Pilot evaluation of Family Foundations targeting perinatal mental health and conflict

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Abstract

Objectives: A formative evaluation of a home-based family intervention, Family Foundations (FF), targeting parent mental health and conflict in the perinatal period was conducted. The aims were to (a) assess parent satisfaction and recommendations for improvement, (b) identify perceived enablers and barriers to engagement, and (c) obtain preliminary outcome data related to parent mental health, conflict, and coparenting.

Methods: A mixed-methods evaluation was conducted with 41 families at risk of or experiencing parental conflict. FF was delivered by two organizations in Australia. Qualitative interviews with parents and FF clinicians were conducted, and intervention outcomes were assessed using parent survey.

Results: Feasibility of reach and recruitment of the target population was demonstrated. Parents’ indicated a high level of satisfaction with all aspects of FF and offered recommendations for improvements to resources and delivery. Service, program, clinician, and family characteristics as enablers and barriers to engagement in FF were identified. Both mothers and partners reported a decrease in their child’s exposure to conflict. Mothers also
reported a decrease in mental health symptoms and parenting hostility and an increase in positive coparenting behavior.

**Conclusion:** Feasibility and acceptability of home-based FF in the perinatal period had been established, with preliminary evidence of positive outcomes for families.

**Implications:** The current findings generate evidence to inform further development of home-based FF and wider implementation in health and social care services in Australia.

**KEYWORDS**

Family Foundations, intervention, parent conflict, parent mental health, perinatal

In the first postnatal year approximately one in four women (Dennis et al., 2017; Gavin et al., 2005) and one in 10 men experience mental health difficulties (Giallo et al., 2012; Paulson & Bazemore, 2010), and many parents experience a decline in relationship satisfaction (Mitnick et al., 2009). Although estimates are wide-ranging across studies, 20% to 35% of parents experience frequent and serious arguments and conflict (Liu & Tronick, 2013; Westrupp et al., 2015; Yelland et al., 2010). For some parents, particularly those experiencing economic and social disadvantage, mental health difficulties and conflict can escalate and persist well beyond the postnatal period (Giallo et al., 2014; Wajid et al., 2020). The negative effects of mental health difficulties and conflict on parenting behavior (Giallo et al., 2015; Krishnakumar & Buehler, 2000) and a range of emotional, social, and learning outcomes for children are well established (Kingston et al., 2012; Rhoades, 2008; van Eldik et al., 2020). Interventions targeting parent mental health difficulties and conflict during the critical early years of children’s lives are paramount.

A range of prevention and early interventions have been developed to promote parent mental health and relationship functioning after having a baby. Universal prevention
approaches often include written or online psychoeducation that parents can work through independently, as well as group-based prevention programs such as What Were We Thinking? (Fisher et al., 2016). Prevention programs tend to be brief, focusing on early infant care and strategies for coping, self-care, mutual support, and communication (Pinquart & Teubert, 2010). Targeted counseling interventions (i.e., Couples CARE for parents; Petch et al., 2012) are also available for parents with more complex and long-standing relationship difficulties.

Evidence for the effectiveness of couple-based interventions during the transition to parenthood was demonstrated in a meta-analysis of 24 controlled studies representing 21 universal \((n = 18)\) and targeted \((n = 3)\) interventions (Pinquart & Teubert, 2010). Small effects for couple communication, couple adjustment, and parent mental health were found, and stronger effects were demonstrated for interventions that included both antenatal and postnatal sessions, were longer than five sessions, and were delivered over a 3- to 6-month period.

Family Foundations (FF) is an example of a universal group intervention spanning several months across the antenatal and postnatal periods (Feinberg & Kan, 2008). It is generally set apart from the couple-based interventions mentioned earlier because it focuses on the coparenting relationship or “parenting partnership” rather than the parents’ intimate or romantic relationship (Feinberg & Kan, 2008). This focus means it is appropriate for parents and other caregivers parenting in diverse family contexts (e.g., foster or extended families; single parents; parents living else; stepfamilies; LGBTQIA+ families). The eight manualized sessions focus on building skills to (a) manage common challenges in raising children (life stress, differences in parenting), (b) decrease anxiety and stress (relaxation, self-care), (c) strengthen coparenting relationships (decision-making, mutual support), and (d) reduce conflict (conflict management, problem-solving).
Figure 1 provides an overview of the FF content, approaches, and intended outcomes for parents and children. The intervention content and delivery is underpinned by family stress theory (Conger & Conger, 2007), which proposes that economic and social hardships and disparities strain couple and parent–child relationships, and by emotional security theory (Davies & Cummings, 1994), which postulates that exposure to conflict can threaten children’s sense of security, safety, and stability within their family and lead to emotional-behavioral difficulties. FF draws upon trauma-informed care, recognizing the long-term and pervasive impact of trauma such as past history of family violence and conflict on mental health and family relationships. Finally, cognitive-behavior therapeutic approaches underpin the manualized curriculum, opportunities for reflection with workbook exercises and discussion-based activities, live modeling by the clinicians, and opportunities for behavioral rehearsal of emotion-regulation strategies, communication, and problem-solving skills. Video content has also been produced to capture past parents’ experiences of using the FF strategies, the importance of practice, and modeling of emotion regulation, listening, and speaking skills.

FF has been extensively evaluated in four completed randomized controlled trials in the United States. In the first trial with 169 families during pregnancy and the first postnatal year, FF was associated with decreased maternal depressive and anxiety symptoms and increased coparenting support with small to moderate effect sizes at post-intervention (Feinberg & Kan, 2008; Feinberg et al., 2009). Compared with those in the control group at follow-up, children of parents who had received FF also had fewer emotional–behavioral difficulties at 3 years (Kan & Feinberg, 2014) and 5 to 7 years (Feinberg et al., 2014). The second trial with 399 families found that FF was associated with decreases in verbal and physical parental conflict, parental depressive and anxiety symptoms, and increased coparenting behavior with small to moderate effect sizes (Feinberg et al., 2016).
Despite promising evidence for universal group interventions such as FF, they are often attended by more highly educated parents with fewer relationship problems, and there can be issues with partner nonattendance (Pinquart & Teubert, 2010). Without the participation of partners, critical opportunities to address relationship dynamics that are risk factors for poor mental health, relationship difficulties, and conflict can be missed. Even when both parents attend group interventions, there may be limited opportunities to address sensitive relationship issues and practice new skills. Families experiencing more complex psychosocial health issues (i.e., stressful life events, high conflict, history of childhood adversity) may benefit from more targeted and individually delivered interventions.

