ORIGINAL PAPER



A Quasi-Experimental Study of the Respectful Approach on Early Parenting Competence and Stress

Amanda C. Richardson 1 · Johnny Lo · Lynn Priddis · Therese A. O'Sullivan 1

Published online: 29 July 2020

© Springer Science+Business Media, LLC, part of Springer Nature 2020

Abstract

Early parenthood can be stressful. Many parenting interventions emphasize skills training, as opposed to improving the parent-child relationship. We investigated whether the Respectful Approach intervention, based on building the parent-child relationship through observation and respect, improves stress and confidence in parents of infants and toddlers. Using a quasi-experimental design, we compared changes in self-reported levels of stress and parenting competence between 15 parents who attended the Respectful Approach parent-child classes (once a week for six weeks), to a control group of 23 parents utilizing the 'Parenting Sense of Competence Scale', 'Parental Stress Scale' and 'Depression Anxiety Stress Scales'. A focus group was held at the conclusion of the intervention to provide feedback about the classes. A significant Time × Group interaction was observed for both parent competence (p = 0.004) and parent stress (p = 0.010). Parents in the intervention group demonstrated a significant increase in parent competence (p = 0.001) with no significant change observed in the control group (p = 0.787). Parent stress significantly increased in the control group (p = 0.017) and marginally decreased in the intervention group (p = 0.134). Qualitative analysis revealed that the intervention parents felt they were calmer and better understood their children. These findings suggest that the Respectful Approach intervention may improve parental stress and parenting competence. Our results justify development of a randomized controlled trial to further quantify the effect of this approach.

Keywords Respectful Parenting · Stress · Competence · Infants · Toddlers

Highlights

- We examined an early relationship-based parenting intervention (Respectful Approach) for parents of children under the age of two.
- Respectful Approach aims to improve parent stress and competence by helping parents view the child as a separate, competent being with their own thoughts and intentions, and to trust in the child's abilities.
- Parents of infants revealed they felt less stressed, while parents of toddlers felt more confident after participation in the intervention.
- Further research into the use of the Respectful Approach as a potential population-based support system is warranted.

Supplementary information The online version of this article (https://doi.org/10.1007/s10826-020-01762-w) contains supplementary material, which is available to authorized users.

- Amanda C. Richardson aricha16@our.ecu.edu.au
- School of Medical and Health Science, Edith Cowan University, Joondalup, WA, Australia
- School of Science, Edith Cowan University, Joondalup, WA, Australia
- ³ Law School, University of Western Australia, Crawley, WA, Australia

Early parenting can be a difficult period, as parents psychologically, emotionally and socially adapt to meeting the many demands of caring for young children (Petch and Halford 2008; Wiklund et al. 2018). Parents may also feel overwhelmed and lack confidence as they adapt to their new role (Hudson et al. 2001; Kristensen et al. 2018). High rates of maternal depressive symptoms are frequently reported, including stress (Don et al. 2014; Miller et al. 2006). Parent stress can interfere with the parent-child relationship and adversely impact on child outcomes (Harmeyer et al. 2016).



The early years of the child's life are therefore the prime time to support family functioning (Sutton et al. 2012).

Despite this, parenting research tends to be dominated by parent interventions focusing on older children, often once negative patterns have developed (Reichle et al. 2012; Sanders et al. 2014). Early behavioral parenting interventions have predominantly focused upon modifying undesirable child behaviors and non-compliance (Barlow et al. 2010; Hiscock et al. 2005). However, interventions focused not on 'fixing' behavior but on optimizing the parent-child *relationship* may be the key to potentially preventing problems occurring in the long term (Bakermans-Kranenburg et al. 2005; Stewart-Brown 2008).

Parent interventions to enhance the parent-child relationship have included the 'Circle of Security', 'Tuned in Parenting ('TIP') and 'Mellow Babies'. These interventions utilized video feedback, whereby parent-child interactions were recorded and later observed for reflection and discussion. Another well-researched and documented psychotherapeutic treatment approach known as 'Wait, Watch, Wonder' ('WWW'), entails a mother sitting nearby her infant observing their independent activity. Results from such interventions suggest improvements in parent wellbeing, although predominantly in at-risk or clinical samples (Cohen et al. 1999; Hoffman 2006; Huber et al. 2016; King et al. 2015; Levi et al. 2019). While it is acknowledged that clinical groups should be offered intensive parent support programs, brief universal interventions that are accessible to all parents to support the parent-child relationship (especially to parents of children under age two) need to be designed and evaluated for routine use in the early parent healthcare pathway (Enebrink et al. 2015; Gilmer et al. 2016; King et al. 2015).

The Pikler® approach developed by Hungarian pediatrician Dr. Emmi Pikler and 'Resources for Infant Educarers' RIE® established by infant specialist Magda Gerber also place great importance on observation in care. Magda Gerber initiated the 'Demonstration Infant Program' (which later lead to RIE®) with Dr. Tom Forrest, whereby parents were encouraged to observe their child in uninterrupted play as Gerber modeled selective intervention. These sessions aimed to provide early prevention of problems and were offered to all parents of infants in the general public from birth to 18 months old (Gerber 2013). Early learning professionals have continued to conduct 'parent-infant guidance classes' based on Gerber's original model, with advantageous reports from parents (Petrie and Owen 2005; Suskind 1993). One study gathered anecdotal evidence of the benefit of a group class format based on this approach to increase parents reflective functioning and perceive their child more positively (Reynolds 2003). At the core of the Pikler® and RIE® method is the view of the child as a separate, competent being who is psychologically autonomous (Cooper et al. 2014). Through providing opportunities for observation of their child in uninterrupted play, the method aims to encourage parents to consider that children have individual thoughts and intentions that lead their actions and to trust in the child's inborn competencies (Gerber 2002). Initial investigations suggest the application of these principles promote attachment in the parent-child relationship (Triulzi 2008). This approach has also been examined in group settings of childcare centers (Bussey and Hill 2017) and an orphanage with positive results to child outcomes, caregiving practices and adult-child interactions (Gerber 2013; Petrie and Owen 2005; Pikler 1968).

The Respectful Approach intervention utilized in this study entails parent-child group classes based on the Pikler® and RIE® six guiding principles: trust, mutual respect, sensitive observation, a prepared environment, time for uninterrupted play and consistency (Gerber 2002; Tardos 2010). At times it looks similar to the 'Watch, Wait and Wonder' approach utilized in psychotherapy, albeit with somewhat different theoretical underpinnings and supervisory framework (Tucker 2006). Many elements of 'WWW' are consistent with our intervention, such as an environment to support optimal infant led play with access to the parent (Gerber 2002; Muir et al. 1999). The Respectful Approach intervention aims to cater to universal parent populations with the addition of opportunities for parent social connectivity (Bennett et al. 2017). The direct child observation during the classes are also one step closer than in community based video interaction approaches such as the 'Tuned in Parenting' program (King et al. 2015).

In this study, the Respectful Approach intervention was investigated to determine its potential as a preventative initiative. The aim was to invite parents to explore their cognitions and reorganize their narrative regarding their child as they viewed them at play. The group discussions were based on observations and parents' current questions. Parents were also able to consider new perspectives regarding their 'parent role'. For example, they were encouraged to view caregiving moments as opportunities to build their relationship with their child through participatory care, as opposed to perceiving caregiving moments as chores to be rushed through (Chahin 2008; Gerber 2002). We aimed to gather pilot data about the effectiveness of the Respectful Approach intervention to improve parental wellbeing in early parenting. Primary outcomes of our study were parent competence and parent stress. Secondary outcomes included general stress, anxiety, and depression. In addition, participant feedback regarding the effectiveness and acceptability of the Respectful Approach parent-child classes were gathered to inform future larger studies. We hypothesized that the Respectful Approach intervention would be associated with increased parent confidence and



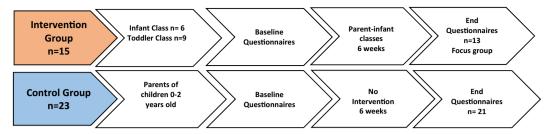


Fig. 1 Study design

decreased parent related stress, along with lower general stress, depression, and anxiety.

