Title:

Feasibility of the NCTSN Breakthrough Parenting Curriculum: A pilot study of an online trauma-informed training for birth parents involved in the child welfare system

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Abstract

Unresolved trauma can negatively impact parenting and increase chances of child maltreatment. With the passing of the Family First Prevention Services Act (FFPSA) in 2018, new attention has been focused on strengthening family connections and expanding the community-based service array focused on preventing maltreatment and out-of-home placement. The purpose of this paper is twofold: (1) to describe preliminary outcomes from a pilot evaluation of a new curriculum teaching parents trauma-informed strategies to address and resolve their own trauma while supporting healthy attachment with their children; and (2) assess the feasibility of conducting a large-scale study. Forty parents involved in the state child welfare system were recruited to participate. Statistical analyses included T-tests, propensity score analysis, and repeated measures MANOVA. Assessments were administered at pre and postintervention and comparable times for the quasi-waitlist group. Results indicated: a high retention rate (72%) for the intervention group; an increase in parent knowledge of trauma, skills to address trauma behavior, and parent well-being for the intervention, relative to the waitlist comparison group; and a decrease in child problem behavior in the intervention, relative to the waitlist group. Fidelity data was strong, with trainers completing 100% of activities for each module. Parental satisfaction in the intervention group was also high. Costs to implement the training were reasonable. The findings of this pilot study provide strong support for evaluating the BPC in a large-scale outcome investigation.

Introduction

Trauma can affect people in profound ways that persist throughout the lifespan (Van der Kolk, 2005). The trauma response can cause changes in neurodevelopment that alter the limbic system's response to stress and limit a person's self-regulation and emotional expression, their ability to trust and attach to others, and may predispose them to subsequent trauma (Lubit et al., 2003; Lyons-Ruth & Jacobvitz, 1999; Schore, 2009). Intervention efforts to treat trauma and alleviate symptoms hinge on the person being in a safe and trusting relationship (Geller & Porges, 2014). For children, this can mean the relationship with a therapist, but is also embedded in a safe space with their parents or caretakers (Geller & Porges, 2014; Isobel et al., 2018).

Relational trauma, such as when someone has been abused by a close relative, can interrupt healthy attachment and relational skills, making close, intimate relationships difficult or avoided (Amos et al., 2011; Schore, 2009). For adults, these effects are often barriers to forming adult friendships and romantic attachments but can also create issues with healthy attachment and interaction in the parent-child relationship (Amos et al., 2011). Parents who have experienced trauma may have difficulty providing support to their children due to their own traumatization symptoms and attachment difficulties (Schwerdtfeger & Goff, 2007). In fact, children whose parents experienced trauma can exhibit similar symptoms to their parents despite never having exposure to the traumatic event themselves (Giladi & Bell, 2013; O'Neill et al., 2013).

Kellerman (2001) hypothesized that this intergenerational transfer of trauma potentially occurs through unconscious displacement of emotions from the parent to the

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child, through the sharing of social norms, through family dynamics and ways of interacting, and/or via neural organization passed from parent to child. Regardless of the mechanism, the transfer of trauma from parent to child increases the child's vulnerability to being traumatized themselves and may limit the parent's ability to provide a psychologically safe space to bond with and support their child (Isobel et al., 2018; Salberg, 2015).

Caring for a child or youth who has experienced trauma can be challenging and difficult, especially when the caregiver may have had similar traumatic experiences. Unresolved trauma in a parent can negatively impact parenting and interfere with healthy decision-making (Iyengar et al., 2014). The experience of trauma can lead to traumatic stress reactions that can be confusing, frustrating, and overwhelming for both parents and children. Traumatic stress reactions and other responses to trauma can cause children to behave in ways that may baffle parents, teachers, and other caregivers (Prather & Golden, 2009). Relationships with adults, and even with their peers, may feel shaky or unpredictable, and parenting needs may be very complex. Parents may need specific tools that educate them about the impact of trauma on themselves and their children, while providing information, skills and strategies for understanding, healing, hope and growth.

Isobel and colleagues (2018) highlighted the potential for effective traumainformed strategies to both address and resolve parents' trauma and support attachment between parent and child to improve family well-being. In this paper, we describe a new curriculum developed for parents involved in the child welfare system whose children have experienced trauma, called the B*reakthrough Parent Curriculum (BPC): Navigating*

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Trauma Across Generations. The program was designed to teach trauma-informed parenting practices to support the child, but also addresses parents' own unresolved trauma and its effects on the parent-child relationship. Our primary objectives in this study was to report the preliminary findings of the intervention and ascertain whether a full-scale evaluation of the curriculum is warranted and feasible.