To better meet the needs of families experiencing more complex psychosocial health issues, a home-based model of FF was developed. Although the theoretical basis and intervention content remained the same, FF was adapted to enable greater tailoring of the content to the individual family’s social context and presenting concerns. This involved extending the number of sessions to 10 and providing more opportunities for discussion about the intervention content and how it related to the parents’ experiences and their family situation. Although there are no opportunities for peer support and learning from other parents and it is more resource-intensive than group-based FF, the home-based approach was designed to overcome barriers to attending group sessions in a central venue. Home-based sessions also provide more opportunities for parents to practice emotion regulation, coping, and relationship skills to disrupt their existing patterns of negative communication and develop new ways to manage conflict in their own home environment.

An initial acceptability study of the home-based model with five families in Australia indicated high acceptability with the intervention aims, content, activities, and materials. Program enhancements were made based on the parent feedback and clinician-researchers’ experiences of delivering the intervention. This included (a) production of video content
depicting families living in Australia; (b) changes to language, examples, and activities in the facilitator manual that would be more familiar and acceptable to families living in Australia; and (c) development of a more comprehensive parent workbook with summaries of intervention content. In a second step, we conducted a formative evaluation of a pilot implementation of home-based FF delivered by real-world health and social care services in Australia. The aims of this formative evaluation were to (a) assess parent satisfaction with the home-based model and recommendations for improvement, (b) identify perceived enablers and barriers to engagement in FF, and (c) obtain preliminary data about potential intervention outcomes related to parent mental health, partner conflict and coparenting.

METHODS

Study design

Two community organizations were funded by the Victorian Government Department of Health and Human Services (Australia) to pilot the home-based model from January to November 2018. A mixed-methods evaluation was conducted. Qualitative interviews were undertaken with parents who had received FF and clinicians who delivered it. Parents were asked about their satisfaction with FF and how it could be improved, and both parents and clinicians were asked about (a) enablers and barriers to engagement in FF and (b) perceived outcomes for families. Outcomes for families were also investigated using data collected by the organizations as part of their routine clinical and quality assurance purposes. Ethics approval for the qualitative study was obtained from the Royal Children’s Hospital Human Research Ethics Committee, and the collection and use of routinely collected assessment data by the organizations was governed by Australian health and privacy legislation. Participant consent was obtained for their deidentified data to be provided to the researchers.

Participants
The target population were parents from families expecting a baby or in the first postnatal year, reporting at least one risk factor for high partner conflict, including (a) self-reported parent mental health difficulties, (b) young parental age (<24 years); (c) low educational attainment (high school or below), (d) low employment (not in paid employment, part-time or casual), (e) self-reported relationship difficulties, or (f) parenting two or more children. Both parents in each family had to consent to participate in FF and complete the assessment measures. Parents were not eligible if they had a family violence intervention order, pending court case for family violence, or child protection involvement.

Approximately 133 families contacted the intake team expressing interest in FF, and of these, 52 (39.1%) enrolled. Common reasons for not enrolling included family did not meet the inclusion criteria, family no longer interested, and partner not wanting to take up the program. Of the 52 enrolled, 11 did not commence FF or give consent to complete the assessments. A total of 41 families enrolled and commenced FF and gave consent to complete the assessments. Their demographic characteristics are presented in Table 1. The majority were couples in a heterosexual relationship with a second or subsequent child. All Parent 1s were mothers, and the majority were born in Australia and English-speaking, with a post–high school qualification. Parent 1s are consistently referred to as mothers henceforth. The majority of Parent 2s were fathers, with the exception of two mothers in a same-sex relationship. Parent 2s are referred to as parenting partners or partners henceforth. The majority of partners were born in Australia, English-speaking, and in paid employment.

Verbal conflict was reported by approximately half of the families, and two thirds reported parent mental health difficulties. With respect to the inclusion criteria above, 87% reported two or more risk factors, and a third reported four or more risk factors.

Eight parents consented to participate in the qualitative interviews. All were mothers, were from different families, and had completed all FF sessions. Seven clinicians (three
males, four females) participated in the qualitative interviews. The sample had an average of 14 years’ experience working with families, and the majority had a social work qualification ($n = 4$).

**Procedure**

Information about FF was distributed to maternal and child health services, community child and family health services, general practices, and local hospitals in northern and western metropolitan Melbourne. The intake team engaged with both parents/caregivers within the family by telephone to assess suitability for the program. They were asked questions reflecting the inclusion (e.g., currently experiencing mental health or relationship difficulties) and exclusion criteria (e.g., currently experiencing family violence or if the child protection service was involved with their family). Both parents within each family who enrolled were asked to complete surveys approximately 1 to 2 weeks before the intervention and approximately 2 weeks after the final session.

**Family Foundations intervention**

The 10 sessions were delivered to both parents in the family in their home by the same male and female clinicians with counseling, parent education, or allied health (psychology, social work) qualifications. A pool of approximately 20 clinicians (five male, 15 females) were available, and several were from diverse LGBTQI and cultural backgrounds (e.g., Eritrean, Samoan, Sudanese). Clinicians received 3-day training involving (a) presentations on the theoretical and evidence-base for FF; (b) demonstrations modelling session delivery; and (c) opportunities for discussion, experiential learning, and skills practice. Ongoing supervision was provided by experienced managers within the services.

Each family was provided with workbooks and all resources required for the exercises. Sessions were offered during and outside of business hours, with an average duration of 60
minutes. Clinicians completed a session fidelity checklist after every session, indicating whether they delivered the key content, if any departures from content occurred, and the reasons for these. Approximately 95% of the session content was delivered as intended, with the lowest fidelity for Sessions 9 and 10 (~90%). Common reasons for not delivering the session as intended included interruptions due to children being present; parent tiredness, parents harder to engage due to recent conflict, parents raising issues that needed to be contained, poor time management (i.e., activities running over time, clinicians overexplaining concepts), and perceived content overlap in the final sessions by clinicians.

**Qualitative interviews with parents and clinicians**

Both parents from each family who completed FF were informed about the qualitative interviews in their final FF session, and clinicians were invited to participate by their manager. Consent was obtained by the research team, emphasizing that nonparticipation or withdrawal would not affect access to services (for parents) and employment (for clinicians). Semistructured interviews were conducted over the phone or face-to-face by a researcher with postgraduate training in psychology. Interviews ranged from 40 to 60 minutes, and the audio recordings were transcribed verbatim. Parents from each family were compensated for their time with a $50 grocery store voucher.