Methods

Participants

Parents who were primary caregivers of an infant or toddler aged under two years old were recruited by convenience sampling through various family-based organizations such as libraries and playgroups, in Perth, Western Australia. Parents self-selected into the study (n = 38) (all mothers, although fathers were also invited to participate) and chose to participate in either the intervention (n = 15) (six in an infant class and nine in a toddler class) or control group (n = 23). All participants were required to have a good understanding of written and spoken English and be over 18 years of age. The intervention participants were required to be available to attend six classes in person with their child. The control group did not receive any intervention or any attention from the researchers over the study period. Ethics approval was provided through the Edith Cowan University (ECU) Human Research Ethics Committee for this study (project code: 27263) and all participants provided informed consent. Using G*Power, an a-priori sample size calculation was performed for a mixed model design with 2 groups (i.e. control and toddler/infant group) and 2 time points (pre and post intervention). The minimum required sample size to detect a medium Group × Time interaction effect size (i.e. Cohen's f = 0.25) at 5% level of significance and 80% power was 34, or 17 subjects per group.

Procedure

This study used a quasi-experimental mixed method design to assess the impact of the Respectful Approach parent-child classes, utilizing repeated quantitative measures over two time points (see Fig. 1) in addition to qualitative data collected at study end. The intervention group included parents of infants aged four to eight months old, who attended a parent-infant class, along with parents of toddlers

aged sixteen to twenty months old, who attended a parenttoddler class. Parents in the intervention group completed baseline questionnaires, prior to commencing the first parent-child class and again at the end of the final class. The control group included parents who had at least one child aged two years or younger. The control group completed baseline questionnaires at the same time points via mail in a stamped self-addressed envelope provided by the researchers. The quantitative data was the dominant component of this study. Self-reported questionnaires were completed by both groups to measure parental confidence and stress, along with general stress, depression, and anxiety. Responses were linked to individuals by a unique code for anonymity. In order to extend on quantitative data and extract meaningful descriptions regarding the parents perspective of being in the classes, focus groups were held after the final class (Ansay et al. 2004; Gill et al. 2008). Feedback on acceptability of class structure and content was gathered to guide any adjustment to future class formats.

Separate infant and toddler Respectful Approach intervention classes were conducted in small groups to take into consideration the developmental differences in these age groups. We also wanted to determine if parents of infants and toddlers responded differently to the intervention across any of the measures. Parents in the intervention group attended six weeks of the Respectful Approach intervention parent-child classes with either their infant or toddler once a week for one hour. The same parent was required to attend each week and was not permitted to bring any other children along to the class, to minimize distractions. The room in which the classes were conducted was set up specifically to cater to infant and toddler developmental stages, utilizing small climbing equipment, soft mats, and appropriate play objects (see Supplementary Fig. 1). As a part of the intervention, parents were asked to remain in the same area in the room so that their child could explore and return to them as needed. They were asked to observe without interruption, while the facilitators engaged with the children only as necessary. Two facilitators were involved in both infant and todder classes, both qualified Early Childhood Educators and certified in the 'RIETM Foundations' course which explicitly teaches the core principles shared in the



Respectful Approach intervention. Each class covered one principle per week (see Supplementary Table 1). The structure of the class involved welcome, settling in, introducing the principle for the week and a period of uninterrupted play where parents observed their children. This session concluded with group discussion about what was observed. Parents were also provided with weekly handouts and reflective questions pertaining to each principle. Links to relevant support organizations were also provided to all parents.

Measures

Demographics guestionnaire

A demographics questionnaire was completed by all study participants. Questions related to age, marital status, education level, employment status, annual household income, postcode, childcare arrangements, previous knowledge of 'Resources for Infant Educarers' RIE®, child age, child gender and the number of siblings.

Parenting sense of competence

Parent competence (also referred to as perceived parent self-efficacy or parent confidence in the literature) relates to parent cognitions about how capable they are in performing their new role and has been found to shield against early symptoms of parent psychological distress (Crncec et al. 2008, 2010). To assess parent confidence, the 17-item Parenting Sense of Competence Scale, was used to determine parenting self-efficacy and satisfaction (Johnston and Mash 1989). A 6-point scale rates agreement to statements from 'strongly disagree' to 'strongly agree', with higher scores indicative of higher parent confidence (Ohan et al. 2000). It has been validated for factor structure and internal consistency within an Australian sample and with mothers in a normative sample (Gilmore and Cuskelly 2009; Rogers and Matthews 2004).

Parental stress

Parent stress relates to the negative mental perceptions parents have of themselves or their children (Leigh and Milgrom 2008; Williford et al. 2007). To assess stress specifically related to parenting, the Parental Stress Scale was used, an 18-item measure of stress generated from having children (Berry and Jones 1995). It utilizes a 5-point scoring process of statements relating to both negative and positive components of parenting, with 1 indicative of full disagreement and 5 indicative of full agreement (Lessenberry and Rehfeldt 2004). This tool has been validated in an Australian sample and with mothers in a clinical and

non-clinical sample and found to be internally stable and consistent across varying parent characteristics (Berry and Jones 1995; Tellegen and Sanders 2014).

Depression, anxiety, and stress

To assess general stress not specifically related to parenting, the short form of the Depression Anxiety Stress Scales (DASS-21) was utilized, a 21-item tool used to distinguish between the dimensions of depression, anxiety and stress (Henry and Crawford 2005). The psychometric properties of the DASS-21 have been shown to have internal stability (Lovibond and Lovibond 1995), and it has been validated in both community and clinical samples, including with parents of infants and toddlers (Antony et al. 1998; Dunning and Giallo 2012).

Data Analysis

Parenting confidence, parent stress and general stress questionnaires

Data was entered into IBM SPSS Statistics for Windows (Version 25.0, Armonk, NY) for analysis. Participant characteristics at baseline were categorized and tabulated (see Table 1). Differences in participant characteristics between the intervention and control groups were assessed using the Chi-square independence test. A linear mixed model was used to determine any statistically significant variations between the intervention and control group across all measures over the six-week period to ascertain the effect of the Respectful Approach intervention on parent confidence, stress, anxiety and depression in the intervention group. All models were adjusted for mother's age, socioeconomic status, education, employment, income, childcare, previous parent education and number of children. This analysis was then repeated comparing the infant and toddler groups to the control group. Results were deemed significant if p < 0.05.