Background

The Family First Prevention Services Act (FFPSA), passed in 2018, focused new attention and resources on strengthening family connections to reduce trauma and improve outcomes for children in the child welfare system. For decades, federal entitlement funding had supported services for children in foster care. The FFPSA extended these funds to also provide evidence-based services to families in an effort to maintain children safely at home without the need for foster care (H.R. 1892). Many have welcomed the legislation as a step in the right direction toward family preservation and prevention of trauma associated with out-of-home placements (Testa & Kelly, 2020); however, service provision is designated only to programs identified as a promising practice on the Title IV-E Prevention Services Clearinghouse (PSC). This requirement constrains service provision, particularly in rural states where there is a limited workforce and service array. In response, Lindell et al. (2020) called for quality evaluations and identification of more prevention services that meet criteria as a promising practice for Title IV-E Prevention Services Clearinghouse funding eligibility. Addressing the variety of needs and severity levels of a diverse group of families served by the system is critical to leverage the opportunities available through FFPSA (Lindell et al., 2020). To that end, this study aimed to test the efficacy of the BPC, potentially for inclusion as clearinghouse-recognized prevention service.

Parent Curriculum Development

In 2011, the National Child Traumatic Stress Network (NCTSN), funded under the Substance Use and Mental Health Services Administration of the US Department of Health and Human Services, developed the training called *Caring for Children Who Have Experienced Trauma: A Workshop for Resource Parents (RPC)*. Developed by Catherine A. Grillo, Deborah A. Lott, and the Foster Care Subcommittee of the Child Welfare Committee of the NCTSN the RPC aims to educate foster, adoptive and kin caregivers about the impact of trauma on the development, relationships, emotions and behaviors of the children in their care (NCTSN, 2011). The RPC successfully increased parent self-efficacy, knowledge and skills related to traumainformed parenting, while decreasing caregiver stress, and perceptions of children's negative behaviors (Gigengack et al., 2017; Murray et al., 2019; Strolin-Goltzman et al., 2018;. Sullivan et al., 2016).

Breakthrough Parenting Curriculum (BPC)

Considering the successful outcomes associated with the RPC, the NCTSN embarked on the development of a parallel curriculum for birth parents–*The Breakthrough Parenting Curriculum (BPC): Navigating Trauma Across Generations* (Walsh et al., 2021), the focus of this paper. The first draft of this curriculum was completed, and pilot tested in 2016 in two counties in California. Based on the feedback gathered from that process, as well as feedback from an expert committee, an updated version of the curriculum was finalized in Spring of 2021 in collaboration with affiliates from [University X blinded for review]. The curriculum development team included trauma-informed system specialists, parent partners, content specialists, training specialists, evaluators and two trauma-informed equity consultants. The trauma-informed equity consultants performed an audit, providing feedback to be incorporated in the revised curriculum. Each of the consultants reviewed the participant and facilitator guides and identified areas that de-centered people living with multiple marginalized experiences (e.g., Black, Indigenous, people of color, LGBTQ, neurodivergent, disabled, religious minorities, etc.) suggesting revisions to language. They also made recommendations about the delivery of the content to increase the trauma-informed pedagogical approaches utilized by facilitators.

The BPC is a 10-module course differs from the RPC in that it is specifically designed for parents who have been involved with (or are at risk of being involved with) the public child welfare system. The ten modules aim to enhance knowledge, skills, and social connections in a trauma-informed, culturally responsive, and accessible format that allows space for parents to learn alongside one another. The overarching focus is on strengthening family connections through engaging material that teaches about the impact of trauma on the development, attachment, emotions, behaviors, and challenges of parenting a child who has experienced trauma, while having experienced their own trauma (Walsh et al., 2021).

The modules cover topics such as: trauma-informed parenting; parent recognition of stress response and self-care; understanding the effects of trauma and resilience; understanding how parents' experiences shape parenting behaviors; emotion regulation and support advocacy and planning for the future.

Value-Added of the BPC

While there are Title IV-E PSC-endorsed evidence-based interventions focused on parenting, the BPC specifically targets parents involved in the child welfare context and is distinct from other parenting programs in four ways:

(1) It was developed specifically for *parents involved in the child welfare system* focusing on increasing self-awareness about the impact of their own potential trauma history on their child and separating their lived experience from that of their child, thus building empathy for themselves, their children, and other parents in similar situations.

(2) It uses a *trauma-informed equity lens*, including a focus on educating parents about their own trauma and how trauma experienced by their child/ren impacts emotion, behavior, and development through an equity lens.

(3) It *elevates parent voices* by incorporating a co-facilitator with lived experience in the child welfare system promoting accountability with self-reflection and empathy.
(4) It is *accessible and cost-effective*, where all of the electronic manuals and training materials are available free of charge through the National Child Traumatic Stress Network. Further, the small group format, which can be adapted to a virtual setting, allows equitable access to participants across rural areas where services are traditionally less accessible.

