A trauma-informed intervention for foster caregivers in Central Massachusetts: A mixed methods pilot evaluation

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ABSTRACT

The Encompass program trains and supports foster, kinship, and pre-adoptive caregivers to recognize trauma in children, attend to foster children's behavioral health needs, and ease the stress of caregiving. We used a caregiver survey at two time points to evaluate the preliminary efficacy of the Encompass program on foster parent (n = 17) and child (n = 25) outcomes, and conducted qualitative interviews with caretakers (n = 15). We observed significant positive changes in caretakers' perceived knowledge about trauma, confidence in trauma-informed fostering, and use of external support care providers. Qualitative data suggest that participants found the Encompass program to be helpful and enjoyable, but that systemic issues in the child welfare system, which were beyond the scope of this program to impact, contribute to caregiver dissatisfaction and fostering difficulties. Findings suggest that Encompass has a positive impact on caregiver perceptions of knowledge about trauma and confidence in their capacity to provide trauma-informed foster care. Continued evaluation of the Encompass program using an experimental design will be informative about program impact.

1. Introduction

Trauma, defined as exposure to an incident or series of incidents that are emotionally disturbing or life-threatening, and have lasting adverse effects on functioning and mental, physical, social, emotional or spiritual well-being, is common among US youth (Substance Abuse and Mental Health Services Administration, 2014; Trauma-Informed Care Implementation Resource Center, n.d.). Traumatic events in childhood can include physical, sexual, and emotional abuse, neglect, exposure to interparental and/or community violence, poverty, death of or separation from a loved one, and living with a family member with a mental health or substance use disorder (Substance Abuse and Mental Health Services Administration, 2014; Trauma-Informed Care Implementation Resource Center, n.d.). As many as one-half to two-thirds of youth in the general population have experienced at least one trauma in their lifetime (Copeland et al., 2007; Dorsey et al., 2012; Finkelhor et al., 2009).

Trauma in early childhood can impair brain development and lead to long-term problems in adolescence and adulthood related to emotion regulation and cognition. These problems, in turn, can impact an individual's interpersonal relationships, ability to learn, think, concentrate, and regulate impulses and emotions (Child Welfare Information Gateway, 2020). These impairments can then contribute to problems at school and work, and an increased risk of delinquency and crime (Zhang et al., 2021). Further, experiencing childhood trauma can elevate one's risk of depression and suicide, smoking, drinking alcohol, and developing chronic diseases such as chronic obstructive pulmonary disease, heart disease, cancer and obesity (Felitti et al., 1998).

It is estimated that approximately 90% of youth in foster care in the United States have experienced at least one trauma, with almost half reporting experience with four or more types of traumatic events (Fratto, 2016; Stein et al., 2001; Zhang et al., 2021). A study of foster care alumni found that 30% of respondents met lifetime criteria for post-

traumatic stress disorder (PTSD) compared to 7.6% of a general population with similar demographics (Pecora et al., 2009; Salazar et al., 2013). Youth in foster care with mental health or behavioral problems can struggle to display improved psychological adjustment in their foster placement or to achieve placement stability. Placement stability refers to when children in foster care remain in a consistent, safe, nurturing home without disruption (Barber et al., 2001; Barth et al., 2007). Foster caregiver turnover also contributes to placement instability (Hanlon et al., 2021). Caregivers report leaving the foster system as a result of burn-out, lack of formal and informal support for grief and loss (DeGarmo, 2017), lack of sufficient financial compensation (Ahn et al., 2018), lack of access to daycare and transportation services (GAO, 2018; Rhodes et al., 2001), dissatisfaction with child welfare agency workers (Ahn et al., 2018; DeGarmo, 2017; Rhodes et al., 2001), difficulty navigating and interacting with the child welfare system (i.e. foster care), lack of external and peer support, and a lack of training and knowledge about trauma and fostering (Hanlon et al., 2021). Placement instability resulting from foster parents exiting the system not only contributes to poor child outcomes, but also burdens the child welfare system by forcing it to continuously spend limited resources on recruiting, training, and equipping new foster parents (Hanlon et al., 2021). Research suggests that helping foster parents traverse the foster care system and providing material supports, trauma training, peer support, and external support (e.g. respite care) promote caregiver retention by reducing burn-out and increasing caregiver satisfaction (Hanlon et al., 2021; Madden et al., 2016; Pope et al., 2022). As a result, there have been calls for trauma-informed child welfare systems and increases in interventions that promote foster parent retention as ways to improve placement stability and foster parent and child outcomes (Beyerlein & Bloch, 2014).