Focus group

To gather feedback about the parent-child classes, a focus group following each of the final classes at the end of the six-week period was conducted. Children continued to play during the focus group, while one facilitator supervised them. A focus group guide was developed, containing openended questions, and closely followed by the other facilitator. The focus group guide included introductory questions relating to participants' overall experience attending the classes, and guiding questions related specifically to class structure (time, length, routine, environment), content (the principles, weekly handouts, reflection activities) and



 Table 1 Participant

 characteristics at baseline

	Total <i>n</i> (%) 38	Control <i>n</i> (%) 23	Intervention <i>n</i> (%) 15	p value
Mean age and SD (years)	32.3 (4.0)	32.6 (4.4)	31.9 (3.5)	0.470^{a}
Socioeconomic status				
SEIFA ^b 1-6 (Australian Bureau of Statistics 2018)	7 (18.9)	4 (18.2)	3 (20)	0.890 ^c
SEIFA 7-11	30 (81.1)	18 (81.8)	12 (80)	
University qualification				
Yes	26 (68.4)	19 (82.6)	7 (46.7)	0.020^{c}
No	12 (31.6)	4 (17.4)	8 (53.3)	
Employment status				
Work or study	24 (63.2)	17 (73.9)	7 (46.7)	0.089^{c}
Stay at home or maternity leave	14 (36.8)	6 (26.1)	8 (53.3)	
Annual household income (AUD)				
\$90,000 or above	28 (75.7)	17 (77.3)	11 (73.3)	0.784^{c}
Below \$90,000	9 (24.3)	5 (22.7)	4 (26.7)	
Child care arrangements				
Any (family, friends, paid)	33 (91.7)	20 (95.2)	13 (86.7)	0.359^{c}
None	3 (8.3)	1 (4.8)	2 (13.3)	
Previous RIE ^d (Gerber 2002)				
Parent education				
Yes	17 (44.7)	8 (34.8)	9 (60)	0.185^{c}
No	21 (55.3)	15 (65.2)	6 (40)	
First time parent				
Yes	18 (47.4)	5 (21.7)	13 (86.7)	0.001^{c}
No	20 (52.6)	18 (78.3)	2 (13.3)	

^aIndependent t-test

the overall success of the classes. One parent from the infant group and one parent from the toddler group were unable to attend the focus group in person and therefore provided feedback online via email. The focus group was voice recorded by an OLYMPUS Digital Voice Recorder (VN-731PC) and a Samsung S8 voice recorder, with consent from participants. The focus group data was analyzed utilizing the method of 'thematic analysis' to identify themes and capture data relevant to our research questions. The researchers utilized an inductive approach to understanding the data gathered. The process of analysis involved the following steps. The focus group recordings were transcribed verbatim by 'Go Transcribe' services, Australia (https://gotranscript.com). Transcripts were carefully checked for errors and updated for accuracy. A semantic approach was taken to categorize what was said. We then calculated the number of times a theme occurred and interpreted their relevance to our study questions based on existing literature. This process was reviewed by two researchers involved in the study and a realist approach was applied, whereby the surface level language enabled us to make meaning of the data. Although this process is often not viewed as an analytical method, it is able to provide insightful data. Each de-identified participant was provided with a code to identify them by number and group (e.g. Mother 1, Infant Group—'M1, IG').

Results

Baseline Characteristics

The baseline characteristics of the parents from both the control group and intervention group are illustrated in Table 1. All parents were female and over 90% were married or living with a partner. Mothers had an average age of



bSEIFA stands for the Socio-Economic Indexes for Areas. The number rates the socioeconomic status with lower scores indicative of lower socioeconomic advantage and higher scores indicative of higher socioeconomic advantage

^cChi-square test

^dRIE stands for 'Resources for Infant Educarers'. It is an organization established by infant specialist Magda Gerber to distribute knowledge and resources to parents and early childhood educators

32 (±4.0) years. Most mothers had a relatively high socioeconomic status (SEIFA 7-11), held a university qualification and were engaged in either full time work, part time work, or study. The majority also indicated childcare support from either family, friends or paid care and had an annual family salary of AUD 90,000 or above. There were more mothers in the control group who had more than one child and held a tertiary qualification than mothers in the intervention group. While parents in both groups had heard of 'Resources for Infant Educarers' RIE®, more parents from the intervention group were aware of it.

Attendance Rates

One intervention participant withdrew from the study after week one, due to unforeseen personal circumstances. The remaining intervention participants attended an average of 83.3% (five out of six) of the classes over the six-week period, with one class being the maximum amount missed by any one parent. Reasons for missing classes were one late enrollment and sickness. Participants were contacted via Skype or phone to receive the content covered in the missed class, and to discuss that week's principle. The focus group was attended in person by 84.6% of intervention participants.

Parent Competence and Parent Stress

A significant Time × Group interaction was observed for both parent competence (p=0.004) and parent stress (p=0.010). For the intervention group, there was a significant increase in parent competence (p=0.001), but no significant change was observed in the control group (p=0.787). In contrast, a significant increase in parent stress was evident in the control group post intervention, with 15 of the 19 parents (84%) reporting an increase in their stress level (p=0.017). Conversely, nine out of 11 parents (82%) in the intervention group reported a reduction in stress (p=0.134).

General Depression, Anxiety and Stress

A significant interaction effect of Time × Group was observed in the stress (p=0.026) and depression (p=0.045) components of the DASS over the six-week period. A significant reduction in stress (p=0.004) was evident in the intervention group, whilst a marginal mean reduction in depression was observed (p=0.062) with eight out of 12 parents (67%) reporting a reduction in depression. There were no significant changes observed in either the stress (p=0.989) or depression scores (p=0.353) in the control group (see Fig. 2 and Table 2). The intervention had no significant impact on general anxiety.

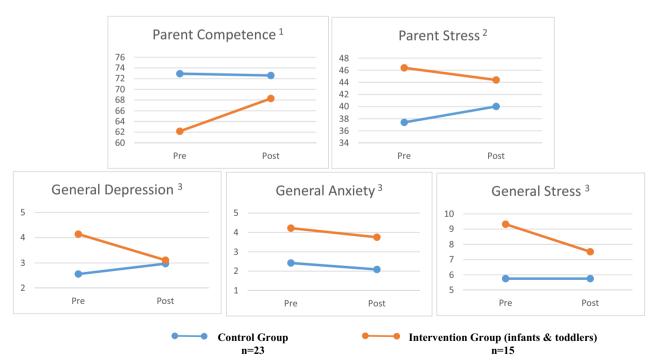


Fig. 2 Comparison between control and intervention groups changes in parent competence, parent stress and general depression, anxiety and general stress measures over a 6-week period. ¹Parent Sense of Competence Scale to measure changes in parent competence, higher scores indicate higher competence (Ohan et al. 2000). ²Parental Stress

Scale used to measure parent stress; higher scores indicate higher parent stress (Berry and Jones 1995). ³Depression, Anxiety and Stress Scale used to measure general depression, anxiety and stress, higher scores indicate higher levels of general depression, anxiety and stress (Parkitny and McAuley 2010)



Table 2 Linear mixed modeling post hoc results for each of the outcome variables for the control group and intervention group (total n = 38)

Outcome	Control $(n = 23)$)	Intervention $(n = 15)$			
	Pre mean (SD)	Post mean (SD)	p value	Pre mean (SD)	Post mean (SD)	p value
Parent Competence ^a	72.9 (3.9)	72.6 (3.9)	0.787	62.2 (3.7)	68.3 (3.8)	0.001
Parent Stress ^b	37.4 (2.8)	40.0 (2.6)	0.017	46.4 (2.7)	44.4 (2.45)	0.134
General Depression ^c	2.6 (0.9)	3.0 (0.9)	0.353	4.1 (0.8)	3.1 (0.9)	0.062
General Anxiety ^c	2.4 (0.8)	2.1 (0.8)	0.412	4.2 (0.7)	3.8 (0.7)	0.338
General Stress ^c	5.8 (1.6)	5.7 (1.5)	0.989	9.3 (1.5)	7.5 (1.5)	0.004

^a'Parent Sense of Competence Scale' was used to measure changes in parent competence

c'Depression, Anxiety and Stress Scale' was used to measure depression, anxiety and general stress