Current Aims

The primary goal of the current study was to evaluate the pilot of an adaptation of the Resource Parent Curriculum targeting parents who are involved with, or at risk of involvement with the child welfare system, assessing its feasibility for a large-scale research study. This paper aims to (a) describe the newly adapted training curriculum for birth parents involved in the child welfare system, (b) report preliminary pilot results on parent and child well-being outcomes, and (c) assess the feasibility of conducting a large-scale study. Questions were considered in the following areas:

- (1) Outcomes: What are the differences in trauma knowledge and skills, parent well-being, and child well-being between parents participating in the BPC and a waitlisted quasicomparison group? Do pilot outcomes warrant larger scale study?
- (2) **Satisfaction:** What is the participants' level of satisfaction with the BPC and their perceptions of its impact on their own parenting?
- (3) Feasibility: Is it feasible to conduct a full-scale research study of the BPC? Specifically, is it feasible to recruit a sample? Is data collection across multiple time periods feasible? Can the training be implemented with fidelity? What is the cost of the program?

Method

Design

The pilot was conducted in a private, nonprofit, specialized community mental health agency providing services that are grounded in trauma-informed care. The evaluation used a pre-post non-equivalent group quasi-experimental design with a waitlist comparison group to assess the feasibility and better understand how the training might be improved upon in the future. As such, the Institutional Review Board determined the project to be quality improvement and program evaluation. Participants received an information sheet reviewing the procedures, risks, and benefits, and consented to participate in the evaluation study.

Procedures

Recruitment. Recruitment for the BPC began in Fall 2021 through a network of community mental health centers and the Department for Children and Families (DCF) in one northeastern state. A member of the implementation team began recruitment and outreach statewide through three informational emails sent out on a listserv with over 700 professionals across the state, representing organizations including child parent centers, Family Services, public child welfare, community mental health, and substance-abuse agencies. In addition, flyers and emails were sent to child welfare and child/family mental health agencies and parent/child centers across the state. Recruitment continued with live informational sessions with DCF social workers and designated mental health agencies. During recruitment, it was stated that participation in the BPC should not be a case plan requirement, but all participants should be involved with, or at risk of involvement with the public child welfare system. There was no evidence that caseworkers disproportionally referred parents based on level of risk of removal.

Selection and Eligibility. To meet eligibility for participation in the BPC, parents must have had some contact as a parent with the child welfare system. In addition, parents with any acute mental health challenges (e.g., active psychosis without medication stabilization; major depressive episode; suicidal ideation or homicidal ideation) were ineligible to participate in the training.

Assignment. Forty participants were recruited to participate in the Breakthrough Parenting Curriculum (BPC) and were assigned to either the intervention cohort or a waitlist control group based on participant needs. For instance, a parent whose child was facing the possibility of an immediate out-of-home placement were entered into the first cohort in an attempt to maintain placement stability. As often happens in naturally occurring experiments, participant need and ethical obligation to provide services led to the decision not to randomize and instead manage group equivalence through statistical procedures using propensity scores as covariates (De Meulemeester et al., 2018).

Data Collection. Pre-tests were administered in late 2021 and early January 2022 when cohort 1 began the BPC. All pre-tests were collected prior to a participant attending any of the BPC modules. Post-test surveys were completed and sent to participants in both groups on the last day of the BPC.

Retention See figure 1 illustrating the CONSORT flow diagram (Schultz, et al., 2010).

Figure 1

CONSORT flow diagram



Facilitators. Given the nature of the training, it was critical to include a co-trainer that had lived experience as a parent in the child welfare system. The RPC had a similar model with a foster/kin/adoptive parent as a co-facilitator, however, we believe that this is among the first parent training programs for child welfare-involved parents that incorporates a parent with lived experience into the facilitation and leadership of the workshop. The person in this role elevated parental voices, allowed parent participants someone who they could immediately connect with knowing they had been through similar struggles and are on the other side. The parent facilitator acted as a peer model, co-teacher, and liaison for all parents participating in the workshop. The goal of having a parent co-trainer with lived experience was to mobilize hope through personal connections with someone who had experienced similar life circumstances. The co-facilitator models moving through the healing process and accessing vulnerability for post traumatic growth and resilience. Sessions were led by a parent facilitator and two

master's-level clinicians who had completed a train-the-trainer with two of the curriculum developers.