**Routinely collected assessment data**

The Depression Anxiety Stress Scale-21 (DASS-21; Lovibond & Lovibond, 1995) consists of 21 items assessing symptoms of depression, anxiety and stress in the previous week.

Response options ranged from *Does not apply to me at all* (0) to *Does apply to me very much or most of the time* (3). It has excellent reliability and validity, with clinical cut points and normative data available for Australian samples (Crawford et al., 2011). Cronbach’s alpha for
all subscales at pre- and post-intervention for mothers and partners were acceptable, ranging from .70 to .95.

The Interparental Conflict subscale from the Quality of Co-parental Interaction Scale (Australian Institute of Family Studies, 2005) comprises of five items assessing verbal conflict (disagreements, arguments, anger, hostility) and one item assessing physical conflict (arguments with pushing, hitting, kicking or shoving). Response options ranged from never (1) to always (5). Cronbach’s α for mothers at pre- and post-intervention was .77 and .81, respectively, and .85 and .79 for partners at pre- and post-intervention.

Child Exposure to Conflict subscale from the Coparenting Relationship Scale (Feinberg et al., 2012) assessed parents’ perceptions of the degree to which their child is exposed to conflict (e.g., How often do you yell at each other within earshot of the child?). Response options ranged from never (0) to very often (6). Cronbach’s α for mothers at pre- and post-intervention was .79 and .88, respectively, and .91 and .93 for partners at pre- and post-intervention.

The Coparenting Relationship Scale (Feinberg et al., 2012) assesses (a) coparenting support (e.g., My parenting partner appreciates how hard I work at being a good parent), (b) endorsement of partner parenting (e.g., My parenting partner pays a great deal of attention to my/our child), and (c) coparenting agreement (e.g., My parenting partner and I have the same goals for my/our child) were used. The 17 items were rated from Not true of us (0) to Very true of us (7). Cronbach’s alpha for all subscales at pre- and post-intervention for mothers and partners were acceptable, ranging from .70 to .90.

Parenting warmth was measured using a modified five-item subscale from the Child Rearing Questionnaire (Sanson, 1995). Parents indicated how often they feel close to and express affection toward their child (e.g., Hug or hold this child for no particular reason). Response options ranged from Never/almost never (1) to Always/almost always (5).
Cronbach’s alpha for mothers at pre- and post-intervention was .91 and .85, respectively, and .84 and .88 for partners at pre- and post-intervention, respectively.

*Parenting hostility* was assessed using adapted items from the Early Childhood Longitudinal Study of Children (National Center for Education Statistics, 2000). Parents rated how often they engage in hostile behaviors during interactions with their child (e.g., I have raised my voice with or shouted at this child). Response options ranged from *Not at all* (0) to *All of the time* (10). Cronbach’s α for mothers at pre- and post-intervention was .90 and .81, and .82 and .83 for partners at pre- and post-intervention.

Using the *FF Satisfaction Survey*, parents rated their satisfaction with FF including the aims, content, workbook, video, home visits, and the number and duration of sessions.

**Data analyses**

Thematic analysis of interview data was conducted by two researchers using the process recommended by Braun and Clarke (2006), which involves (a) familiarization with the data, (b) generation of initial codes, (c) identify themes across codes, (d) review themes, and (e) define themes. Throughout the process, meetings were held to discuss the analysis and reach consensus on codes and themes. The interviews and thematic analysis were conducted simultaneously to engage with the emerging themes and for the point of adequate data saturation (no new themes emerging) to be identified.

All pre–post comparisons of survey data were analyzed using dependent-measures *t* tests for (a) participants who had complete data and (b) those with missing data due to intervention dropout or loss to follow-up (intention to treat [ITT]). Multiple imputation was conducted, whereby 40 complete datasets were imputed using chained equation modeling, and the pooled estimates were averaged using Rubin’s rules. Cohen’s *d* was reported as the measure of effect size for the complete case analyses, with .20, .50, and .80 representing small, moderate, and large effect sizes, respectively.
RESULTS

Participation in FF

The average number of FF sessions completed for the overall sample was 7.6 (3.9), representing approximately 76% of sessions completed. Of the 41 families that commenced FF, 12 (29.3%) dropped out after approximately two sessions ($M = 1.8$, $SD = 1.6$). Reasons included parent substance use issue ($n = 2$), unable to contact the family ($n = 3$), family wanted relationship counseling ($n = 2$), family had no time to commit to the intervention ($n = 1$), and parents separated and not interested in continuing ($n = 1$). Given that FF is a family-based intervention targeting family functioning, coparenting, and communication, both parents/parenting partners were required to participate in FF. Therefore, if one parent was unable to or did not want to participate further, the intervention ceased, and the family was noted to have dropped out. There were no significant differences between the families that completed FF and those that dropped out on any of the parent demographic characteristics or baseline scores for parental conflict, depression, anxiety, or stress symptoms.

Parents’ satisfaction with FF and recommendations for improvement (Aim 1)

Both parents from 22 families and one parent from six families completed the satisfaction survey ($N = 50$). Table 2 indicates that parents were highly satisfied with all aspects of FF. Parents were particularly satisfied with the home-based model, having two parent coaches, the number of sessions, and the opportunities for discussion provided in the sessions. There were no differences between mothers and partners.

Parents were asked open-ended questions to obtain more information about their satisfaction with FF. They indicated that the most important content and strategies covered were (a) the mnemonic to encourage self-regulation and focus on child well-being, (b) the relaxation and self-regulation tools, (c) the specific speaker and listener communication
strategy, (d) strategies about how to parent together, (e) strategies to use when in an argument, and (f) problem-solving framework to break down problems and solve them. With respect to the videos, parents noted that they liked (a) seeing both parents in the videos, (b) the “realness” and “honesty” of the parents and being able to relate to them, (c) hearing other parents’ experiences and knowing that hardships are shared by other parents, (d) hearing how other parents use the strategies, and (e) hearing about some benefits for other parents. Some written responses to an open-ended question about their overall participation in FF include “FF has completely changed the way our family operates for the better and made my relationship with my husband and child stronger” and “Understanding ourselves as parents and learning how this influences our approach to our children and to conflict with each other.”

Parents were asked about how FF could be improved. General themes included: (a) less repetition of content throughout the sessions, (b) more information related to the session content in the parent workbook, (c) greater cultural, gender and family structure diversity in the videos, (d) video content of parents modelling skills and strategies, (e) more flexibility within the sessions to meet the individual family, (f) having a booster session several months after the program ends, and (g) more experiential activities in the later sessions.

