useful in promoting positive parenting approaches. Eleven parents were interviewed (ten mothers and one father). Participants indicated that they thought the PCMG program increased their confidence to be aware of, and respond more effectively, to their child(ren)'s behavior, which as the research above has indicated, is a factor that influences secure attachment (Thompson, 2008) They also found that parents felt that they learned knowledge and skills that improved their interactions with their children and that meeting with other parents made them feel supported in their parenting
(Weis, 2006)	Using a case study design, the researcher explored how infant-directed singing impacts the parent-child relationship and explored other impacts the PCMG program had on the lives of participants. The results reiterated some of the benefits proposed by the program, including providing social support and increasing knowledge in parenting skills. The researcher also found that infant-directed singing can serve as a strategy for mothers under stress and that it could positively impact their own emotions.

Martin, Cohen, Nerlich, & Heinz, 2004	In this evaluation, the PCMG program showed significant increases in speech and social development. However, there were no significant differences found in language development between the children in the PCMG program and the comparison group children who attended a different child care centre
Terrett, White & Spreckley, 2012	This study found that the PCMG program improves language skills, specifically expressive language, in children. They also found that the program has a positive impact on parent's perceptions of their child's demandingness, suggesting that it can influence the parent-child relationship in a positive way if parents find their children to be less demanding. The researchers suspected that the positive impacts to a child's language skills and to the parent's reaction to their child's skills, had a reciprocal positive effect on the parent-child relationship.
Scharfe 2011	Parents who participated in the PCMG program in Toronto, Canada, and those on a waiting list, were assessed at the start of the 10-week program (T1), at the end (ten weeks later – T2) and six months after the program finished (T3). The assesments looked at parenting self-efficacy, attachment in the children and adult attachment styles in the parents. The study started with 310 mothers and finished with 140, 42 of which were waitlisted participants. The results found a significant change in children's attachment categories between T1 and T3 for program group participants and not for the comparison group, indicating that the program participants were more likely to see a change in level of security in their children than waitlist participants. There were no significant changes found in adult attachment scores between T1, T2 and T3 for either program or waitlist participants, which is not surprising given the difficulty in changing adult attachment styles. However, the study found that mothers who completed the program, after six months, reported higher levels of parenting self-efficacy than those on a waitlist.

The Study

Research Questions:

The primary goal of this study was to answer the question: **How does the PCMG program impact parent-child relationships?**

As it is difficult to directly measure parent-child relationships, especially when the child is an infant or toddler, the current study analyzed factors that are known to contribute to positive parent-child relationships.

Secure Attachment: Babies that form long lasting, secure attachments to their parents or caregivers are better able to:

- Develop and maintain successful relationships as they age;
- Problem solve; and
- Regulate emotion.

They also tend to have:

- Desirable personality qualities;
- A more positive self-regard,
- decreased feelings of loneliness

(Thompson, 2008; Wearden, et. al, 2008).

One such factor was type of attachment a child has to his/her parent/care giver. Attachment is based on a theory that explains how infants/toddlers form lasting bonds to their parent/caregiver by examining the parent-child interactions and behavious. These interactions can form secure or insecure attachments to their parents or caregivers depending on the quality of care the child receives (Ainsworth, 1985). Children of parents who are responsive and provide a safe and secure environment for a child to grow, learn and explore, tend to form secure attachments. Whereas, children of parents who are severely inconsistent, unavailable, rejecting and in some severe cases, abusive, tend to form insecure attachments, which research has shown, correlate with mental illness and relationship issues in adulthood (Stovall-McClough & Dozier, 2016; Feeney & Monin, 2016).

Since the PCMG program is targets the parents, it was important to measure how the program impacts parenting approaches known to support secure attachment. Therefore, the study explored self-efficacy and emotion regulation in parents. It was hypothesized that the program has a significant impact on these parenting factors which in turn have a positive impact on secure attachment and the parent-child relationship. Table 2 provides definitions for all the factors explored in the study.

Table 2: Definitions of Factors Explored in the Study

Factors Explored			
Attachment	**Secure Attachment**	**Parent Self-Efficacy**	**Emotion Regulation**
The way a child, even at infancy, understands their relationship with their parent.	When a child feels that their parent is available and will respond to their needs, especially when they are scared, upset, or in distress.	How confident and satisfied a parent is with their parenting abilities.	The awareness and understanding of ones' emotions and the ability to manage those emotions in a positive way
Why are these outcomes important? →	Better emotional, social and mental health outcomes for children.	Parents are better able to cope with parenting stress and have more positive parent-child interactions.	Parents are better at coping with stress and responding appropriately to their child.