Trauma-informed care (TIC) is an on-going, systems-level organizational process that aims to incorporate awareness of how traumatic experiences can affect children, families, and anyone who interacts with them into organizational practices and policies. TIC requires individuals and organizations to recognize how traumatized individuals may perceive practices and services within the context of their trauma, and how certain actions, words, or spaces have the potential to retraumatize or trigger traumatic memories or reactive behaviors. It encompasses care at the child, caretaker, practitioner, service management, and inter-agency organizational levels, and it seeks to change practices that can inadvertently exacerbate trauma (e.g. the use of restraints or seclusion) and improve consistency and communication across linked organizational sectors (Child Welfare Information Gateway, 2020; Middleton et al., 2019; Trauma-Informed Care Implementation Resource Center, n. d.; Zhang et al., 2021). TIC in the child welfare system is intended to help decrease the number of children who require crisis intervention services and emergency department visits, decrease prescriptions for psychotropic medications, decrease foster home placement disruptions, and improve overall child functioning and well-being (Child Welfare Information Gateway, 2020).

In response to federal initiatives and funding, there has been an increase in national trauma-informed practice and training models in the U.S. over the past several years (Bunting et al., 2019; Zhang et al., 2021). TIC models and practices in the child welfare system typically comprise elements including: screenings and assessments to identify the needs of children and families, workforce development strategies (including training and workshops to address secondary trauma for providers), caregiver trainings, and initiatives to build supportive, collaborative treatment networks comprised of various agencies that interact with children and families (Bunting et al., 2019; Middleton et al., 2019; Trauma-Informed Care Implementation Resource Center, n.d.). In a systematic review summarizing the features of TIC in the child welfare system in the U.S., Bunting et al. (2019) found that most TIC interventions and evaluations to date have focused on implementation of trauma-informed practices at the workforce level, such as training for staff in child welfare service agencies (Bunting et al., 2019). Evaluations

show significant increases in staff knowledge, confidence, and skills in applying TIC principles, and that these positive changes persist over time (Bunting et al., 2019). In a meta-analysis of 15 studies estimating the pooled effect of TIC interventions on the well-being of children involved in the child welfare system, Zhang et al. (2021) found that overall, TIC interventions yield a moderate effect on child well-being, but that this effect is generally robust with respect to PTSD symptom reduction, behavioral problem reduction, and other psychological well-being improvement (Zhang et al., 2021). Notably, both reviews reflect the lack of interventions and evaluations focused on caregiver outcomes and interventions designed to bolster TIC practices among foster caregivers.

The foster care system is critical to Massachusetts' child welfare system. When abuse and neglect threaten children's safety, children are removed from their birth parents and placed in foster homes. Foster care is intended to be a short-term solution while the state child protection agency, the Department of Children and Families (DCF), works to reunify children with their birth parents, place them with a trusted relative, or find them an adoptive family. According to the DCF Fiscal Year 2022 Quarterly Profile, as of September 30, 2021, there were 8,401 children in out-of-home placements in Massachusetts. Of these, 1,430 were from Central Massachusetts (Massachusetts Department of Children & Families, 2021).

The Encompass program of the Massachusetts Society for the Prevention of Cruelty to Children (MSPCC) is a TIC model that aims to improve outcomes for children who receive foster, kinship, or pre-adoptive care in Central Massachusetts. MSPCC is a private, non-profit organization with offices across Massachusetts whose work focuses on preventing or mitigating the effects of childhood trauma. One of MSPCC's core services is providing support to foster and adoptive families (Massachusetts Society for the Prevention of Cruelty to Children, n.d). The Encompass program trains foster, kinship, and pre-adoptive caregivers to recognize trauma in children, attend to foster children's behavioral health needs, and provides material and peer support to foster caregivers. The inspiration for the Encompass program began with the 2018 MSPCC survey in which foster caregivers reported finding satisfaction with providing safe and loving homes for children, but acknowledged a unique set of challenges they were not prepared to handle without support. These challenges included children's behavioral issues related to trauma; lack of access to essential information, training, and services; few opportunities to engage with other foster and kinship caregivers for support and mentoring; and feeling that they were not valued or respected as a member of a child's treatment team (Massachusetts Society for the Prevention of Cruelty to Children, 2018). Subsequently, in consultation with key stakeholders and after examining successful programs across the country, MSPCC developed the Encompass program, which comprises three components: (1) Peer Trauma Coaching, (2) Skill Enhancement Peer Support Program, and (3) Extended Community Supports (Fig. 1 and Table 1).