Intervention. Facilitators met with parents one time per week online for a total of 3 hours each over a 10-week period. Each session, facilitators followed the BPC manual with predetermined topics and activities. Group sessions began by welcoming the group, a brief icebreaker, and a reminder of group-established rules. The facilitators then reviewed content from the previous week, then began the new lesson. Sessions ended with quiet reflection time. The BPC included the following 10 modules which were entitled:

- Module 1: Trauma-Informed Parenting
- Module 2: Taking Care of Yourself
- Module 3: Trauma 101
- Module 4: Understanding Trauma's Effects
- Module 5: The Impact of Your Childhood on Your Parenting
- Module 6: Learning to Cope with Feelings and Change Behaviors
- Module 7: Trauma-Informed Parenting Responses
- Module 8: Connections and Healing
- Module 9: Becoming an Advocate for Your Child
- Module 10: The Tree of Life

Measures

In order to examine the workshop's impact on participant knowledge, skills, and well-being, a standardized set of tools was compiled into an online survey administered before and after the ten-week workshop. The waitlisted participants completed pre- and post-surveys during the same time periods as the BPC group. The waitlisted cohort began the BPC the week after the conclusion of cohort 1. The *BPC survey instrument* consisted of approximately 200 items completed by a parent across several categories, including: (a) demographics; (b) child welfare outcomes which included a set of parent-focused measures and child-focused measures, and (c) participant satisfaction with training and fidelity.

Demographics and Covariates

Demographic data included items such as *age*, *gender*, *race/ethnicity*, *education*, and *placement status of children*.

Propensity Score was included as a covariate and was calculated by regressing age, gender, race, number of children, education, and current custody on BPC group membership.

Parent and Child Outcomes

The outcome domains measured in this evaluation included parental well-being, child well-being, and trauma-informed knowledge and parenting skills. All measures were completed by the parent.

Parent-Focused Measures

Parenting Self Efficacy was measured using the Parenting Self Efficacy Scale (PSES); (Layne & Barber, 1999). The PSES is a 20-item self-report measure of caregivers' perceived parenting ability. All items are rated on a 9-point scale ranging from 0 (Very Poorly) to 8 (Exceptionally Well). For this sample, the internal consistency of this scale was strong (α =.96).

Parent Well-being was measured using the WHO-5 Well Being Index (Bech, 2004) which includes 5 items such as "*I have felt calm and relaxed*." Participants are asked to rate their response on a scale of 0-5 where 0= "no time at all within past 2 weeks" and 5= "*all of the time within past 2 weeks*." Reliability analysis showed strong internal consistency ($\alpha = .81$).

Trauma-informed knowledge and parenting skills. Trauma knowledge and skills were measured on two researcher-created scales of 19 items (skills) and 13 items (knowledge). Statements were answered using a 7-point Likert scale ranging from "*strongly agree*" to "*strongly disagree*." Knowledge items included statements such as "*I know what trauma reminders are*" and "*I understand how traumatic events can impact the way a child's brain works*." Skills items included statements such as "*I have skills to advocate for my child*" and "*I can identify and avoid hotspots*." The reliability of both scales across groups was tested using Cronbach's alpha and found to be strong with α above .95.

Child-Focused Measures

Strengths and Difficulties Questionnaire (SDQ) was collected using the parent SDQ. The SDQ is a validated, standardized instrument used to assess mental health and well-being of children between the ages of 2 and 18 (Goodman, 1997). Two subscales of the SDQ were included in this study: *prosocial behaviors* and *total difficulties*. The internal consistency for each scale was acceptable with alpha scores above .8. Parents were asked to identify the child with whom they were most concerned about when answering the SDQ. They referred to this child for pre- and post-evaluation. If the child

whom the parent identified was living out of the home, they were asked to complete the scale based on their visits and other interactions with that child.

Participant Satisfaction and Impact

Participants were asked to complete a 10-item satisfaction survey at the end of the 10-week workshop. For 7 questions, participants were asked to rate the workshop on a scale of 1-5 on items such as "*The training was a good use of my time*," "*Material was engaging*" and "*I would recommend this workshop to a friend*." The last 3 questions were open-ended asking participants to identify the most helpful part of the training, suggested changes, and their perception of the impact of the training on their own parenting.

Fidelity

Monitoring and assessment of implementation of the BPC was done by using an *Implementation Fidelity Monitoring Tool* adapted from the Resource Parent Curriculum (RPC) fidelity checklist (Coatsworth et al., 2014). There were three facilitators present for all 10 sessions of the BPC including the two clinicians and one parent partner. The facilitators utilized their lived experiences and salient identities to assist in the delivery of the curriculum, i.e., Master's degree with licensed clinical professional backgrounds and parental experience of navigating child welfare system. The 10 sessions of the BPC added up to a total of 250 instructional hours with 50 social hours embedded (break time). There was a minimum of one week between each session. Fidelity was calculated by identifying the percentage of activities in the curriculum for each module and dividing that score by the number of completed activities to get a fidelity index. The index was 100% for the pilot, indicating that trainers completed all activities within the appropriate time or module.