Methods

Phase 1- Focus Groups

To help answer the study's research question, focus groups were conducted with the program facilitators in May 2014. There were 4 – 7 participants in each group which lasted 1.5 – 2 hours. The researcher led the group through the guiding questions while an FSFFS staff member took more detailed notes to capture the conversations. Each focus group was also digitally recorded with the permission of every participant and later transcribed. To mimic the PCMG program, all three focus group sessions were opened and closed with a song.

The goals of the focus groups for the PCMG study were to:

- Explore, from the facilitators' perspective, the impact of the program on parent-child relationships.
- Collect narratives from the facilitators regarding their experience with PCMG to better articulate the outcomes of the program in their community.
- Assist in developing survey questions for phase 2.

The questions for the focus groups were developed based on the observations and discussions with FSFFS staff along with a review of the literature regarding facilitator impact on program outcomes.

The transcriptions of the focus groups were coded using a three step coding approach for qualitative data (Neuman, 2006). First, the data from the transcripts was coded by summarizing statements into a few words that described the sentiment. For example, the code "not perfect" was used to describe the statement, "Don't have to be perfect." From there, more focused coding (also known as axial coding) was employed to find similarities between the codes. So for example, the "not perfect" code came up several times, sometimes worded differently, like "no judgement" or "make mistakes." This example was then given the theme of "nobody is perfect" which is described in the results section. Finally, by looking through the focused codes and all the statements attached to them, the researcher was able to categorize the statements based on how they could answer the research questions.

Example of Focus Group Questions

- How does PCMG differ from other programs?
- How do you describe what participants can expect to get out of from this program?
- How do you as facilitators try to encourage positive parent-child connections?
- Would anyone like to share "success" stories they have had as a PCMG facilitator?

Phase 2 – Participant Survey

The second phase gathered survey data from program participants at their first PCMG session and again at the last session (Pre-post test design). The survey's were designed to measure attachment, parent self-efficacy and emotion regulation in order to obtain insights into how the program strengthens parent-child relationships.

The following are the surveys found in the questionnaire package participants filled out:

- Demographic Questionnaire
- Attachment Questionnaire: 18 questions were developed (based on Scharfe's (2011) questionnaire) that parent/caregivers could answer based on their experience with their infant/toddler.
- Parent Self-Efficacy: The Parenting Sense of Competence (PSOC) Scale (Johnston and Mash, 1989) measures parenting sense of competence, self-efficacy and satisfaction with being a parent.
- Emotion Regulation: Two sub-scales of the Difficulties in Emotion Regulation Scale, (DERS) measured 1) Impulse Control Difficulties and 2) Limited Access to Emotion Regulation Strategies (Gratz and Roemer, 2003).

- Program Specific and Exploratory Questions: 15 questions were developed (many of which were based on the results from the focus group) to assess the following three areas:
    - Program specific questions about emotion regulation for the parents;
    - Program specific questions that assessed the effectiveness of the program; and
    - Questions that assess the participant's behaviour in regards to the level of interference they may exhibit when interacting with their children (used to compliment the attachment survey).

The Results

Phase 1 – Focus Groups

A total of 17 current and past facilitators attended one of three focus groups in May of 2014. Fourteen of the facilitators began the program as participants. The number of years facilitating the program ranged from 8 months to 17 years. The average amount of years facilitating was about 7.5 years (standard deviation (SD) = 5.03 years), with some facilitators working on and off for many years. Table 3 summarizes the findings that help answer the research question and factors that contribute to positive parent-child relationships.

Table 3 – Summary of focus group findings that answer the research questions

Research Questions	Findings Summary	Quotes
How does PCMG promote positive parent-child relationships?	Often facilators would note that the program promotes bonding or positive interactions between parent and child. Other stories emerged about how the program impacted the whole family, not just those who attended the program.	"We train the parents and then they use it to bond with the children." "it's what [the songs, rhymes, stories, touching, playing, etc.] they [parents] learn and they take it home and that's when the bonding takes place. It has to do with and it's the interaction of the rhyme and the language and the touch." "One dad in the group, big burly guy, the first time he came it was week 6 and he knew all the songs, so they were obviously using them at home. He just sang and was part of the group."
Parent Self-Efficacy: Does the program promote positive parent self-efficacy? If so, how?	Findings indicated that the program provides parents with tools and strategies while giving them the time and space to reflect on their abilities. Examples included specific songs for changing diapers or getting a child into a car seat, the use of different volume and tones of voice to get your child's attention, and using songs as a distraction tool for toddlers rather than punishing or saying no.	"At PCMG, people find their voice." " [they] discover their own voice in a story…" "As a parent, having a toolkit of songs and stories to fall back on. You're out and about and the kid starts freaking out, you might sing their favorite songs to bring it back to normal. It gives you the confidence to know that you can handle it. You can deal with it with those songs." "A parent and child come in and the parent shows signs that they are unable to deal with a situation and they don't have the skills to think of an option. Following the weeks, I notice that they have different tactics. You know the first week they may be quite stern and then in the following weeks they try something else and see how that goes."