**Perceived enablers and barriers to engagement in FF (Aim 2)**

Figure 2 displays the thematic map arising from the interviews with parents and clinicians. The enablers of engagement reflected characteristics of the (a) service, (b) FF program, (c) clinicians, and (d) families. **Service factors** included flexibility in the provision of FF before or after business hours, enabling both parents to fully engage at a convenient time.

*Usually at that time it was after work and then when he stopped working—they changed it to after he finished schooling.* (Mother)
To say we can offer it at 7 o’clock at night or on Saturdays or 6 o’clock in the morning or whenever it is, I think that’s incredibly honorable. (Clinician)

Some parents took it up because it was free, and others reflected that engaging both parents in the intake process was an important way of encouraging fathers/partners to participate.

I found out about FF through my health worker. He told me about how they help people and what kind of stuff they do. I’m like, “Awesome. I need some help with this.” (Mother)

It was massive. We would have liked the program but if we’d had any doubt and we’d been paying money, we probably would have cancelled. (Mother)

With respect to the FF program characteristics, both parents and clinicians reinforced that the home visits made FF more accessible and minimized the need for childcare.

The fact that they came to our house was amazing. It just made it accessible, otherwise it would have been really stressful and really hard to get to somewhere else and conform to their time schedule. We could just be at home and it didn’t matter if she was asleep or needing food. (Mother)

Especially getting Dad, most of the times, with the times I’m doing the sessions, Dad’s usually getting home just from work and just winding down. As well, you’ve got in most cases a lot of children that are there. (Clinician)

The structured, manualized content was important for keeping parents focused and contained when other issues that were not directly relevant were raised.

I think it’s particularly containing, it’s really containing for parents who are just in chaos and there’s a lot of unpredictability in their lives with the baby and all the other
stresses they have to sort of deal with day to day, things they have no control over.

(Clinician)

Clinicians noted the opportunity to view the facilitators as live models and parents in the videos, as well as practice skills, were also noted as important.

_The more they do it, the more confidence they get and the more comfortable they get._

_We’ll adapt it to the way we work and then the couple goes... we tried a couple of the techniques from the sessions, and it got us to either not escalating or we worked stuff out better._ (Clinician)

In terms of clinician factors, parents noted that clinicians’ skills and own lived experiences of parenting were important because they were able to relate to families.

_It’s an amazing service where you get two skilled workers coming to your house to talk you through and give you guidance on pretty important life skills. And it was just such a really special time._ (Mother)

_ I will say it was nice that both of our trainers are parents because they can speak to their own experience._ (Mother)

_It opens up a whole lot of territory, developmental, current relational stuff, historical stuff for the parents that haven’t been addressed. So, all of this has the potential to really open up deep stuff that hasn’t otherwise been looked at, and I think there needs to be a nuance awareness of that and how to respond to it, name it, and then recognize how to respond, but then also come back to this as the core of what we’re doing for the next hour. And, then as I said responding with the appropriate referrals._ (Clinician)
Parents also appreciated how the clinicians sought to develop a meaningful relationship with them, and having a male clinician was seen as particularly important for building relationships with fathers. Having two clinicians visit the home was seen as critical, providing an opportunity to observe how the clinicians work together and practice the communication skills, as well assist with looking after children present during the session.

*They listened and they were very supportive towards different situations.* (Mother)

*I think with him having the—another male that has kids that can understand where he comes from and how frustrating certain things can be, with them not listening and stuff. And, him and [Clinician] got along really well with talking about that kind of stuff.* (Mother)

*Working with a male colleague has certainly been really helpful. Especially with the children there, when parents are trying to do breathing, that’s really distracting having children there. So, I’ve found that if I’ve done a breathing, I’ve got a colleague there to support with the kids, and vice versa.* (Clinician)

Finally, several parents noted a family-related factor—namely, that couples and families need to be ready to commit to get the most out of FF.

*I think just the general feeling was that we were just trying to absorb as much as possible because we knew it was just a short program, it wasn’t something that we knew we’d be able to do ongoing.* (Mother)

Figure 2 also presents the perceived barriers to engagement in FF related to the (a) service, (b) FF program, (c) clinicians, and (d) families. Barriers were only identified by parents. Only one service factor related to limited availability for sessions outside of business
hours was identified. When the services were at capacity for after-hours sessions, some families had to wait until they could be allocated a time that suited them best.

_The barriers would’ve just been timing. But I guess that’s always going to be a barrier in terms of if we hadn’t had that time, then it would’ve been—I’m sure there’s probably hearing lots of feedback on trying to do it after hours._ (Mother)

A key program barrier was that the content was not tailored enough for diverse family constellations, such as same-sex couples and families with more than two parents or caregivers.

_Tailor the program a little bit differently. On a very personal front, if there are any queer people on the parenting training team, that would be awesome. It would just add an extra layer of value._ (Mother)

For some families, the duration of the sessions was not long enough.

_Some of the questions I guess bring up vulnerabilities and that sort of thing. And, you don’t always have the opportunity to talk about that stuff._ (Mother)

The only clinician factor related to an incongruent style between the clinicians and the family.

_He was nice, but he just talked a lot. I mean a lot. To the point where he just dragged things on so much that you just go okay, enough, let’s go to the next subject now._ (Mother)

Finally, in relation to family factors, some parents noted that they had limited time to commit to the program.

_There was stuff I usually learnt each week and I did find it beneficial and I did try and implement it and every single time they would come the next few days I’d try and implement it and then sometimes I revert back ’cause it’s quite hard to do the change._ (Mother)
Some had difficulty implementing the strategies, particularly if their partner was not fully engaged and committed to the program.

*I guess the only barrier would be if my ex would shut down and not verbalize what he’s feeling within the session because he’s—it’s hard for him to verbalize anything, especially emotional because that’s where it just gets too much.* (Mother)

**Preliminary outcomes of FF (Aim 3)**

The interviews identified changes in four main areas: (a) for parents, (b) for the relationship between the parenting partners, (c) for parenting and parent–child relationships, and (d) for children. With respect to outcomes for parents, both parents and clinicians noted that FF provided an opportunity to develop coping skills to manage stress and emotions.