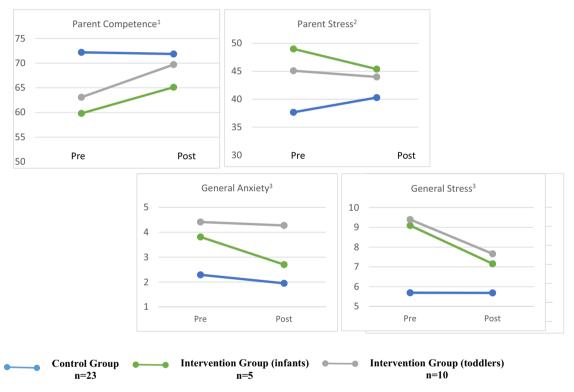


Fig. 3 Comparison between control and infant and toddler intervention groups for changes in parent competence, parent stress and depression, anxiety and general stress measures over a 6-week period. ¹Parent Sense of Competence Scale to measure changes in parent competence, higher scores indicate higher competence (Ohan et al. 2000). ²Parental

Stress Scale used to measure parent stress; higher scores indicate higher parent stress (Berry and Jones 1995). ³Depression, Anxiety and Stress Scale used to measure general depression, anxiety and stress, higher scores indicate higher levels of general depression, anxiety and stress (Parkitny and McAuley 2010)

Three Group Category Comparison: Infant Intervention, Toddler Intervention and Control Group

A significant Time × Group interaction effect was still observed in parent competence (p = 0.016) and parent stress (p = 0.024) when the intervention was split into infant and toddler groups (see Fig. 3 and Table 3). A marginal increase in parent competence was observed in the infant group (p = 0.052), and a significant increase was evident in the toddler group

(p=0.005). No significant change was observed in the control group (p=0.792). Conversely, a significant increase in stress was seen in the control group (p=0.017), while no significant changes in parent stress was observed in both infant (p=0.105) and toddler intervention groups (p=0.503). There was a weak Time × Group interaction effect in general stress (p=0.086) and general depression (p=0.072), with marginal reduction in stress observed in the infant intervention group (p=0.052), while the toddler intervention group observed a



^b'Parental Stress Scale' was used to measure parent stress

Table 3 Linear mixed modeling post hoc results for each of the outcome variables for the control group, infant intervention group and toddler intervention group (total n = 38)

Outcome	Control $(n = 23)$			Infant Intervention $(n = 6)$			Toddler Intervention $(n = 9)$		
	Pre mean (SD)	Post mean (SD)	p value	Pre mean (SD)	Post mean (SD)	p value	Pre mean (SD)	Post mean (SD)	p value
Parent Competence ^a	72.2 (4.1)	71.9 (4.1)	0.792	59.8 (5.6)	65.1 (5.8)	0.052	63.1 (4.3)	69.7 (4.3)	0.005
Parent Stress Scale ^b	37.7 (2.9)	40.3 (2.7)	0.017	49.0 (4.2)	45.4 (3.7)	0.105	45.1 (3.1)	44.0 (2.8)	0.503
Depression ^c	2.8 (0.9)	3.3 (0.9)	0.345	4.9 (1.2)	4.7 (1.4)	0.841	3.9 (0.9)	2.4 (1.0)	0.033
Anxiety ^c	2.3 (0.8)	2.0 (0.8)	0.402	3.8 (1.1)	2.7 (1.1)	0.182	4.4 (0.9)	4.3 (0.8)	0.819
General Stress ^c	5.7 (1.7)	5.7 (1.6)	0.987	9.1 (2.3)	7.2 (2.2)	0.052	9.4 (1.8)	7.7 (1.7)	0.030

^a'Parent Sense of Competence Scale' was used to measure changes in parent competence

reduction in both stress (p = 0.030) and depression (p = 0.033). No significant changes were evident in the control group (p > 0.05 for both stress and depression). No significant changes in general anxiety was noted in any of the groups (p > 0.05).

Covariates

No significant association was observed between any of the covariates with changes in parent confidence, general stress, and anxiety. However, first time parents tended to score lower on the depression (p=0.027) and parent stress (p=0.001) scales. There were more first-time parents in the intervention groups.

Thematic Analysis of Focus Groups

In-person focus groups included five out of six parents from the infant group and nine out of 11 parents from the toddler group. Each focus group session was approximately 35 min long. The main themes were that parents felt relaxed and gained insight into their children's developments and personal intentions as they observed them playing. The modeled interactions with the children by the facilitators assisted parent learning and relieved pressure for parents. The classes were found to be acceptable to parents with one main request amongst the parents for session times earlier than 10am to be made available (see Supplementary Table 2).

Reflecting on Parent's Experience

Parents felt relieved of pressure and more relaxed through observation. Parents from both groups agreed that by attending the classes they were able to 'step back and get a broader perspective' of their parenting, which lessened pressure. Parents reflected their appreciation to be able to observe their child without feeling required to be in charge. This theme was reflected in statements such as:

'Yes, and just being able to observe and not be solely in charge of your child's behaviour. If they do something wrong or try to take something from others, you don't have to jump in there and defend the other child because all the parents we are not all judging each other like we may do in other environments.' Mother 4, Toddler group (M4, TG)

'It definitely feels good to have that pressure off our shoulders, to know that all of us are on the same page, and we're not going to be judged because your kid took a toy away from the other kid...or that your kid is crying, ... it feels like the safest place. A safe place for us as well.' (M2, TG)

Parents in both the infant and toddler groups referred to societal pressures and agreed that attending the classes assisted in alleviating their sense of performance pressure, helping them to refocus on their relationship with their children. They reported that they felt reassured to let their children express themselves without feeling obliged to react, as well as experiencing a sense of calmness and relaxation as they observed their children. These attitudes were expressed through statements such as:

'Because I think there's so much pressure- like "This is what you should do for your kid."... This just made



b'Parental Stress Scale' was used to measure parent stress

^c'Depression, Anxiety and Stress Scale' was used to measure depression, anxiety and general stress

me take a step back and realize that all she needs is me...' (M1, IG)

Parents reflected this same attitude of calmness carried over outside of the parent-child class environment, with one participant reflecting:

'I am more relaxed when he cries and ...have come to understand his personality better. And that crying is a big part of his communication and I can't always make him happy. This seems to help us both!' (M5, IG)

Participants enjoyed attending classes and would recommend them to others. Parents found the classes beneficial, all saying they would recommend them to others because they provide a different perspective to parenting:

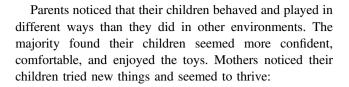
'I love this approach and I'd recommend to everyone because it's the opposite. You don't need any of that stuff, you just need to keep existing with that relationship thing right there.' (M2, IG)

Reflecting on the Inclusion of the Children in Classes

Parents communicated that through the process of observation they began to understand their children as separate people with their own feelings and interests. They came to appreciate their needs to express themselves and explore independently with enjoyment. They reflected on how they were better able to 'tune in to respond' rather than react, by giving their children space and observing them. Parents from the infant group noticed their children's developments, progress, and competencies as they observed them. They felt their children made progress when given space and time. They saw their emotions as developments. They felt like they could trust their children to develop without needing to force them.