	There were several examples of how the program promotes self-efficacy and confidence much of which was supported by the facilitation techniques and social support created by the program (which will be discussed below)	"after 4 or 5 sessions that they have these different strategies to allow their child to be the leader and working at better harmony, there is not that power struggle." One facilitator pointed out, they are able to make more referrals because "they trust us" and "they feel safe with us."
Emotion Regulation: Does the program promote positive emotion regulation in parents? If so, how?	Many stories captured noted that participants would begin to understand that the songs and rhymes were not always for the child, but for the "big people" too, as they recognized they would feel better after singing, even when their child did not calm down.	"My son, he had an ear ache, we were camping and I knew it was an ear infection. But we were out in the middle of nowhere, it's 2 in the morning… What are you going to do? … And that's why 'Pigeon' is his lullaby – that was the lullaby we learned and he laid on my chest and I sang that lullaby for probably for 3 hours and he screamed the entire time… One of my kids woke up and said I don't think it's working mom and I said it's helping me, it's not for him it's for me right now." "sometimes it's you as the parent or caregiver, you're the one being distracted, they (the child) didn't change, but I'm able to keep calm a little more." "I sing more, I yell less."

Unexpected Findings

Other themes emerged from the focus groups that did not directly answer the research questions. However, it was important to note these themes as they came up more than once and seem to contribute to the success of the program and the impacts it has on the parent-child relationship.

Role of the Facilitator: The results of the focus group indicate that there were several factors that contributed to strengthening the parent-child relationships with program participants, including the teaching styles, facilitation techniques, and role of the facilitator. Findings also indicated that the facilitation of this program also helps with other outcomes such as parent confidence and emotion regulation. The following were common examples given as successful facilitation techniques:

- Modeling "nobody is perfect"
- Subtly teaching parenting strategies without judgement or lecture
- Providing feedback on parent-child interactions

In addition to these techniques, facilitators often created a safe space for participants to learn about and explore their relationship with their child(ren). They did this by infusing their own personal experience and stories into the session. The trust they built with participants enhanced their learning experience.

The phone calls: Another unique feature that increased trust and learning were the phone calls. A few days before the next class, facilitators would make phones calls, typically at a convenient time for participants. Although some facilitators opened up about their initial skepticism of the value of the phones, it became clear that the phone calls provided a mechanism for facilitators to connect to participants, have participants reflect on their learnings, and engage more with the program even when attendance sporadic.

Social Support networks: Finally, the program provided an opportunity for participants to develop relationships with other parents, the facilitators, and the community. This social support was crucial to participants, especially those who were new to the community. As one facilitator noted, she often encouraged newcomers to attend, "And if you're new to a community like I was, it's a great way to meet people." Some facilitators described their personal experience as a participant and finding lifelong friends through attending the program.

It was also noted that through this program, participants are often referred on to other programs or groups as the facilitators assess their needs. Their ability to make these referrals comes from the trust that is built over the ten weeks of classes

and phone calls. As one facilitator pointed out, they are able to make more referrals because "they trust us" and "they feel safe with us." In addition to moving on to other programs, examples were also given of participants becoming more involved in their community through attending community events advertised during the program or becoming volunteers.

Phase 2 - Participant Questionnaire:

Between January 2015 and April 2016, data from participants who were attending the PCMG program in Fort Saskatchewan was collected. During this time, the program ran four times, (Winter 2015, Spring 2015, Fall 2015 and Winter 2016), with four programs per season. Within these 16 programs, 217 families registered, of which 133 were unique, as in they only attended the program once during that time frame. A total of 87 participants filled out the questionnaires at the beginning of the PCMG program and 51 completed the same questionnaires ten weeks later in their last session. The questionnaires completed included measures of attachment, parent's sense of competence, emotion regulation and program specific questions.

Demographics: The average age of participants was, and the majority of participants were female, married and Caucasian. The full demographics of participants are found in Table 5. 65.5% of participants indicated they had participated in PCMG before with an average participating 3 of times (min=1 – max = 12). In addition, 54 participants also listed at least one other programs they had attended prior to PCMG. Table 4 lists all entries (participants were able to list up to 3 other programs) and how many times they were counted.