*The other one was a reminder to make space, to take space to meditate or something like meditation. So be mindful or whatever you want to call it, but take space and breathe. Again, I don’t do that as much as I should, but it’s not something that I would have thought of at all if we hadn’t done the program.* (Mother)

*I think getting a deeper understanding of their emotions and how when they’re flooded with negative emotions they will be very reactive and volatile. And, to be able to understand what is it that I’m identifying, my throat feels dry. ... Whatever is happening in the body, being able to identify that and then I think that’s where the change happens.* (Clinician)

Several parents said they were less stressed and more open to asking for help from family and friends, as well as professional supports. Clinicians noted that some parents had greater insight into the impact of their emotions, behaviors, and conflict on their children.
The benefits specifically for us, I think, they reduced stress on both of us, they consolidated our relationship, and I think only gave it greater strength and sustainability going forward. (Mother)

It also just gave us confidence in seeking help as a positive thing, and it leads to a greater—it leads to good outcomes. (Mother)

In terms of parenting partner relationships, both parents and clinicians noticed improved positive communication and resolution of conflict.

I’m tearing up thinking about the first Speak Out, Listen Up! because it was so—my partner and I have been together for 10 years, and we’ve always felt really very solid and positive. But just being able to actually listen to each other was so revolutionary.

For me it was a real paradigm shift. And, I think it can only mean good things for our relationship and our child in lots of ways. It was really positive. (Mother)

I feel like the program diffused our parenting conflict a bit. It helped us see it as a parenting conflict and not a sky falling in. (Mother)

They’ve found that that decreased a lot of their conflict and then they were able to send each other clearer messages about what they really need. (Clinician)

What happens when they’re engaged with conflict and all that and so that being a key change is again, allowing the space for couples to really pick apart that really heated moment, to provide to themselves and each other a bit of understanding around their patterns and what do they do. Their fight/flight, what is their process in that and
actually examining that process and going “All right. So, are you happy with this or are you not, what do you want to change in here?” (Clinician)

Overall, relationships were perceived to be stronger, with parents specifically sharing that they were working together more to raise their children.

*Parenting is really trying on the relationship, or can be. The program is designed to help you look at what are the pressure points and how could you make them more manageable as a couple and develop some common language around how you approach things.* (Mother)

*We have to coparent because we share our lives together. I felt like it would help us even if we separated. Regardless of the status of our relationship, it was going to improve our ability to parent together. It helped my commitment toward the parenting stuff because I was thinking that even if the relationship is in turmoil or difficult, we still want to get this parenting stuff right and we can focus on that as distinct from our relationship.* (Mother)

*I think what I could say is that of the couples that I have seen go through the program now, you can see a shift in their partnership.* (Clinician)

Parents and clinicians also noted that FF created an opportunity for parents to develop a greater understanding of their partners’ experiences and how they respond to stressful situations and conflict.

*Because it gave us a really good understanding where we both want to go with [child] and where we want to go in our relationship.* (Mother)
I'm seeing women saying, “We would never have had this conversation if we didn’t do FF” and that is great, isn’t it? “I would never have known he felt this way because, we don’t give men opportunity or help to do this.” That’s really nice and that’s where they feel closer and it’s not so scary. (Clinician)

Positive outcomes for parenting and parent–child relationships were identified. Both parents and clinicians thought that parents had more positive relationships and interactions with their children.

The boys listen more to their dad now, and they actually get to spend time with him, because they have that—he makes that effort now. So, they get more time together. (Mother)

Strengthening those relationships. I guess children to be listen and heard as well. A lot of the children are a bit younger, but some of the children I’ve worked with have been six and seven have been siblings. And they’ve told me about the relationship they’ve had with him, that’s been better. (Clinician)

I know with parenting he is a bit more I guess willing or trying to change in a way. He has moved a bit forward to the way he was previously ‘cause he was such—so closed off and he knew he loved his kids, but he didn’t know that how he was acting made the children or especially my son feel like he wasn’t loved. (Mother)

Even like recognizing temperament and the type of child he is and maybe pushing him in directions that he’s uncomfortable with and that his behaviour is more a signal of him being overwhelmed as opposed to him being disobedient. (Clinician)

Clinicians specifically noted that fathers were more engaged in parenting.
Pilot evaluation of Family Foundations

They get a more involved father. The dads often start off with, “Well, what can I do? I can’t breastfeed. The baby just wants her all the time.” We talk all about that. Then he also goes, “Yeah. It’s not all biological. She’s just had the practice.” So, you need to practice more and you need to let him practice. (Clinician)

Finally, there were several perceived benefits for children. Both parents and clinicians reflected that children were exposed to less conflict, and they seemed easier to settle when upset. Clinicians observed that children had a stronger sense of safety and security in relationships with their parents.

One of the things we had always tried with our first child was not to have conflict in front of him. That’s been a work in progress. Since this program, we’ve become much better at parking stuff and saying, “That has to be chatted about later ’cause it’s obviously a bit heated.” We’re both onboard with that. (Mother)

I think they get less exposure to arguing. (Clinician)

He’s actually a lot calmer at home at times. (Mother)

There’s a few exercises in here, especially if there’s a baby present ... bring the parent’s attention to actually just watch what’s happening, you relax and watch what’s happening with your child. But then if you extend that to the older siblings that might be floating around as well and so you can see things slowdown in the room and then bring the parent’s attention to—you’re coming down, you’re relaxing.

(Clinician)

Outcome assessment survey data
With respect to the assessment data, the percentage of missing data across the outcome variables for the entire sample was 33%: (mothers: 24% at pretest and 37% at posttest; partners: 28% at pretest and 43% at posttest). Pretest data were available for 11 of the 12 families who dropped out. Data were completely missing at random for both mothers and partners as evidenced by the Little’s missing completely at random tests: mothers: $\chi^2(61) = 76.9, p = .080$; partners: $\chi^2(89) = 93.1, p = .362$. Descriptive statistics for the outcomes for the complete case and ITT analyses are presented in Table 3. Table 4 presents the pre–post comparisons for the complete case and ITT samples. Although the descriptive statistics and mean changes from pre- to post-intervention were similar for both sets of analyses, there were differences in the pattern of significant results. This is likely due to the small sample size and lack of power to detect significant differences. For mothers, there were decreases in depressive, anxiety, and stress symptoms associated with moderate effect sizes. Few changes in mental health outcomes for partners were observed. There were decreases in mothers’ reports of children’s exposure to conflict, but these effects were stronger for partners’ reports. Mothers reported an increase in coparenting support and coparenting agreement associated with moderate effect sizes, and changes in these outcomes for partners approached significance. There was a decrease in parenting hostility associated with a moderate effect size for mothers.