Data Analytic Approach

All statistical analyses were conducted using SPSS for Windows, Version 28. Bivariate analyses and GLM Repeated Measures were completed. Bivariate analyses included Chi-square analyses, Pearson product-moment correlation, and T-tests. GLM Repeated Measures is a procedure that uses ANOVA to model dependent variables measured at multiple times (Tabachnick & Fidell, 2001). GLM Repeated Measures was performed to assess whether there were significant differences in the amount of change for the dependent variable between pre-test and post-test, comparing between subject effects from the BPC participants and the waitlist group.

In quasi-experimental designs selection bias may be substantial; however, researchers can use statistical techniques to address non-equivalence. Propensity Score Analysis (PSA) is one such technique. Rosenbaum and Rubin (1983) developed the propensity score method to provide an alternative for estimating treatment effects when treatment assignment is not random. PSA uses logistic regression to obtain a predicted probability of group membership based on observed predictors (Guo, Barth, & Gibbons, 2004; Guo & Fraser, 2014; Joffe & Rosenbaum, 1999). Rather than matching on several variables, group equivalence can be obtained by using one score that is inclusive of several covariates. Calculating a propensity score equalizes the likelihood that a participant is selected for the intervention, thus mimicking randomization on observed variables. It is an interval level variable that represents the probability that a given participant will receive the intervention. Because it uses multiple observed variables to obtain the probability it in effect controls for the difference between the two groups on any baseline observed variables, similar to what would naturally happen in a randomized study. Five covariates were included in this analysis, which yielded the propensity score as reported above.

In the GLM Repeated Measures ANOVA, the propensity score was included as a covariate. In addition, we calculated the partial eta-squared (η_p^2) value to ascertain the effect size. We used Cohen's (1988) benchmarks to assist the interpretation of effect sizes ($\eta_p^2 = 0.2$), medium ($\eta_p^2 = 0.5$), and large ($\eta_p^2 = 0.8$).

Results

Participants

Forty parents involved at various levels in the child welfare system were recruited to participate in the workshop. Some parents had unfounded reports, while others had children placed in state custody. The sample was too small to determine differences between training outcomes and level system involvement. Six participants dropped out prior to completing the pre-test. Eighteen participants were assigned to the BPC cohort, while sixteen were assigned to the waitlist. Thirteen of the eighteen participants in the BPC cohort completed the ten-week training. The overall completion rate for the BPC intervention group was 72%. Completion was determined by a participant attending 7 of 10 sessions. The retention rate for the waitlist group was 94%.

We assessed differences between the intervention and waitlist comparison groups on demographics. As illustrated in Table 1 below, participants were largely female, white, non-Hispanic, in their 30s and had less than a college degree. The intervention and waitlist groups did not differ on any key demographic variables (i.e., age, education, race, number of children) at baseline.

Participant Demographics

Table 1

Demographic characteristics of the sample by group

Frequence	Frequency/ Mean		Significance		
	BPC	Waitlist	$\chi^{_2}$ or F	р	
Parent Age (yrs.)	35.5	34.1	F=.55	.46	
Parent Race/Ethnicity					
Non-white	22.2%	18.8%	F=.06	.81	
White/non-Hispanic	77.8%	81.2%			
Parent Gender					
Male	29.4%	12.5%	$\chi^2 = 2.62$.27	
Female	64.7%	87.5%			
Non-binary/not listed	5.9%	0%			
Parent Education*			$\chi^2 = 2.00$.86	
High school or less	37.5%	50%			
Some College	38.9%	56.3%			
College Degree or higher	11.2%	6.3%			

Note. χ^2 = Pearson's chi-squared

Participants' Children

The age of the participants' children ranged from 0-18. A total of 40 children were being parented by participants. On average, the participants had 3 children. At baseline, the BPC group reported 61% (SD =.50) of participants had a child in DCF custody, while 31% (SD =.48) of the waitlist group reported a child in DCF custody, placed out of home. The remaining parents had contact with DCF but did not have a child in custody. Although the p-values did not reach a level of significance at .05, there was a trend in that direction (t(32) = 1.77, p = .09), thus this variable was included in the propensity score calculation as a control for baseline group differences.