Table 4: Other Programs Participants Attended

Program	n	Program	n
Books for Babies	15	Community Kitchens	6
Sing & Sign	11	Young Parents	6
Moms Group / Network	11	ABC Camp	4
Exercise / Sport Class	11	Time for Tots	3
CHIPS	8	Triple P	2
Library Program	8	Alphabet Soup	2
Epic	6	Other	10

Table 5: Quantitative Measures Participant Demographics

Demographic	n	%
Age (in years)		
Under 20	2	2.7
20-24	8	10.8
25-29	**32**	**43.2**
30-34	19	25.7
35-39	8	10.8
40 and over	5	6.8
Marital Status		
Single, never married	5	5.8
First marriage/first common law relationship	**75**	**87.2**
Remarriage or common law relationship	4	4.7
Separated or divorced	2	2.3
Ethnicity		
Aboriginal	1	1.2
Asian	1	1.2
White/Caucasian	**83**	**96.5**
Other	1	1.2
Gender		
Female	**81**	**94.2**
Male	5	5.8
Number of Children		
1	**40**	**46.5**
2	**37**	**43.0**
3	6	7.0
4 or more	3	3.5
How long they have lived in Fort Saskatchewan		
Less than 1 year	9	10.8
1.1 – 3 years	**23**	**27.7**
3.1 – 5 years	13	15.7
5.1 – 10 years	12	14.5
10 or more years	26	31.3

Pre & Post-Test Results: Between the first session and the last, participants reported a significant increase in their parenting sense of competence, and more specifically, their parenting self-efficacy. Unfortunately, no significant differences were found with the attachment scale or the emotion regulation scales. An explanation of these results can be found in the conclusion. Table 6 reviews the results from all the pre- and post-test questionnaires.

Table 6: Descriptives and Distribution of Data for Questionnaires

Questionnaire	N	M	SD	Test Score	p-value
Attachment				1.024	0.312
Pre-Test	40	77.50	4.97		
Post-Test	40	76.70	6.73		
Self-Efficacy				**-2.418**	**0.020***
Pre-Test	**42**	**69.69**	**9.62**		
Post-Test	**42**	**71.97**	**8.07**		
Emotion Regulation				-.308	.758
Pre-Test	42	21.67	7.98		
Post-Test	42	21.00	8.68		

Note: Range of scores varied between questionnaires. Attachment:18-90, high scores indicating more secure attachment; Self-Efficacy: 16-96, high scores indicating higher levels of parent sense of competence and self-efficacy; Emotion Regulation: 14-70, low scores indicating more use of emotional regulation strategies and impulse control.
*p-value<.05. This indicates there was a significant change in pre- to post-test scores.

When exploring the data using the demographic information collected, several interesting results were found (see Table 7 for statistics).

- Previous Participation in PCMG: Those who had never participated before in PCMG had significantly higher pre-test self-efficacy score than those who had participated before.
- Age of parent: Parents aged 24 or older, who had participated in PCMG before, had a significant increase in their pre to post test self-efficacy scores.
- New to the community: Those new to the community had a significant increase in their pre and post self-efficacy scores.
- New parent: Parents with 2 or more children, and who had participated in PCMG before, saw a significant increase in their pre and post parent self-efficacy scores.

Table 7: Difference in Pre- and Post-Test Self-Efficacy Through Different Demographic Groups

	Average Score			
Group	Pre-test	Post-Test	Test Score	P
Parents aged 24 or older who have participated in PCMG	67.52	70.28	t= -2.29(24)	.0.030*
New to the Community	69.00	73.54	z = -2.326	.020*
New Parents	67.86	71.14	z = -2.072	.038*
*p-value<.05 which indicates a significant difference				

Program related questions

A handful of questions were developed with unique program outcomes in mind. Of interest to FSFFS is the significant positive difference between pre- and post-test scores found in two of the questions:

- When I sing, rhyme or tell a story my child will look directly at me.
- When my child is really upset and crying, talking in a calm, soothing voice does not help.

The Conclusion

Discussion of findings

The following section summarizes the findings from both phases, the importance of these findings in relation to other research and notes any important interpretations based on the limitations of the research.

Parenting Self-efficacy

The results from the focus groups and the Parenting Sense of Competence (PSOC) questionnaire seem to indicate that there are some positive changes to parental self-efficacy in those who participate in the program. Facilitators observed several instances where parent's self-efficacy increased through the way they interacted with and advocated for their child(ren). The way in which the program facilitates self-efficacy is through both its teaching style and learned strategies for parents.

The latter, was discussed often in the focus groups as a "tool box" that parents can pull from when they need it. Data from the questionnaires found a significant increase in pre- and post-test PSOC scores in all participants and in those who had previously participated in the PCMG program.