Finally, given that the vast majority of partners were fathers or male caregivers, we conducted a sensitivity analyses without the data from the two mothers from same-sex couples to assess whether their data were affecting the results for fathers. The analyses yielded similar findings.

**DISCUSSION**

This study is the first to report on the acceptability and preliminary outcomes of home-based FF delivered in real-world service settings in Australia. Importantly, we demonstrated that it
was possible to reach and recruit the intended target population. At baseline, approximately half of the families reported partner conflict, and one in three reported parent mental health difficulties. The majority of families (87%) were experiencing two or more risk factors for parental conflict and mental health problems including relationship difficulties, young parental age, low educational attainment, low income, and parenting two or more children.

Reaching and offering early interventions such as FF to families experiencing, or at risk of, conflict and mental health difficulties is important not only for parents themselves but also for their children, who are at risk of health, well-being, and developmental difficulties across the life course (Rogers et al., 2020; Schiff et al., 2014).

There was high level of satisfaction with all aspects of FF. Specifically, parents appreciated that it was delivered in their own home by two clinicians at a time that suited them. Although this has implications for organizations (i.e., higher level of staff resourcing per family than usual, workforce availability outside of business hours), there are potential benefits for parent engagement. In the interviews, mothers and clinicians agreed that the home visits made FF accessible, overcoming potential common barriers to attendance associated with employment and difficulties finding childcare. The value of home-based models to overcome barriers to help-seeking and service use by those who are less likely to attend health and social services in the community is well documented (McDonald et al., 2012). Delivering FF in the home may also aid use and generalization of the skills in the environment in which parents will need to use them.

Several features of FF were identified as particularly important for the engagement of fathers. These included (a) the focus on the parenting partnership in raising children; (b) involving fathers in the intake process to convey the importance of their involvement in FF and address any concerns or hesitations about what it would involve; and (c) inclusion of a male clinician to build relationships with fathers, provide opportunities to discuss men’s
health issues, and challenge attitudinal barriers to help-seeking commonly held by men. These findings are important given research indicating that men’s help-seeking behavior and uptake of mental health interventions and support is markedly lower than women’s (Thompson et al., 2004) and the need for more father-inclusive practices in child and family services to promote the engagement of fathers (Lee et al., 2018).

It was also important to identify the barriers to engagement and intervention completion. Although one in five families dropped out after an average of two sessions, many of these occurred in the early stages of implementation of FF when the inclusion criteria and intake processes were being refined. For at least half of the families that dropped out, substance use or severe relationship conflict were not disclosed at intake. These families found it difficult to engage in FF and were offered different supports to meet their needs. Some parents also found it particularly challenging if their parenting partner was not fully engaged and committed to FF. Taken together, these findings indicate that FF may not be appropriate for some families and highlights the importance of a thorough intake process that engages both parents to assess their readiness and identify potential barriers to engagement and intervention completion of FF.

With respect to potential improvements to FF to enhance engagement and completion, a small number of mothers shared that the content was repetitious, and more opportunities to discuss their specific needs and practise skills would be helpful. This can be a common challenge of manualized programs that are carefully designed to provide parents with maximum opportunities to reinforce, practice, and internalize the content and skills learned in the program. Although it is possible to build more flexibility into FF, it would require careful assessment and decision-making by clinicians to determine how they do this and ensure that program fidelity is still maintained. This may require more intensive training and supervision. Greater representation of diverse families in the resources, translated materials, and
employment of bicultural staff are key considerations for future program development. This is critical given the challenges migrant, Aboriginal, and LGBTQI families often face in accessing culturally and socially appropriate care and support in the early years of parenting.

The final aim of the study was to gather preliminary evidence about the outcomes for families. Decreases in depressive, anxiety, and stress symptoms were reported by mothers. Although improvements in mental health were not specifically noted in the interviews, several mothers spoke about having stronger coping skills and a willingness to reach out for support in the interviews. These are important outcomes because a key focus of FF is to practice emotion regulation and stress management skills, as well as to practice how to ask for help.

There were decreases in mothers’ and partners’ reports of how much they engaged in conflict in front of their children. FF provides psychoeducation about what it can be like for children to see their parents fighting and conveys the importance of using a broad range of positive communication strategies when there are disagreements. In the interviews, mothers and clinicians noted improvements in communication and conflict resolution skills, and several mothers highlighted the usefulness of specific mnemonics to help them use the skills in conflict. This is an important finding given research indicating that observing conflict can (a) be highly distressing for children, (b) threaten their sense of security in their family relationships, and (c) model negative ways of handling conflict in relationships (Davies & Cummings, 1994; Grych & Fincham, 1990). Research also indicates that it can be beneficial for children to see their parents problem-solve conflicts, work together, and support one another (Feinberg, 2002). Mothers in this study reported increases in coparenting support and agreement, and this was also corroborated in the interviews. This was an important outcome as FF focuses on shared values and understanding differences and shared decision-making skills. Mothers and clinicians also noted that FF helped to foster greater empathy and
understanding between parents. This may be an important practice underlying the process of strengthening coparenting agreement and support and is worth further exploration.

There were also perceived benefits of FF for parenting and parent–child relationships. This was also reflected in decreased hostility by mothers. Although specific content about children’s temperament, parenting values, and goals may have been important in facilitating changes in parenting behavior, we also hypothesize that there were indirect effects on parenting behavior via improvements in parent mental health, decreased conflict, improved conflict resolution skills, and increased coparenting. Parent mental health difficulties and conflict are established risk factors for harsh parenting behaviors, and they can make it difficult for parents to engage in sensitive and responsive interactions with their children (Krishnakumar & Buehler, 2000; Shelton & Harold, 2008). Although the short- and longer-term effects of group-based FF on parenting and children’s emotional-behavioural functioning has been established (Feinberg et al., 2014), exploring the short-term impacts of home-based FF and mechanisms underlying long-term benefits for children is an important area for rigorous evaluation research in the future.

Finally, the lack of significant findings for partner mental health, coparenting, and parenting behavior is due further consideration. Although it is likely that the sample size for partners ($n = 19$) was too small and underpowered to detect small effects, it is possible that partners needed more time to implement the FF strategies and perceive change in their mental health and relationships. It is also worth noting that on average, partners’ baseline scores for mental health symptoms were relatively low, and their scores for coparenting behavior were relatively high. For example, mothers’ pretest scores for depressive symptoms was about .6 standard deviation units higher than partners’ pretest scores. Thus, floor and ceiling effects may have limited the potential for improvement. Further, these partner baseline scores may also have influenced their perceived need for FF and their level of engagement. Future
research with larger samples and a more robust evaluation design is required before drawing firm conclusions about whether FF works as well for partners as it did for mothers.