'I have a greater understanding of my baby as a little human. I watch his development with more awareness and trust him to accomplish a lot more on his own. I see his genuine delight in concurring tasks. Something I wouldn't have understood before.' (M5, IG)

'I understand that she needs her own space, that she's got her own feelings and she does need to express them, whereas before I was like, she's really just a baby, but that I was always to control everything.' (M7, TG)



'Yes, I loved it. He loved the interaction. He loved the freedom... He had free play, where he doesn't have it all the time. He previously had never really enjoyed it.' (M3, IG)

He's so much more confident here....in his exploring and trying new things... He was thriving in here. (M4, TG)

One parent found her son to be the opposite—less confident and more apprehensive:

I think it's a little bit opposite of what the other mums have said, but he was a little bit more observing... I don't know if he doesn't like to be observed in this environment....' (M2, TG)

The inclusion of children in classes and facilitator modeling assisted parent learning. Parents reflected that they were better able to actively absorb new information through observing the children in their interactions with the environment and other children. They also found the modeling from facilitators useful in feeling more confident in how to handle typical early childhood scenarios (e.g. toddler conflict) as they were witnessed. While many of the mothers agreed that the inclusion of the children assisted them to move from theory to practice, a few suggested the inclusion of 'parent-only' classes to assist them in attaining a greater comprehension of the overarching principles. Parents also felt that they gained from the group format and learnt from the environment set up:

'I've done parenting workshops before where just the parents attend, and they've been good theoretically, but I found this really good to have all the kids together and have to come to terms with their behaviors right here and now.' (M3, TG)

'I actually enjoyed the casualness of having a discussion while the babies were playing. (M1, IG)

'I liked the ability to see the kind of toys that are appropriate, and the modelling of the principles by the teachers.' (M5, IG)

Parents reflected on their own parenting practice through observing their child. Most parents from the toddler group



found themselves reflecting and consolidating their own parenting behaviors and approaches by attending the classes. They felt they were able to become more confident and reassured in how to fulfill their parent role:

'I found the most helpful for me was to notice how much I interrupted, and just more observing him and taking a back seat. I think it's brought attention to my behaviour, how I respond to things, and kind of addressing why I respond in that manner.' (M1, TG)

'I kind of like the confidence that I got from the group.... It's good. Back home - I was ... wondering if I'm doing the right thing all the time, not really knowing what's a good approach... (M4, TG)

Reflecting on Class Format and Content

The class length was appropriate practically, although class format and content amount were debated by participants. Most parents found the length of the classes suitable for them and their children practically. The combination of observing the child and gathering information strengthened their understanding, however, sometimes it can be difficult to absorb the content:

'Yes, one hour was a good amount of time for my daughter to warm up without becoming over tired.' (M10, TG)

'I just think that comes back to not having enough time. Everything was so important; you don't want to rush any one thing. I don't know how you would shift the focus to the discussion, without cutting into the hands-off time. (M2, IG)

'I think the length of it, probably more time on the actual topic would be better. I think we found that a lot of time that we were all observing, which was great, but when I left, I was like, "What did we talk about?" (M3, IG)

Reflection activities were useful and helped with a sense of accountability. Parents found the weekly challenges assisted them to reflect further on topics discussed in class and adapt them into their daily parenting practices:

'I found the...weekly activities helpful, to actually try things out on a deadline sort of thing (M6, TG)

Most parents requested earlier class times and electronic information in advance. Parents all reflected that they would

have preferred the option of an early morning class time as opposed to mid-morning or midday:

'I would say the time made it difficult. Would've been easier just an hour earlier. (M2, IG)

'A slightly earlier session would have worked better as usually 11am is my daughter's nap time, so she would have probably been more interactive if the class was earlier in the morning.' (M10, TG)

Parents would have preferred receiving information on the principles prior to that class as opposed to after each class so they felt prepared to discuss the topic of the week.

Parents suggested being provided with topic information prior to attending the class in order to feel prepared to engage in group discussion. They felt they would gain from visual and written content in the class notifying them of the principle for that week:

'I don't know maybe when you did the handout at the end of the class that was for what we had just discussed. I probably would have found it more helpful to find out what we were going to discuss next time. Then we could read over it (in advance) and have our heads around what we were going to talk about. (M4, TG)

Parents preferred the use of digital information and links as opposed to paper and made suggestions regarding digital platforms. Parents found paper handouts helpful but said that being required to type in web addresses for resources was off-putting, instead they would have preferred digital links they could just click on. Facebook was identified as a useful portal to communicate information, with parents finding they consolidated principles through information and links provided on it. They want information easily accessible digitally and suggested their phone rather than email. Information on how to set up specific groups to promote discussion on Facebook was also suggested:

'The paper stuff that you gave us the links, I have to say, I haven't gone patiently in reading that sort of thing but on Facebook I'll read or watch a video or YouTube clip.' (M3, IG)

Discussion

In this discussion section we will discuss both the quantitative findings and the findings from the focus group that



support them. The results revealed that parents in the 'Respectful Approach' intervention group demonstrated a statistically significant improvement in competence and general stress, whereas the control group remained unchanged in relation to these. Our results are comparable to the therapeutic 'WWW' intervention for mother-infant dyads, that also found improved competence and stress scores in mothers after engaging in observation of their infant in self-initiated activity (Cohen et al. 1999; Tucker 2006) and other studies that have explored short-term group interventions during infancy and toddlerhood in clinical and at-risk populations (Hayes et al. 2007; Levi et al. 2019). With limited studies exploring parent competence and stress in parents of children under age two in universal populations to compare our results with (Barlow et al. 2014; Stewart-Brown 2008), they were best supported by a study conducted with a universal sample of mothers of infants, that utilized a program that incorporated non-judgmental observation. Mothers who attended this mindfulness-based intervention in early parenting displayed significant improvements in competence and general stress compared to controls (Perez-Blasco et al. 2013). In the general population, new parents receive guidance that is primarily concerned with baby care and practical skills through routine hospital and health nurse schedules. There is less support for all parents' psychosocial preparation and wellbeing (Ateah 2013; Buultjens et al. 2017). All new parents' confidence may be improved with interventions that encourage them to explore psychosocial elements of early parenting.

Focus group feedback expanded upon the quantitative results, suggesting that parents felt relieved of pressure and more confident in their parenting practices and interactions with their children. They expressed opinions regarding the impact of observation to promote reflecting on their own parent practice and appreciation for their children's developments. These findings are consistent with previous studies incorporating non-intrusive observation (King et al. 2015; Reynolds 2003), for example parents from a study that implemented a group class based on 'WWW' called 'Together Time' reported that observing their children as they played independently assisted their ongoing parentinfant interactions (French 2011), also validated by earlier findings (Muir 1992). Observation provides opportunities for the parents to simply 'be' with their children, appreciate their capabilities and acknowledge their struggles, which strengthens bonds and relieves the parent of their own agenda (Da Ros and Wong 1996; McBride 1998). Another study that explored a parent-child observation based classes based on RIE® principles, also found via interviews that parents felt less pressure and urgency to be in control as they watched their child's actions unfolding (Lee 2016).

One of Magda Gerber's mantras was to 'observe more, do less, enjoy most', it emphasizes an adjustment to parents' expectations of themselves and resulting stress and intrusiveness into their children's world (Gerber 2002). Parents ability to reflect in such a way about their own and their child's state of mind can cause them to alter their behaviors in parent-child interactions (Slade 2005).

Parents of toddlers and infants tended to respond differently to the intervention. Parents of toddlers demonstrated the greatest increase in competence and decrease in depression over the six weeks. This may be due to the parents' need to adopt new skills to facilitate their children's newfound mobility and desire for autonomy in toddlerhood, with parent competence playing a significant role in the acquisition of new parenting skills. In our study, parents of toddlers revealed that the classes caused them to reflect on their parent practice and perceptions of their child's behaviors. This type of parental reflection has previously been correlated with increased parent confidence (Coleman and Karraker 2003). Thematic analysis of our focus groups revealed that the process of observation supported parents to recognize their baby as a separate human being with their own interests. Other studies have confirmed a link between recognizing infants individual state of mind and parents' ability to regulate their stress in response to them (Rutherford et al. 2013). The presumption of many parenting interventions is that increasing knowledge will improve parenting behavior (Gilmer et al. 2016). However, improving the way in which parents perceive and relate to their child may be a better approach to support the wellbeing of both parents and children (Sher-Censor et al. 2018; Stewart-Brown 2008). Further formal investigation relating to the impact of the Respectful Approach intervention on parent perceptions of their children would be beneficial.