The findings from the current research, much like Scharfe's (2011) PCMG study, show the impacts PCMG has on parent self-efficacy which is related to several positive outcomes for parent-child interactions. This is important because increasing parent self-efficacy helps parents cope with their role, improves parent-child interactions and promotes positive child development and secure attachment (Jones & Prinz, 2005; Mendel, et al., 2012.; Bloomfield & Kendall, 2012)

Emotion Regulation:

The data that explored emotion regulation has promising results, the strongest of which came from the focus groups. Facilitators provided many examples of how parents who participated in the program would use their learnings to help with their own emotion regulation. Often, the stories included mothers realizing how much better they would feel after singing, regardless if their baby had calmed down.

One of the strongest quotes, "I sing more, I yell less," illustrated in a few words the impact the program had on a participant and influenced further inquiry into emotional regulation for quantitative phase.

The focus group findings and a few individual questions within the questionnaire data suggest that more exposure to the program may influence emotion regulation outcomes for participants. In addition, the questionnaires found a relationship between emotion regulation and attachment, which is similar to other research that considers emotion regulation in parents as an important influence on secure attachment in children (Cassidy, 2016; Thompson, 2008; Leerkes, et al., 2011; Biringen, 2000). Emotion regulation strategies allows parents to have a more positive interactions with their children and pass the same strategies onto their children as they grow and develop into healthy and productive adults (DeOliveira, et al., 2005; Leerkes & Crockenberg, 2006). Given the importance of emotion regulation and the promising findings that indicate the PCMG program offers strategies to participants, the program would benefit from further research or evaluation regarding this outcome.

Attachment

Similar to the emotion regulation results, the attachment findings were encouraging, yet need further exploration. Facilitators from the focus groups discussed the "bond" or positive interactions that the program promotes which were interpreted as a way to describe a parent-child relationship that encourages secure attachment. Unfortunately, no significant changes were found with the attachment questionnaire.

The questionnaire findings must be noted with caution as the attachment scores recorded in this present study may have started too high to see a significant change from pre- to post-test. This could be a likely possibility given that the attachment scores in both pre- and post-tests skewed heavily to the high end of the attachment scale indicating their children may already have secure attachment styles.

Interpretation for Attachment Results

- Attachments scores started high, indicating children may have already be securely attached.
- Pre- and post-test research design did not allow for enough time to see significant changes. In the 2011 Scharfe PCMG study the research found signifincat attachment differences after 6 months

Attachment has been researched since the 1980's and there is ample evidence as to why secure attachment styles are important to children, families and society. Children who grow up with the understanding that their parent(s) will consistently respond to their needs and be there when they are distressed are better positioned to develop their own coping strategies and trust others as they begin to develop relationships outside of the family. Given the previous research completed by Scharfe (2011), and the notable qualitative findings in the current study, the PCMG program appears to help increase attachment and/or parenting approaches that influence attachment, such as parental self-efficacy.

Other findings

Social support: The focus groups explored the influence PCMG facilitators had on creating social support systems that could support parent-child relationships. Some of the PCMG research has looked at social support qualitatively (Formosa, et al., 2003; Carroll, 2005) and found that participants felt more connected to their community through the program. Factors, such as the positive social support and the environment families live in, can contribute positively to parental approach to

attachment and can impact the parent-child relationship and attachment (Green, Furrer, McAllister, 2007).

Many facilitators from the current study indicated that the PCMG program helped participants build a community of support from other parents attending the program. This current study found that facilitators in Fort Saskatchewan also provided extended support to participants through the phone calls and by being present in the community. The questionnaire results of the current study found that the PCMG program may also support moms who are new to the community and mothers with more than one child in terms of their parental self-efficacy. This supports other research which indicates that parenting programs not only can increase positive parenting behaviours, but also increase involvement in the community and reduce isolation (Niec, Hemme, & Yopp, 2005).

Previous research, and the fact that facilitators often gave examples of social networks created through the program for them and their participants, is an indication that PCMG can promote social supports for parents. This may explain why many PCMG program participants often attend the program many times. The PCMG program clearly has an important presence in the community of Fort Saskatchewan and the social systems it creates can perhaps account for the other benefits facilitators and parents express, such as an increase in self-efficacy and more positive parent-child relationships.

Role of the facilitator: During the focus groups it became very clear that the facilitators played a significant role in the program achieving its outcomes. Facilitators created a safe and trusting space for parents to learn from their mistakes and from the experience of others. Many facilitators noted that the program trains parents to enjoy and enhance their relationship with their infant or toddler. The role of the facilitator in promoting positive parent-child relationships was evident with the stories shared in the focus groups. The literature indicates that many of the tactics PCMG facilitators use (subtle teaching methods, creating safe space to learn, model nobody's perfect, ability to be agile and flexibile) can increase program completion rates, facilitate learning, build skills, change behaviours, and engage hard to reach participants (Axford, et al., 2012; Mills, et. al, 2012; Chablani & Spinney, 2011; Evangelou, et. al, 2013).