**Limitations and future directions**

There are several limitations to note. This real-world evaluation was embedded within a newly funded initiative that supported establishment and implementation of home-based FF within two services in Australia. There were several challenges in implementation setup including establishing referral pathways, intake, and assessment procedures. This initial preparatory work took time, and recruitment was initially slow. The sample size was small, limiting statistical power to detect small to moderate intervention effects. Further, the sample was not representative of families from non-English-speaking and indigenous backgrounds, same-sex parents, or families with more complex family structures (i.e., stepfamilies, kinship and extended family carers). The evaluation did not include a control or a comparison group, and the outcomes were assessed immediately after the intervention. It is possible that parents needed more time to implement the intervention strategies before changes in some outcomes became noticeable. A longer term follow-up is required to assess change and maintenance in parent and family functioning over time. The organizations were responsible for collecting assessment data from parents, and they had limited resourcing to follow-up parents who had not returned their final assessment measures. Finally, only parents who completed FF were informed about the interviews, and it is likely that parents who were engaged and had more a positive experience of FF opted to participate in the interviews.

**Implications**

Notwithstanding these limitations, this pilot study demonstrates the feasibility of implementing home-based FF with families in Australia. The mixed-methods approach was a particular strength. The rich interview data offered insight into the acceptability, enablers and
barriers, and benefits of the intervention from the perspectives of both parents and clinicians, providing an opportunity to triangulate findings and add meaning to the self-report survey data. The pilot results are encouraging and a necessary first step in gathering evidence to inform further development of home-based FF and wider implementation in health and social care services in Australia.

REFERENCES


Pilot evaluation of Family Foundations


### TABLE 1 Demographic characteristics of families who enrolled in Family Foundations

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total sample (N = 41)</th>
<th>Parent 1 (Mothers)</th>
<th>Parent 2 (Parenting partners)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>41 (100.0)</td>
<td>2 (4.9)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>—</td>
<td>39 (95.1)</td>
<td></td>
</tr>
<tr>
<td>Age in years (M, SD)</td>
<td>33.5 (6.1)</td>
<td>35.1 (5.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Range: 17–44</td>
<td>Range: 26–47</td>
<td></td>
</tr>
<tr>
<td>Country of birth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>32 (78.0)</td>
<td>32 (78.0)</td>
<td></td>
</tr>
<tr>
<td>Outside Australia</td>
<td>5 (12.2)</td>
<td>5 (12.2)</td>
<td></td>
</tr>
<tr>
<td>Not reported</td>
<td>4 (9.8)</td>
<td>4 (9.8)</td>
<td></td>
</tr>
<tr>
<td>English-speaking language</td>
<td>35 (85.4)</td>
<td>36 (87.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td><strong>Highest level of educational attainment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school education</td>
<td>7</td>
<td>17.1</td>
<td></td>
</tr>
<tr>
<td>Post–high school qualification</td>
<td>26</td>
<td>63.4</td>
<td></td>
</tr>
<tr>
<td>Not reported</td>
<td>8</td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td><strong>Primary income source</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee salary/wages or self-employed</td>
<td>18</td>
<td>43.9</td>
<td></td>
</tr>
<tr>
<td>Government pension/allowances</td>
<td>13</td>
<td>31.7</td>
<td></td>
</tr>
<tr>
<td>Not reported</td>
<td>10</td>
<td>24.4</td>
<td></td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>35</td>
<td>85.4</td>
<td></td>
</tr>
<tr>
<td>Lesbian</td>
<td>1</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Queer</td>
<td>1</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Not reported</td>
<td>4</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td><strong>First-time parents</strong></td>
<td>17</td>
<td>41.5</td>
<td></td>
</tr>
<tr>
<td><strong>Expected parent/couple</strong></td>
<td>7</td>
<td>17.1</td>
<td></td>
</tr>
<tr>
<td><strong>Number of children in the family (M, SD)</strong></td>
<td>1.5</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Count (Percentage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal conflict</td>
<td>21 (51.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical conflict</td>
<td>1 (2.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent mental health difficulties</td>
<td>27 (65.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Descriptive statistics for parents’ satisfaction with elements of FF ($N = 50$)

<table>
<thead>
<tr>
<th></th>
<th>$M (SD)$</th>
<th>$n (%)$ rating the item with highest possible score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relevance (0 = not relevant to 4 = highly relevant)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aims</td>
<td>3.6 (0.6)</td>
<td>35 (70.0)</td>
</tr>
<tr>
<td>Content</td>
<td>3.5 (0.7)</td>
<td>30 (60.0)</td>
</tr>
<tr>
<td>Videos</td>
<td>3.2 (0.8)</td>
<td>20 (40.0)</td>
</tr>
<tr>
<td><strong>Helpfulness (0 = not helpful to 4 = very helpful)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>3.4 (0.8)</td>
<td>28 (56.0)</td>
</tr>
<tr>
<td>Videos</td>
<td>3.3 (0.8)</td>
<td>22 (44.0)</td>
</tr>
<tr>
<td><strong>Satisfaction (1 = not satisfied to 7 = highly satisfied)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of sessions (10 sessions)</td>
<td>6.4 (1.1)</td>
<td>37 (74.0)</td>
</tr>
<tr>
<td>Duration of the sessions (approx. 1 hour)</td>
<td>6.4 (1.1)</td>
<td>34 (68.0)</td>
</tr>
<tr>
<td>Home visits</td>
<td>6.9 (0.4)</td>
<td>45 (90.0)</td>
</tr>
<tr>
<td>Session activities</td>
<td>6.4 (0.8)</td>
<td>30 (60.0)</td>
</tr>
<tr>
<td>Activity</td>
<td>Mean (SD)</td>
<td>N (%)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>Workbook</td>
<td>6.2 (1.0)</td>
<td>23 (46.0)</td>
</tr>
<tr>
<td>Videos</td>
<td>6.2 (1.1)</td>
<td>29 (58.0)</td>
</tr>
<tr>
<td>Having two parent coaches</td>
<td>6.9 (0.3)</td>
<td>45 (90.0)</td>
</tr>
<tr>
<td>Opportunities for discussion</td>
<td>6.5 (0.9)</td>
<td>36 (72.0)</td>
</tr>
<tr>
<td>Home practice exercises</td>
<td>6.3 (0.9)</td>
<td>26 (52.0)</td>
</tr>
</tbody>
</table>
### TABLE 3
Descriptive statistics for the outcomes at pre- and post-intervention for complete case and intention-to treat samples