Child Welfare Outcomes

Data were downloaded from an online survey into SPSS 26.0 and inspected for irregularities in the values. GLM Repeated Measures ANOVAs were conducted to determine any differences between the BPC group and the quasi-waitlist group from pre to post training workshop (for the BPC parents) on parent-focused outcomes (parent well-being, parent self-efficacy, and trauma-informed knowledge and skills) and child-focused outcomes (SDQ total difficulties and SDQ prosocial scale). Means and standard deviations by group and time are reported in Table 2. Group-by-time interaction effects are reported within the text below for each outcome category.

Table 2

	Pre-Test			Post-Test				
	BPC		Waitlist		BPC		Waitlist	
Outcome	М	SD	M	SD	М	SD	М	SD
Trauma-informed Knowledge**	61.8	18.3	63.3	12.5	81.6	17.2	62.5	15.0
Trauma-informed Parenting Skills**	93.0	20.5	91.7	17.0	119.2	24.3	93.1	22.0
Parent Self-Efficacy (PSES)*	136.8	33.1	146.4	21.1	153.3	31.4	148.6	20.7
Parent Well-being (WHO-5)*	14.9	4.8	17.4	4.2	20.3	5.5	18.2	4.4
SDQ Child Prosocial	11.9	2.5	11.5	2.1	11.8	2.8	11.7	2.1
SDQ Child Total Difficulties*	34.9	6.1	32.4	5.6	31.9	7.1	33.9	5.7

Outcome means by group and time

Note. **p* < .05. ***p* < .01. ****p* < .001.

Changes in Parent focused outcomes

Trauma-informed knowledge. Descriptive statistics show differences from pre to post on trauma-informed knowledge with a slight decrease in knowledge in the waitlist group and approximately a 20-point improvement in knowledge in the BPC group (see Figure 2). Results show a significant interaction effect between time and BPC group on the knowledge outcome F = 9.91(1), p = .004, partial $\eta^2 = .29$.

Figure 2

Trauma knowledge time by group interaction



Trauma-informed parenting skills. Descriptive statistics show similar differences to the knowledge outcome in the change from pre to post on trauma-informed parenting skills between the two groups (see figure 3). Results show a significant interaction effect between time and BPC group on the skills outcome F = 6.65(1), p = .016, $\eta_{p^2} = .22$.

Figure 3

Trauma-informed parenting skills time by group interaction



Parent self-efficacy. Figure 4 illustrates the pattern from pre to post on parent self-efficacy across the BPC and waitlist groups. Results show a significant interaction effect between time and BPC group on the skills outcome F = 5.64(1), p = .03, $\eta_{p}^{2} = .19$.

Figure 4

Parent self-efficacy time by group interaction



Parent well-being. Figure 5 illustrates the significant interaction effect between

the groups and time on well-being for parent participants. Both groups increased;

however, there is a significantly larger increase from pre to post among the BPC

participants F = 5.36 (1), p = .03, $\eta_{P}^2 = .18$.

Figure 5

Parent well-being time by group interaction



Changes in Child -focused outcomes

SDQ: Total difficulties scale. As illustrated in Figure 6, the mean score for the waitlist group increased while the mean scores for total difficulties in the BPC group decreased from pre to post-intervention. There was a significant interaction between wave and treatment condition on the total difficulties outcome (F = 4.20 (1); p = .05).

Figure 6

Total Child Difficulties time by group interaction



SDQ: Prosocial scale. No significant between or within-subject effects were found on the prosocial scale. The interaction effect was also non-significant (F = .02 (1); p = .90).

Parent Satisfaction

Participating parents reported high levels of satisfaction with the training with mean levels of satisfaction at or above 4.7 or greater on a 5-point scale (See Table 3).

Table 3

Item	М	SD	
Expectations were met	4.7	.48	
Learned new parenting strategies	4.7	.48	
I will share what I learn with a friend/family member	4.8	.44	
I have at least one additional tool to help meet child's needs	4.9	.32	
Good use of my time	4.8	.42	
Trainers were clear and effective	4.8	.42	
Material was engaging	4.8	.42	
I would recommend this to a friend	4.9	.32	

Mean scores on satisfaction items

Note. Scale ranged from Strongly disagree (1) to Strongly agree (5)

When asked about the most helpful part of the workshops, participants shared a variety of responses including specific activities such as "*repacking the invisible suitcase*", "*shark music*", "*flexibility and accessibility of online format*" and understanding intergenerational trauma. Participants also shared the impact the workshop had on their lives. One participant noted, "*let me know I am not alone*." Another shared, "*Understanding that my child isn't acting out, he's communication through body language was a huge break for me. It taught me more patience and how to understand them*." One participant noted feeling better at listening and discipline while another wrote, "*I've become more present with my kids big feelings, and more emotionally and mentally available for them. I feel closer to my kids and more confident that I will not lose them again. My patience has grown due to my ability to use what I've learned and practiced in the class with my kids."*

Associated Costs

The following is an example of costs associated with running two groups where recruitment all happened at one time and one group was waitlisted, beginning after the first group concluded (see Table 4). Although more time-consuming, community leaders saw the benefit of collecting rigorous evaluation data using a comparison group which could provide meaningful pilot data that would help (a) assess the need for larger-scale evaluation potentially leading to clearinghouse status and long-term sustainable funding for the workshop through FFPSA, and (b) assist with making data-based decision-making related to service funding and provision.