The tactics that facilitators use for the PCMG program are very similar to the role of therapists, interventionists, and facilitators of other parenting programs that promote positive parent-child relationships. PCMG program facilitators are trained to facilitate the program similar to a music therapist as described by Edwards (2011): "A qualified music therapist can work in gentle non-intrusive ways to help

parents and their infants discover and strengthen their capacity for relating through the musical play that is part of the usual repertory of parent-infant interactions" (p. 14). Other literature has indicated that a therapist can take on several roles including teacher, mentor, friend and advocate (Niec, et al., 2005). Researchers have found through case reviews, some key ways programs have increased retention and engagement (Axford, et al., 2012). These included: building relationships and trust with parents; addressing concerns parents have such as how they may be judged by others; and as much as possible, address the needs of parents, especially with regards to accessing the program.

These tactics really resonate with how the PCMG facilitators described their role and the program. Even more recent research continues to emphasize the need for the practitioner/therapist to build relationships and trust with parents, through sharing experiences and facilitate learning, through modeling positive parenting behavours (Mills, et al., 2012). Ultimately, parents could learn new songs, rhymes and stories through books, friends and the internet, however, many still come to the PCMG program to learn. What they may not realize, is that they learn much more than just songs and stories while attending, and the facilitators are the ones who engage, teach, and model these learnings that help them bond with their children.

Limitations

This study had some limitations that could explain the contradictory results found between the first and second phases (focus groups and questionnaires). These include:

- The use of self-report measures as they are susceptible to respondent biases. Including findings from the focus groups where there may have been a positive bias towards the program.
- The creation and use of a self-report attachment questionnaire was guided by research and previous attempts at measuring attachment through a survey. However, the best way to measure attachment is through hours of observation in a laboratory or at the home of a participant, neither of which were feasible for this study.
- Lack of a comparison group for the questionnaires means the conclusions made from this study can only make a link between the program and factors such as parental self-efficacy.
- In some of the survey questionnaires, there were low numbers of participants who filled out all the questions for the pre- and post-test data, making it difficult to find significant differences.

None of these limitations take away from the findings and results from this current study. The limitations of the study helped draw conclusions from the data, as presented above, that are reasonable and defendable in the research community. The researcher successfully defended the thesis of this study, which included these limitations, to a panel of professors in the fields of parenting programs, family studies, quantitative, and qualitative research.

Considerations

Given the direction and emphasis the Alberta Government has placed on supporting parents and children through community programs, research exploring the impact of such programs is important, not only to the program providers, but also to the funders. Results from this study and others suggest that PCMG program supports parents and young families by influencing parenting approaches and positive parent-child relationships. One conclusion from the present study is that it is not necessarily the content of the PCMG program (the songs, stories and rhymes) that effects participants, but the way in which it is facilitated that provides the greatest impact to parents and children. Interestingly, FSFFS already infuses the PCMG program teaching philosophy into many of their other programs and services. Therefore, FSFFS may see similar results with their other programs, which increases their reach and impact in the community. FSFFS may also want to use these results to improve their programming. Recommendations for use of the results come from an analysis of the current findings and literature on parenting program processes and outcomes.

- Promotion of program:
    - Continued promotion – Previous research and current qualitative findings support the claims that this program is attachment based, prevention focused, and has outcomes for both parent and child.
    - Targeted promotion to families most vulnerable. Based on other research, non-traditional, community-based programs can be more accessible to those who would normally feel uncomfortable with a more intensive programming, yet are still in need of the benefits that come from interventions.
- Evidence for funders – Currently FSFFS funds PCMG through grants such as a pre-literacy and adult learning programs. The findings from this research and previous studies can provide indicators of success and examples that the program has a prevention and intervention qualities that are targeted at both adults and children.
- Training facilitators. One of the unexpected, yet more remarkable findings were related to the role of the facilitator. The experiences summarized by

facilators who participated in the focus group could be used to enhance the training provided to new facilitators. For example, new facilitators might benefit from the stories and experiences summarized from the focus groups, especially when looking for opportunities to engage with parents and exploring the impact different teaching methods have.

Regardless if the recommendations are considered, the PCMG program continues to provide parents the skills, knowledge, strategies, and community support to feel confident in their parenting abilities and regulate their own emotions, which can positively influence the parent-child relationship and produce healthier families within the community.

Summary

To summarize, the present study helped confirm what other studies have observed with the PCMG program in regards to attachment and parent self-efficacy. In addition to answering the research questions, the findings also increased our understanding of (1) the role of facilitators in achieving program outcomes, (2) the influence programs like PCMG have on participant emotion regulation, and (3) the importance of the social support created in group parenting programs.