The focus group themes also revealed overall parent satisfaction with the program content and structure, with confirmation of this by our low rates of attrition. Positive feedback regarding the appreciation of qualified facilitators and the group dynamic with children in a similar age range could be explanations for this (Bunting 2004; Gilmer et al. 2016). Parents requested additional parent only sessions in order to absorb the application of principles in more detail, consistent with previous findings that a majority of first time mothers desire extended content and time with professionals in order to gain new skills with their children (Wiklund et al. 2018). In addition, parents agreed that digital information was more easily accessible and relevant than paper, consistent with other studies, suggesting that digital technology is preferred, with social media emphasized as a relevant platform for sharing resources and engaging in support (Baker and Yang 2018; Sanders et al. 2012).



Limitations

This project was a pilot study intended to provide an initial investigation to evaluate the potential for the Respectful Approach intervention to support early parenting. The data provides preliminary support to suggest it may improve parent confidence and stress; however, these findings need to be considered with relevant caution due to some limitations. Participants self-enrolled, introducing some degree of bias to the external validity of our study. Although it is not possible to know how this may have impacted on the results, both sample bias and selfselection bias must be considered in interpreting the findings outlined. It is possible that parents who were experiencing greater difficulties at the time of recruitment were more inclined to participate in our study (Larzelere et al. 2004). We are therefore not able to generalize our results to the wider population. Participants also selected to join either the intervention or control group, the lack of randomization compromises the internal validity of this study. Our results indicate the intervention participants were predominantly first-time mothers. The literature suggests first time parents have lower levels of competence than multiparas, due to lack of knowledge and experience (Liyana Amin et al. 2018). Therefore, they often tend to respond better overall and experience an increase in competence with interventions (Jones and Prinz 2005; Leahy-Warren and McCarthy 2011). Siblings were not permitted to attend the classes so that the parents could focus on their infant or toddler and this may have affected recruitment of parents with multiple children. In addition, mothers in our control group were more likely to have university qualifications than mothers in the intervention group. Level of maternal education has been found to be related to levels of self-efficacy (Leahy-Warren and McCarthy 2011). Although results were promising, it is important to note that parents in the control group did not receive any attention as a part of this study. Therefore, parents in the intervention group may have improved due to the additional attention they received and not necessarily because of the intervention. Although we did not restrict our study to mothers, our subjects included mother-child dyads only and we cannot extrapolate our results to fathers. Our study also utilized self-reported questionnaires, which may produce inaccuracies due to misinterpretation of questions or the influence of social desirability (Morsbach and Prinz 2006). The addition of the focus group strengthens the study by adding a qualitative study component, however it is important to acknowledge the active roles of the researchers and likely assumptions brought to the linking of themes from the data set (Braun and Clarke 2006; Gill et al. 2008). Our small sample size resulted in minimal diversity in the sample characteristics (see Table 1) and narrower intervals for modeling, however we found adjusting for two categories, three categories and the inclusion of the covariates did not significantly impact the output results.

Practical Implications

Results of this study provide justification for the development of a large, randomized control trial investigating a relationship-based early parenting intervention (for parents of children under age two years old) to improve parent wellbeing at a universal level. The core principles applied in the Respectful Approach intervention, including child autonomy, may also improve child outcomes, such as selfregulation, competence, attachment security and comprehensive milestone development. We therefore suggest that future studies also consider child outcomes, and assessment of parent's reflective functioning to provide an indication of the parent-child relationship. Furthermore, the literature recommends the inclusion of fathers in parenting interventions to promote a community of care in the family unit (Panter-Brick et al. 2014). In summary, our findings support further research into the use of the Respectful Approach as a potential supportive intervention for parents in Australia.

Data availability

All data are available at the Open Science Framework (https://osf.io/6t7c4/).

Acknowledgements We would like to acknowledge the contribution of Mrs. Emily McDonald from 'Being with Baby', Western Australia, for her assistance with facilitating the parent-child classes for this study. We would also like to thank our participants and local community organizations in the City of Joondalup and the City of Wanneroo for supporting us with our recruitment process.

Author Contributions A.C.R., L.P and T.O.S. conceptualized and designed the study. A.C.R. conducted the intervention with supervision from TOS. A.C.R. performed the data analysis with statistical support from J.L. J.L., L.P. and T.O.S. assisted with interpretation of results. All authors critically reviewed the manuscript.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval Ethics approval was provided through the Edith Cowan University (ECU) Human Research Ethics Committee for this study (project code: 27263) and all participants provided informed consent.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



References

- Ansay, S. J., Perkins, D. F., & Nelson, J. (2004). Interpreting outcomes: using focus groups in evaluation research. *Family Relations*, 53(3), 310–316. https://doi.org/10.1111/j.0022-2445.2004.0007.x.
- Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological Assessment*, 10, 176–181. https://doi.org/10.1037/1040-3590.10.2.176.
- Ateah, C. A. (2013). Prenatal parent education for first-time expectant parents: "Making it through labor is just the beginning...". *Journal of Pediatric Health Care*, 27, 91–97. https://doi.org/10. 1016/j.pedhc.2011.06.019.
- Australian Bureau of Statistics. (2018). Socio-economic indexes for areas (SEIFA) 2016. Australian Bureau of Statistics. https://www.abs.gov.au/.
- Baker, B., & Yang, I. (2018). Social media as social support in pregnancy and the postpartum. *Sexual & Reproductive Health-care*, 17, 31–34. https://doi.org/10.1016/j.srhc.2018.05.003.
- Bakermans-Kranenburg, M. J., van Ijzendoorn, M. H., & Juffer, F. (2005). Disorganized infant attachment and preventive interventions: a review and meta-analysis. *Infant Mental Health Journal*, 26, 191–216. https://doi.org/10.1002/imhj.20046.
- Barlow, J., Smailagic, N., Ferriter, M., Bennett, C., & Jones, H. (2010). Group-based parent-training programmes for improving emotional and behavioural adjustment in children from birth to three years old. *The Cochrane Database of Systematic Reviews*, 3, CD003680. https://doi.org/10.1002/14651858.CD003680. pub2.
- Barlow, J., Smailagic, N., Huband, N., Roloff, V., & Bennett, C. (2014). Group-based parent training programmes for improving parental psychosocial health. *Cochrane Database of Systematic Reviews*, 5, CD002020. https://doi.org/10.1002/14651858. CD002020.pub4.
- Bennett, C. T., Buchan, J. L., Letourneau, N., Shanker, S. G., Fenwick, A., Smith-Chant, B., & Gilmer, C. (2017). A realist synthesis of social connectivity interventions during transition to parenthood: the value of relationships. *Applied Nursing Research*, 34, 12–23. http://www.sciencedirect.com/science/article/pii/S0897189716303032.
- Berry, J. O., & Jones, W. H. (1995). The Parental Stress Scale: Initial psychometric evidence. *Journal of Social and Personal Relationships*, 12, 463–472. https://doi.org/10.1177/0265407595123009.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Bunting, L. (2004). Parenting programmes: the best available evidence. *Child Care in Practice*, 10, 327–343. https://doi.org/10. 1080/1357527042000285510.
- Bussey, K., & Hill, D. (2017). Care as curriculum: Investigating teachers' views on the learning in care. Early Child Development and Care, 187, 128–137. https://doi.org/10.1080/03004430.2016.
- Buultjens, M., Murphy, G., Robinson, P., Milgrom, J., & Monfries, M. (2017). Women's experiences of, and attitudes to, maternity education across the perinatal period in Victoria, Australia: a mixed-methods approach. Women and Birth, 30, 406–414. https://doi.org/10.1016/j.wombi.2017.03.005.
- Chahin, E. (2008). Caregiving with respect: important lessons from the Pikler institute. Exchange: The Early Childhood Leaders' Magazine Since 1978, 30(5), 40–42. http://www.childcareexchange.com.