Item	Costs
Parent Partner Prep and teaching time	\$2000
Agency Staff prep and teaching	\$12000
Coordination time	\$3000
Administration	\$1000
Materials (\$20/participant x 40 participants)	\$800
Data collection and evaluation incentives	\$5000
Total	\$23,800
Per parent costs for 10-week parent training curriculum	\$595

Costs associated with the implementation of 2 BPC groups (40 participants)

Discussion and Implications

The purpose of the study was to examine the feasibility and preliminary outcomes of a trauma-informed curriculum for birth parents involved in the child welfare system. We investigated parent and child outcomes, feasibility, and parent satisfaction of the intervention.

BPC Outcomes

First, we were interested in whether the BPC helped the families that participated in terms of trauma knowledge and skills, parent well-being, and child well-being. Our results indicate that parents in the treatment group reported a significant increase in their knowledge and skills related to trauma and parenting self-efficacy and reported significantly fewer child behavior problems compared to parents on the quasi-waitlist group. These results mirror the findings from the RPC pilot study with foster and adoptive parents (Sullivan et al., 2016).

This study was a first step in investigating the effectiveness of the BPC and testing the feasibility to conduct a larger scale study. Results support the potential effectiveness of this curriculum for birth parents and provides evidence that the BPC warrants further study. While the sample in this study was comparatively small, this is not usual for applied research (Chacko et al., 2016). Despite the small sample size, which can mask intervention effects, analyses yielded a small, yet significant effect size (Cohen, 1988) demonstrating promising evidence of intervention efficacy. Smaller sample sizes can produce larger error variances, making it difficult to detect differences between the treatment group and the waitlist control group, while larger samples have more stable variance and a higher chance of detecting differences in group comparisons (Thompson, 2006). Thus, the presence of a small, but significant difference between treatment and quasi-waitlist control outcomes demonstrates promising evidence of true treatment effects that may be underestimated due to sample size limitations. Our findings support the utility of a larger-scale study with a larger sample and an experimental design to further test the efficacy of the parent curriculum.

Satisfaction

We were also interested in parents' satisfaction with their experience of the BPC and its impact on their parenting. Overall, parents reported high levels of satisfaction about the training; over 70% parents completed the entire program, which is higher than often reported in parenting programs (see Chacko et al., 2016 for a review). Parents commented on the accessibility of the training and the gains in parenting skills and self-efficacy, the connection to their children, and

the agency keeping their kids in the home. The small effect size found in the results, along with the positive feedback from parents suggests clinically meaningful improvements in parents' well-being. These results support the social validity (Foster & Mash, 1999) of the BPC and bolsters the argument for a larger-scale study.

Feasibility

Finally, we were interested in the feasibility of the program with regard to recruitment, data collection, fidelity, and cost. The online format may have facilitated recruitment and service access while still maintaining a sense of connection among the participants. Further, the online modality allowed access to important trauma-informed parenting strategies during a pandemic when mental health resources were low and inperson meetings were not possible. It also offered access to service outside the child welfare process, providing confidentiality to parents, which may have increased their willingness to be vulnerable and open to the therapeutic process. Likewise, the inclusion of a parent facilitator with lived experience fostered engagement and a sense of hope to participants.

With regard to fidelity, the curriculum manual provides detailed lesson plans for each module, which standardizes intervention and gives clear targets for each training session. Facilitators met 100% of content goals for each of the 10-sessions. Furthermore, the program is relatively inexpensive to implement, especially given the free access to intervention materials online.

In sum, this pilot evaluation was successful at recruiting participants into the workshop, had acceptable rates of data collection, strong fidelity and may lead to cost savings as compared to other parent programs. Together, these factors support a full-scale study to fully establish the efficacy of the BPC.

Limitations

One limitation of this study is the lack of randomization. Although it is possible that participants from the BPC and quasi-waitlist groups differed on initial variables, the propensity score analysis attempted to control for such biases by utilizing logistic regression to mimic randomization among the observed variables. However, this does not account for unobserved variables that were not included, i.e., administrative data (re-reports; # of days in care; family reunification; entry into foster care), more robust well-being indicators, information on substance use and recovery, longevity of post intervention outcomes, or child self-report data. Second, the parent and child outcome findings should be interpreted with caution due to the small sample size and are self-reported, which although appropriate for a feasibility evaluation, limits the generality of the findings. Further, it is possible that parents may not have felt safe to respond honestly to some of the questions for fear that the data may be used against them in their child welfare case. This will need to be addressed in a future study.