What is noteworthy are the results from the qualitative data that went beyond the original research questions and explored other processes that explain the connections between the PCMG program and the parent-child relationship. The focus group data explained how the program facilitates processes that encourage both appropriate parenting approaches and positive child development. The facilitation style described in the focus groups provided a further understanding of how a program, like PCMG, facilitates adult learning outside of traditional teaching methods (ie. Classroom, lecture based, expert led). Additional findings from the present study include the exploration of emotion regulation and how the program seems to encourage an almost meditative or mindful approach to parents dealing with stressful situations. Finally, other research had indicated that the creation of a social support network was important to PCMG participants (Formosa, et al., 2003), however, the present study went further through the qualitative evidence to find instances of how those social connections impacted participants, families and the community.

Programs that support and influence positive parent-child relationships are always in demand, especially for vulnerable or at risk children and families (Thompson, 2008, Berlin, et al., 2008; Berlin, et al., 2016). Children with positive relationships with their parents tend to form and maintain successful relationships both with peers and with authority figures as they grow (Englund, et al., 2011; Grusec, 2011).

In addition, children with positive relationships with their parents tend to have greater problem solving skills, desirable personality traits, positive self-regard, enhanced coping strategies (Thompson, 2008; Wearden, et al. 2008; Englund, et al. 2011). Community-based, group programs have also seen a shift in demand as more evidence surfaces of the benefits of such cost-effective programming (Berlin, et al.,2016). The PCMG program is one such program; it is easier and cheaper to administer than an intensive, expert-driven, therapy program, and still provides benefits to participants.

The benefits of effective, and cost-efficient programming for families has implications for program and policy planning. In the context of Alberta, significant time and money has been invested, not only in programs and services that support families, but also in planning and policy development. The Alberta Government continues to follow similar social policy approaches and invest in early intervention services for children and foundational learning supports for adults (Government of Alberta, 2017). Research that shows the benefits to program participants and the community helps reinforce the importance and continued need for government to support programs through policy and finances.

References

Ainsworth, M. (1985). Patterns of infant-mother attachment, parent emotion and effects on development. *Bulletin of the New York Academy of Medicine, 61,* 771-791.

Axford, N., Lehtonen, M., Kaoukji, D., Tobin, K., & Berry, V. (2012). Engaging parents in parenting programs: lessons from research and practice. *Children and Youth Services Review, 34,* pp. 2061-2071.

Berlin, L., Zeanah, C., & Lieberman, A. (2008). Prevention and intervention programs for supporting early attachment security. In Cassidy, J. & Shaver, P. (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (2nd ed., pp. 958-974). New York: Guilford.

Berlin, L., Zeanah, C., & Lieberman, A. (2016). Prevention and intervention programs for supporting early attachment security: a move to the level of the community. In Cassidy, J. & Shaver, P. (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (3rd ed., pp. 739-758). New York: Guilford.

Berry, S. (2001). The contribution of rhymes to early social-emotional development. *Newsletter of the Infant Mental Health Promotion Project, 31.*

Biringen, Z. (2000). Emotional availability: conceptualization and research findings. *American Journal of Orthopsychiratry*, *70*(1).

Bloomfield L. & Kendall S. 2012. Parenting self-efficacy, parenting stress and child behaviour before and after a parenting programme. *Primary Health Care Research and Development 13 (4) 364 - 372*

Burrell, M. (2001) The benefits of music sessions for very young children with their parent or carers through the eyes of a music therapist. In Edwards, J. (Eds.), *Music Therapy and Parent-Infant Bonding* (pp. 93-100). Oxford: Oxford University Press.

Carroll, A. (2005). Parents' perceptions of the effects of the parent-child mother goose program on their parenting practices. (Masters Thesis). Retrieved from https://open.library.ubc.ca/cIRcle/collections/ubctheses/831/items/1.0092454

Cassidy, J. (2016). The nature of the child's ties. In Cassidy, J. & Shaver, P. (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (3rd ed., pp. 3-24). New York: Guilford.

Chablani, A. & Spinney, E. (2011) Engaging High-Risk Young Mothers Into Effective Programming: The Importance of Relationships and Relentlessness. *Journal of Family Social Work, 14*(4).

DeOliveira, C., Moran, G., & Pederson, D. (2005). Understanding the link between maternal adult attachment classifications and thought and feelings about emotions. *Attachment & Human Development, 7*(2).

Edwards, J. (2011). Music therapy and parent-infant bonding. In Edwards, J. (Eds.), *Music Therapy and Parent-Infant Bonding* (pp. 5-21). Oxford: Oxford University Press.

Englund, M., Kou, S., Puig, J., & Collins, W. (2011). Early roots of adult competence: the significance of close relationships from infancy to early adulthood. *International Journal of Behavioral Development, 35*(6), 490-496.