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Parent 1 (Mothers)</th>
<th>Parent 2 (Parenting Partners)</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Complete cases</td>
<td>Intention-to-treat sample</td>
<td>Complete cases</td>
<td>Intention-to-treat sample</td>
<td>Complete cases</td>
<td>Intention-to-treat sample</td>
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<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td></td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SE$)</td>
<td>$M$ ($SE$)</td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>13.0 (7.4)</td>
<td>6.6 (7.4)**</td>
<td>12.1 (1.7)</td>
<td>7.2 (1.0)**</td>
<td>6.9 (9.3)</td>
<td>6.8 (8.6)</td>
</tr>
<tr>
<td>Anxiety symptoms</td>
<td>11.0 (10.5)</td>
<td>7.1 (9.5)</td>
<td>9.8 (1.5)</td>
<td>6.4 (1.2)*</td>
<td>6.8 (6.6)</td>
<td>5.5 (5.3)</td>
</tr>
<tr>
<td>Stress symptoms</td>
<td>19.7 (11.5)</td>
<td>14.1 (9.2)</td>
<td>18.7 (1.7)</td>
<td>13.7 (1.2)**</td>
<td>11.4 (9.9)</td>
<td>11.7 (8.5)</td>
</tr>
<tr>
<td>Interparental conflict</td>
<td>13.1 (3.01)</td>
<td>12.4 (3.3)</td>
<td>13.4 (0.5)</td>
<td>12.4 (0.5)</td>
<td>12.4 (3.4)</td>
<td>11.8 (2.5)</td>
</tr>
<tr>
<td>Exposure of child to conflict</td>
<td>7.8 (4.7)</td>
<td>5.9 (4.9)</td>
<td>8.6 (0.7)</td>
<td>6.1 (0.7)*</td>
<td>8.9 (7.0)</td>
<td>5.5 (4.0)*</td>
</tr>
<tr>
<td>Coparenting support</td>
<td>21.6 (8.4)</td>
<td>26.4 (7.9)*</td>
<td>20.2 (1.2)</td>
<td>26.5 (1.1)**</td>
<td>26.1 (7.6)</td>
<td>26.7 (7.2)</td>
</tr>
<tr>
<td>Endorse partner’s parenting</td>
<td>29.6 (8.2)</td>
<td>30.6 (9.1)</td>
<td>28.3 (1.1)</td>
<td>32.7 (1.1)*</td>
<td>34.9 (3.9)</td>
<td>34.6 (4.2)</td>
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<tr>
<td>Coparenting agreement</td>
<td>14.5 (3.2)</td>
<td>17.1 (4.5)</td>
<td>14.2 (0.6)</td>
<td>17.4 (0.6)**</td>
<td>16.7 (6.0)</td>
<td>15.3 (5.7)</td>
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<tr>
<td>Parenting warmth</td>
<td>27.8 (3.4)</td>
<td>27.9 (2.9)</td>
<td>27.2 (0.6)</td>
<td>28.2 (0.4)</td>
<td>26.3 (4.3)</td>
<td>26.2 (3.9)</td>
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<tr>
<td>Parenting hostility</td>
<td>14.9 (7.3)</td>
<td>11.9 (6.4)*</td>
<td>14.7 (1.2)</td>
<td>11.9 (0.8)*</td>
<td>12.8 (7.1)</td>
<td>12.1 (6.2)</td>
</tr>
</tbody>
</table>

*Note.* aSample size for complete case analyses varied due to variation in missing data across variables. bStandard deviation not available for multiple imputation; Mean ($SE$) are presented.

*p < .05. **p < .01. ***p < .001.
## Pilot evaluation of Family Foundations

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Parent 1 (Mothers)</th>
<th>Parent 2 (Parenting partners)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean changea</td>
<td>95% CI of the mean difference</td>
</tr>
<tr>
<td>Complete case analysis</td>
<td></td>
<td></td>
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<tr>
<td>Depressive symptoms</td>
<td>22</td>
<td>6.4</td>
</tr>
<tr>
<td>Anxiety symptoms</td>
<td>22</td>
<td>3.9</td>
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<tr>
<td>Stress symptoms</td>
<td>22</td>
<td>5.6</td>
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<tr>
<td>Interparental conflict</td>
<td>21</td>
<td>0.8</td>
</tr>
<tr>
<td>Exposure of child to conflict</td>
<td>17</td>
<td>1.9</td>
</tr>
<tr>
<td>Coparenting support</td>
<td>17</td>
<td>–4.8</td>
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<tr>
<td>Endorse partner’s parenting</td>
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<td>–0.9</td>
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<td>Coparenting agreement</td>
<td>17</td>
<td>–2.6</td>
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<tr>
<td>Parenting warmth</td>
<td>17</td>
<td>–0.1</td>
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<tr>
<td>Parenting hostility</td>
<td>17</td>
<td>3.0</td>
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Intention-to-treat analysis
<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>Mean Pre</th>
<th>CI</th>
<th>Mean Change</th>
<th>p</th>
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<td>[0.5, 6.1]</td>
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*Note. CI = confidence interval; n/a = not applicable.*

*aMean change = mean pre-scores minus mean post-scores. bCohen’s d not available for analyses with multiple imputed data.*
FIGURE 1 Family Foundations intervention logic model

- **FF theoretical underpinnings**
  - Cognitive-behaviour therapy
  - Prevention science
  - Family stress theories
  - Emotional security & attachment theories

- **FF content & skills building in**
  - Emotion regulation
  - Stress management
  - Healthy communication
  - Coparenting support
  - Conflict resolution
  - Problem-solving

- **FF approaches**
  - Manuelised curriculum
  - Video vignettes
  - Discussion-based activities
  - Workbook exercises
  - Modeling
  - Active skills practice

- **Short-term outcomes for parents**
  - Psychological distress, depressive, anxiety & stress symptoms
  - Parental conflict
  - Coparenting behaviour & support
  - Positive family & parent-child interactions

- **Medium to longer-term outcomes for parents and children**
  - Parent health, wellbeing & relationships
  - Child health, wellbeing & development
FIGURE 2 Thematic map of perceived outcomes, enablers, and barriers by parents and clinicians

Note: C = theme arising from clinician interviews; P = theme arising from parent interviews.