Finally, although this study aimed to assess the feasibility of conducting a larger scale study, we did not test the feasibility of scaling up the BPC across rural, urban, and diverse populations and settings. Despite the curriculum being assessed for the ways in which it was centering or decentering multiple marginalized experiences, the sample of participants were demographically homogenous. Future studies should aim to recruit from, for example, more urban areas with a larger representation of individuals from

the global majority as defined by Rosemary Campbell-Stephens (2021). Despite the limitations, findings from this study support the need for future research to conduct a larger scale study that could address the above limitations.

Implications for future research

The BPC demonstrates promising gains in parent and child well-being, parenting knowledge and skills, is well-received by parents, demonstrated high engagement and retention, and is cost-effective to implement. A larger-scale could attempt to replicate these findings with a larger, more nationally representative sample. The effect size found in this study should be utilized to calculate the power needed to detect an effect in future studies and inform recruitment targets.

A larger scale study should also address some of the limitations of this feasibility study. In particular, future research should consider using a more rigorous experimental design where participants are randomly assigned to treatment and waitlist-control groups. In order to maximize our understanding of BPC effectiveness, future research on the BPC could include additional standardized measures of child safety (re-reports), permanency (custody entrance, # days in care), and substance use. Future studies should also consider more comprehensive measures of well-being that balances child self-report instruments with the parent perception measures that incorporate a measure of fear related to sharing honestly. A mixed method approach to post-training follow-up would be beneficial.

Finally, many child welfare interventions struggle with engagement and retention. This pilot provides some promising evidence that the BPC might have stronger attendance and lower attrition as participation was elective and not

mandated as part of a case plan. Future research is needed to assess if engagement and retention with a larger population is similarly successful.

Implications for practice

Children who have experienced trauma need the support of a stable caregiver (Geller & Porges, 2014; Isobel et al., 2018). Parents who have unresolved trauma may benefit from learning new tools than can support connection and healing for their children and themselves (Lubit et al., 2003; Lyons-Ruth & Jacobvitz, 1999; Schore, 2009). The BPC aims to improve child well-being outcomes by addressing the intergenerational aspect of trauma while improving parent knowledge, skills, and selfefficacy. Our results revealed promising evidence of effectiveness that may help families thrive in the face of trauma.

Though more research is needed, the design of the BPC seems to provide tools that are helpful to parenting children who have experienced trauma. The BPC (a) explains the "why" behind trauma-related behavior that can be difficult to deal with, (b) increases parent empathy for their child and (c) provides concrete strategies to improve attachment and connection. The format of the training is flexible and far reaching via online or hybrid modality. Further, it is facilitated by a parent who has been in the same position providing hope and validation of their experiences. More research is needed to determine the impact of the parent trainer, but the results here are promising.

While the NCTSN's Resource Parent Curriculum (RPC) has been available for almost a decade, it has been limited to use with foster, kinship and adoptive caregivers. The BPC is a corresponding trauma-informed curriculum for birth parents. Within our current child welfare system, particularly in rural states, there is a dearth of access to affordable and effective parenting programs that could enhance family well-being and prevent child removal. If, through a larger scale study, the BPC is found to be effective at increasing child and parent well-being, and increasing safe family reunification, the implications for family preservation are enormously positive. Further, a larger scale study has the potential to validate the BPC as an approved Title IV-E Prevention Clearinghouse intervention, which would allow for federal entitlement funding, through FFPSA. This would not only make the BPC available to more families, but also positioned to be used for the *prevention* of out of home placement rather than only available to parents once a child is already removed from the home.

Preventing child removal supports child well-being and family stability, in addition to more equitable outcomes for children and families who are at higher risk on entry in care, such as children of the global majority. Intervention that can address a wide range of parent and child outcomes are timely as our child welfare systems seek new solutions for battling racial, economic, rural, and other inequities related to accessing family preservation supports for parents involved in the child welfare system.

Conclusion

Overall, the pilot findings support the promise of the Breakthrough Parenting Curriculum for parents involved in the child welfare system. Many birth parents struggle with their own trauma histories and evidence from this pilot study suggests that the BPC may be effective at educating participants about the impact of trauma on the development and behavior of their children trauma, increasing parent self-efficacy and improving wellbeing among its participants. Of importance, the findings suggest that the workshop is effective at impacting parent well-being and improvements in children's total difficulties. The promising results of this feasibility study call for a large-scale outcome investigation.

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