Evangelou, M., Coxon, K., Sylva, K., Smith, S., & Chan, L. (2013). Seeking to engage 'hard-to-reach' families: towards a transferable model of intervention. *Children and Society, 27*(2).

Feeney, B. & Monin, J. (2016). Divorce through the lens of attachment theory. In Cassidy, J. & Shaver, P. (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (3rd ed., pp.941-965). New York: Guilford.

Fort Saskatchewan Families First Society. (2016). Families First Society Fort Saskatchewan 2015-2016 Annual Report. Retrieved from https://static1.squarespace.com/static/53d69d9de4b04ced593083e1/t/57eac4bc440243b577766818/1475003590583/AGM_2016-09-26_web.pdf

Formosa, S., Heinz, L. & Lieber, L. (2003). TLC3 Vancouver Project Final Report. Toronto: TLC3 National Management Project Team.

Government of Alberta. (2017). Fiscal plan: expense. Retrieved from http://finance.alberta.ca/publications/budget/budget2017/fiscal-plan-expense.pdf

Gratz, K. & Roemer, L. (2003). Multidimensional assessment of emotion regulation and dysregulation: development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment, 26*(1).

Green, B., Furrer, C., & McAllister, C. (2007). How do relationships support parenting? Effects of attachment style and social support on parenting behavior in an at-risk population. *American Journal of Community Psychology, 40,* 96-108.

Grusec, J. 2011. Socialization processes in family: social and emotional development. *Annual Review of Psychology,* 62, 243-6 9.

Janzen, G. (2001). The parent-child mother goose program. *Newsletter of the Infant Mental Health Promotion Project, 31.*

Johnston, C. & Mash, E.J. (1989) A measure of parenting satisfaction and efficacy. Journal of Clinical Child Psychology, 18, 167-75.

Jones, T. L. & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: a review. Clinical Psychology Review, 25, 341-63.

Leerkes, E., & Crockenberg, S. (2006). Antecedents of mothers' emotional and cognitive responses to infant distress: the role of family, mother, and infant characteristics. *Infant Mental Health Journal, 27*(4).

Leerkes, E., Parade, S., & Gudmundson, J. (2011). Mothers' emotional reactions to crying pose risk for subsequent attachment insecurity. *Journal of Family Psychology, 25*(5).

Martin, F., Cohen, N., Nerlich, E., & Heinz, L. (2004). Final report of the TLC^3 project. Retrieved from http://www.tlc3.ca/Downloads/TLC3FinalReport.pdf

Mendel, W., Tomaselle, N., & Nochajski, T. (2012). Building evidence for a prevention-focused education program targeting parents of infants and toddlers. *Journal of Family Social Work, 15,* 272-287.

Mills, A., Schmied, V., Taylor, C., Dahlen, H., Schuiringa, W., & Hudson, M. (2012). Connecting, learning, leaving: supporting young parents in the community. *Health and Social Care in the Community, 20*(6).

Nakata, T., & Trehub, S. (2004). Infant's responsiveness to maternal speech and singing. *Infant Behavior & Development, 27.*

Neuman, W. (2006). *Social Research Methods: Qualitative and Qualitative Approaches 6th Ed.* Boston, MS: Pearson Education Inc.

Niec, L., Hemme, J., & Yopp, J. (2005). Parent-child interaction therapy: the rewards and challenges of a group format. *Cognitive and Behavioral Practice, 12*, 133-125.

Scharfe, E. (2011). Benefits of mother goose: influence of a community-based program on parent-child attachment relationships in typical families. *Child Welfare, 90,*(5).

Shenfield, T., Trehub, S., & Nakata, T. (2003). Maternal singing modulates infant arousal. *Psychology of Music, 31*(4).

Stovall-McClough, K., & Dozier, M. (2016). Attachment states of mind and psychopathology in adulthood. In Cassidy, J. & Shaver, P. (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (3rd ed., pp.715-738). New York: Guilford.

Terrett, G., White, R., & Spreckley, M. (2012). A preliminary evaluation of the Parent-Child Mother Goose program in relation to children's language and parenting stress. *Journal of Early Childhood Research, 11*(1).

Thompson, R. (2008). Early attachment and later development. In Cassidy, J. & Shaver, P. (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (2nd ed., pp. 348-365). New York: Guilford.

Wearden, A., Peters, I., Berry, K., Barrowclough, C., & Livershidge, T. (2008). Adult attachment, parenting experiences, and core beliefs about self and others. *Personality and Individual Differences, 44*(5).

Weis, D. (2006). *The impact of parent-child mother goose: mother's perception and experiences of singing to their infants aged 6-28 months.* (Master Thesis). Retrieved from http://voyager.library.uvic.ca/vwebv/holdingsInfo?bibId=1446008