- Cohen, N. J., Muir, E., Lojkasek, M., Muir, R., Parker, C. J., Barwick, M., & Brown, M. (1999). Watch, wait, and wonder: testing the effectiveness of a new approach to mother-infant psychotherapy. *Infant Mental Health Journal*, 20, 429–451. https://doi.org/10.1002/(SICI)1097-0355(199924)20:43.0.CO;2-Q.
- Coleman, P. K., & Karraker, K. H. (2003). Maternal self-efficacy beliefs, competence in parenting, and toddlers' behavior and developmental status. *Infant Mental Health Journal*, 24, 126–148. https://doi.org/10.1002/imhj.10048.
- Cooper, M., Hedges, H., & Dixon, H. (2014). Weaving RIE with Te Whāriki: re-thinking family involvement in assessment of learning dispositions. *Early Child Development and Care*, 184, 733–748. https://doi.org/10.1080/03004430.2013.818987.
- Crncec, R., Barnett, B., & Matthey, S. (2008). Development of an instrument to assess perceived self-efficacy in the parents of infants. *Research in Nursing and Health*, 31, 442–453. https:// doi.org/10.1002/nur.20271.
- Crncec, R., Barnett, B., & Matthey, S. (2010). Review of scales of parenting confidence. *Journal of Nursing Measurement*, 18, 210–240. https://doi.org/10.1891/1061-3749.18.3.210.
- Da Ros, D. A., & Wong, A. (1996). The art of being fully in the present with young children. *Early Childhood Education Journal*, 23, 215–216. https://doi.org/10.1007/BF02353339.
- Don, B. P., Chong, A., Biehle, S. N., Gordon, A., & Mickelson, K. D. (2014). Anxiety across the transition to parenthood: change trajectories among low-risk parents. *Anxiety, Stress, And Coping*, 27, 633–649. https://doi.org/10.1080/10615806.2014.903473.
- Dunning, M. J., & Giallo, R. (2012). Fatigue, parenting stress, self-efficacy and satisfaction in mothers of infants and young children. *Journal of Reproductive and Infant Psychology*, 30, 145–159. https://doi.org/10.1080/02646838.2012.693910.
- Enebrink, P., Danneman, M., Benvestito Mattsson, V., Ulfsdotter, M., Jalling, C., & Lindberg, L. (2015). ABC for parents: pilot study of a universal 4-session program shows increased parenting skills, selfefficacy and child well-being. *Journal of Child and Family Studies*, 24, 1917–1931. https://doi.org/10.1007/s10826-014-9992-6.
- French, N. (2011). Learning to wonder together: a group approach to work with parents and infants in a community setting. *Infant Observation*, 14, 75–88. https://doi.org/10.1080/13698036.2011. 552638
- Gerber, M. (2002). Dear parent: caring for infants with respect (J. Weaver, Ed. Expanded ed.). Los Angeles, CA: Resources for Infant Educarers (RIE).
- Gerber, M. (Ed.). (2013). *The RIE manual: for parents and professionals* (Expanded ed.). Los Angeles, CA: Resources for Infant Educarers (RIE).
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204, 291–295. https://doi.org/10. 1038/bdj.2008.192.
- Gilmer, C., Buchan, J. L., Letourneau, N., Bennett, C. T., Shanker, S. G., Fenwick, A., & Smith-Chant, B. (2016). Parent education interventions designed to support the transition to parenthood: a realist review. *International Journal of Nursing Studies*, 59, 118–133. https://doi.org/10.1016/j.ijnurstu.2016.03.015.
- Gilmore, L., & Cuskelly, M. (2009). Factor structure of the parenting sense of competence scale using a normative sample. *Child Care, Health and Development*, 35, 48–55. https://doi.org/10.1111/j. 1365-2214.2008.00867.x.
- Harmeyer, E., Ispa, J. M., Palermo, F., & Carlo, G. (2016). Predicting self-regulation and vocabulary and academic skills at kindergarten entry: the roles of maternal parenting stress and mother-child closeness. *Early Childhood Research Quarterly*, 37, 153–164. https://doi.org/10.1016/j.ecresq.2016.05.001.



- Hayes, L., Matthews, J., Copley, A., & Welsh, D. (2007). A randomized controlled trial of a mother-infant or toddler parenting program: Demonstrating effectiveness in practice. *Journal of Pediatric Psychology*, 33, 473–486. https://doi.org/10.1093/jpepsy/jsm085.
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): construct validity and normative data in a large non-clinical sample. *The British Journal of Clinical Psychology*, 44, 227–239. https://doi.org/10. 1348/014466505X29657.
- Hiscock, H., Bayer, J., & Wake, M. (2005). Preventing toddler externalising behaviour problems: pilot evaluation of a universal parenting program. *International Journal of Mental Health Promotion*, 7, 54–60. https://doi.org/10.1080/14623730.2005.9721866.
- Hoffman, K. T. (2006). Changing toddlers' and preschoolers' attachment classifications: the circle of security intervention. *Journal of Consulting and Clinical Psychology*, 74, 1017–1026. https://doi.org/10.1037/0022-006X.74.6.1017.
- Huber, A., McMahon, C., & Sweller, N. (2016). Improved parental emotional functioning after Circle of Security 20-week parent-child relationship intervention. *Journal of Child and Family Studies*, 25, 2526–2540. https://doi.org/10.1007/s10826-016-0426-5.
- Hudson, D. B., Elek, S. M., & Fleck, C. M. (2001). First-time mothers' and fathers' transition to parenthood: infant care self-efficacy, parenting satisfaction, and infant sex. *Issues in Comprehensive Pediatric Nursing*, 24, 31–43. https://doi.org/10.1080/014608601300035580.
- Johnston, C., & Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology*, 18, 167–175. https://doi.org/10.1207/s15374424jccp1802_8.
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: a review. *Clinical Psychology Review*, 25, 341–363. https://doi.org/10.1016/j.cpr.2004.12.004.
- King, K. L., Priddis, L. E., & Kane, R. T. (2015). Enhancing maternal sensitivity and emotional wellbeing through a preventative parent-child relationship intervention in a community setting. *Journal of Child and Family Studies*, 24, 1582–1592. https://doi. org/10.1007/s10826-014-9962-z.
- Kristensen, I. H., Simonsen, M., Trillingsgaard, T., Pontoppidan, M., & Kronborg, H. (2018). First-time mothers' confidence mood and stress in the first months postpartum. A cohort study. Sexual & Reproductive Healthcare, 17, 43–49. https://doi.org/10.1016/j. srhc.2018.06.003.
- Larzelere, R. E., Kuhn, B. R., & Johnson, B. (2004). The intervention selection bias: an underrecognized confound in intervention research. *Psychological Bulletin*, 130, 289–303. https://doi.org/ 10.1037/0033-2909.130.2.289.
- Leahy-Warren, P., & McCarthy, G. (2011). Maternal parental self-efficacy in the postpartum period. *Midwifery*, 27, 802–810. https://doi.org/10.1016/j.midw.2010.07.008.
- Lee, J. G (2016). What happened to the children? How to support the development of empathy in infants. Pasadena, CA: Pacific Oaks College.
- Leigh, B., & Milgrom, J. (2008). Risk factors for antenatal depression, postnatal depression and parenting stress. BMC Psychiatry, 8, 24–35. https://doi.org/10.1186/1471-244X-8-24.
- Lessenberry, B. M., & Rehfeldt, R. A. (2004). Evaluating stress levels of parents of children with disabilities. *Exceptional Children*, 70, 231–244. https://doi.org/10.1177/001440290407000207.
- Levi, D., Ibrahim, R., Malcolm, R., & MacBeth, A. (2019). Mellow Babies and Mellow Toddlers: effects on maternal mental health of a group-based parenting intervention for at-risk families with young children. *Journal of Affective Disorders*, 246, 820–827. https://doi. org/10.1016/j.jad.2018.12.120.
- Liyana Amin, N. A., Tam, W. W. S., & Shorey, S. (2018). Enhancing first-time parents' self-efficacy: a systematic review and meta-

- analysis of universal parent education interventions' efficacy. *International Journal of Nursing Studies*, 82, 149–162. https://doi.org/10.1016/j.ijnurstu.2018.03.021.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: comparison of the Depression Anxiety Stress Scales (DASS) with the Beck depression and anxiety inventories. Behaviour Research and Therapy, 33, 335–343. https://doi.org/10.1016/0005-7967(94)00075-U.
- McBride, H. (1998). Playing eye-to-eye [Watch, Wait & Wonder program]. *Chatelaine*, 71, 24.
- Miller, R. L., Pallant, J. F., & Negri, L. M. (2006). Anxiety and stress in the postpartum: is there more to postnatal distress than depression? *BMC Psychiatry*, 6, 12. https://doi.org/10.1186/1471-244X-6-12.
- Morsbach, S. K., & Prinz, R. J. (2006). Understanding and improving the validity of self-report of parenting. *Clinical Child and Family Psychology Review*, 9, 1–21. https://doi.org/10.1007/s10567-006-0001-5
- Muir, E. (1992). Watching, waiting, and wondering: applying psychoanalytic principals to mother-infant intervention. *Infant Mental Health Journal*, 13, 319–328. https://doi.org/10.1002/1097-0355(199224)13:43.0.CO;2-2.
- Muir, E., Lojkasek, M., & Cohen, N. (1999). Observant parents: intervening through observation. *Infant Observation*, 3, 11–23. https://doi.org/10.1080/13698039908400851.
- Ohan, J. L., Leung, D. W., & Johnston, C. (2000). The parenting sense of competence scale: evidence of a stable factor structure and validity. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 32, 251–261. https://doi. org/10.1037/h0087122.
- Panter-Brick, C., Burgess, A., Eggerman, M., McAllister, F., Pruett, K., & Leckman, J. F. (2014). Practitioner review: engaging fathers—recommendations for a game change in parenting interventions based on a systematic review of the global evidence. *Journal of Child Psychology and Psychiatry*, 55, 1187–1212. https://doi.org/10.1111/jcpp.12280.
- Parkitny, L., & McAuley, J. (2010). The Depression Anxiety Stress Scale (DASS). *Journal of Physiotherapy*, 56, 204. https://doi.org/ 10.1016/S1836-9553(10)70030-8.
- Perez-Blasco, J., Viguer, P., & Rodrigo, M. F. (2013). Effects of a mindfulness-based intervention on psychological distress, wellbeing, and maternal self-efficacy in breast-feeding mothers: results of a pilot study. Archives of Women's Mental Health, 16, 227–236. https://doi.org/10.1007/s00737-013-0337-z.
- Petch, J., & Halford, W. K. (2008). Psycho-education to enhance couples' transition to parenthood. *Clinical Psychology Review*, 28, 1125–1137. https://doi.org/10.1016/j.cpr.2008.03.005.
- Petrie, S., & Owen, S. (Eds.). (2005). Authentic relationships in group care for infants and toddlers—Resources for Infant Educarers (RIE) principles into practice. Philadelphia: Jessica Kingsley Publishers. http://catdir.loc.gov/catdir/toc/ecip0422/2004019597. html.
- Pikler, E. (1968). Some contributions to the study of the gross motor development of children. *The Journal of Genetic Psychology*, 113, 27–39. https://doi.org/10.1080/00221325.1968.10533806.
- Reichle, B., Backes, S., & Dette-Hagenmeyer, D. E. (2012). Positive parenting the preventive way: transforming research into practice with an intervention for new parents. *European Journal of Developmental Psychology*, 9, 33–46. https://doi.org/10.1080/ 17405629.2011.629037.
- Reynolds, D. (2003). Mindful parenting: a group approach to enhancing reflective capacity in parents and infants. *Journal of Child Psychotherapy*, 29, 357–374. https://doi.org/10.1080/00754170310001625413.
- Rogers, H., & Matthews, J. (2004). The Parenting Sense of Competence Scale: investigation of the factor structure, reliability, and



- validity for an Australian sample. *Australian Psychologist*, *39*, 88–96. https://doi.org/10.1080/00050060410001660380.
- Rutherford, H. J. V., Goldberg, B., Luyten, P., Bridgett, D. J., & Mayes, L. C. (2013). Parental reflective functioning is associated with tolerance of infant distress but not general distress: evidence for a specific relationship using a simulated baby paradigm. *Infant Behavior and Development*, 36, 635–641. https://doi.org/10.1016/j.infbeh.2013.06.008.
- Sanders, M. R., Baker, B., & Turner, K. M. T. (2012). A randomized controlled trial evaluating the efficacy of Triple P online with parents of children with early-onset conduct problems. *Behaviour Research and Therapy*, 50, 675–684. https://doi.org/10.1016/j.bra t.2012.07.004.
- Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-Positive Parenting Program: a systematic review and meta-analysis of a multi-level system of parenting support. Clinical Psychology Review, 34, 337–357. http://www.sciencedirect.com/science/article/pii/S0272735814000683.
- Sher-Censor, E., Shulman, C., & Cohen, E. (2018). Associations among mothers' representations of their relationship with their toddlers, maternal parenting stress, and toddlers' internalizing and externalizing behaviors. *Infant Behavior and Development*, 50, 132–139. https://doi.org/10.1016/j.infbeh.2017.12.005.
- Slade, A. (2005). Parental reflective functioning: an introduction. Attachment & Human Development, 7(3), 269–281.
- Stewart-Brown, S. (2008). Improving parenting: the why and the how. *Archives of Disease in Childhood*, 93, 102.
- Suskind, D. (1993). Parent 'N' me parent-infant guidance class. Massachusetts, USA: Fitchburg State College.

- Sutton, C., Murray, L., & Glover, V. (2012). Support from the start: effective programmes from birth to two years. *Journal of Children's Services*, 7, 18–28. https://doi.org/10.1108/17466661211213643.
- Tardos, A. (2010). Introducing the Piklerian developmental approach: history and principles. *The Signal: Newsletter of the World Association for Infant Mental Health*, *18*, 1–30. https://mafiadoc.com.
- Tellegen, C. L., & Sanders, M. R. (2014). A randomized controlled trial evaluating a brief parenting program with children with autism spectrum disorders. *Journal of Consulting and Clinical Psychology*, 82, 1193–1200. https://doi.org/10.1037/a 0037246.
- Triulzi, M. (2008). Do the Pikler and RIE methods promote infantparent attachment? Smith College School for Social Work, Northampton, MA: Unpublished doctoral dissertation or master's thesis. https://ly.smith.edu/ef/etd7235.
- Tucker, J. (2006). Using video to enhance the learning in a first attempt at 'Watch, Wait and Wonder'. *Infant Observation*, 9, 125–138. https://doi.org/10.1080/13698030600810359.
- Wiklund, I., Wiklund, J., Pettersson, V., & Boström, A. M. (2018). New parents' experience of information and sense of security related to postnatal care: A systematic review. Sexual & Reproductive Healthcare, 17, 35–42. https://doi.org/10.1016/j.srhc. 2018.06.001.
- Williford, A. P., Calkins, S. D., & Keane, S. P. (2007). Predicting change in parenting stress across early childhood: child and maternal factors. *Journal of Abnormal Child Psychology*, 35, 251–263. https://doi.org/10.1007/s10802-006-9082-3.