Prior to implementation, MSPCC identified extended community supports and trained Peer Trauma Coaches in preparation for delivery of the one-on-one coaching sessions and the group-based Skill Enhancement Peer Support Program (NB: for definitions of Encompass-specific vocabulary, please see Table 1). MSPCC also engaged in a public education campaign to inform various stakeholders of the pilot, build interest and momentum for the program, and increase community knowledge about the Encompass program and ways that the public could be involved. A Leadership Team supported MSPCC to modify the Resource Parent Curriculum (The National Child Traumatic Stress Network, 2011) for use in trauma coaching and peer group sessions, led the initial Resource Parent Curriculum training, and provided ongoing case consultation throughout the pilot (Fig. 2).

The Encompass program was piloted with 29 families in Central Massachusetts between January and September 2021. The purpose of this study was to evaluate the preliminary efficacy of the Encompass pilot program on foster caregiver outcomes including use of external and
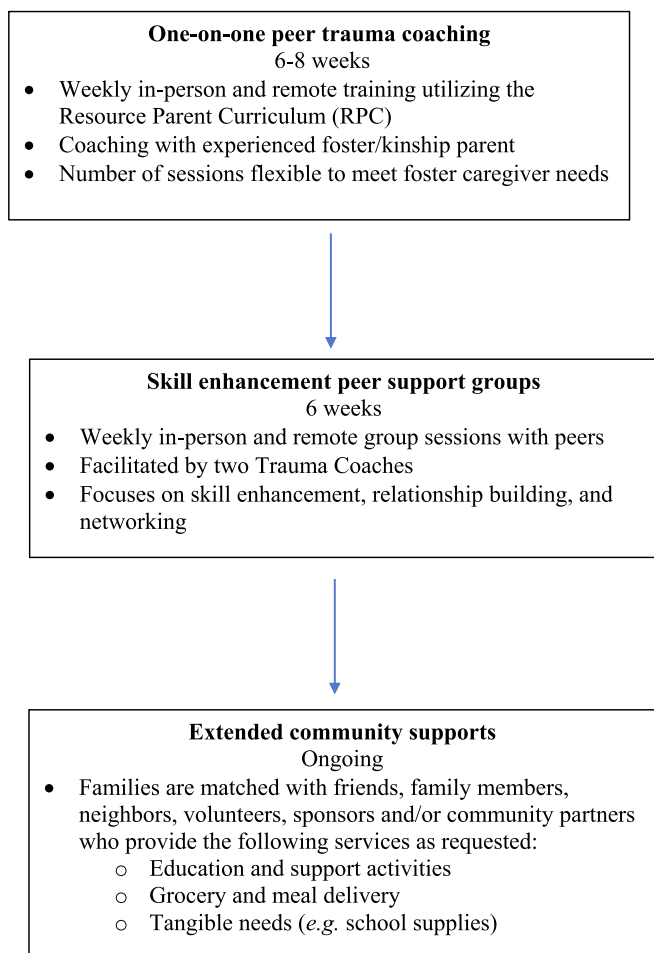
One-on-one peer trauma coaching
6-8 weeks
- Weekly in-person and remote training utilizing the Resource Parent Curriculum (RPC)
- Coaching with experienced foster/kinship parent
- Number of sessions flexible to meet foster caregiver needs

Skill enhancement peer support groups
6 weeks
- Weekly in-person and remote group sessions with peers
- Facilitated by two Trauma Coaches
- Focuses on skill enhancement, relationship building, and networking

Extended community supports
Ongoing
- Families are matched with friends, family members, neighbors, volunteers, sponsors and/or community partners who provide the following services as requested:
    - Education and support activities
    - Grocery and meal delivery
    - Tangible needs (*e.g.* school supplies)

Fig. 1. Encompass Program components.

Table 1
Glossary of terms and Encompass program components.

Term	Definition and purpose
Leadership Team	● A multi-disciplinary team comprised of state and local experts in childhood behavioral health and foster care
	● Partnered with MSPCC staff to review models of providing support to foster care families in Massachusetts and other U.S states, review outcome studies in the scientific literature about foster care support programs, and develop trainings for Peer Trauma Coaches, Volunteer Coordinators, and volunteers
	● Helped MSPCC modify the Resource Parent Curriculum for use in trauma coaching and peer group sessions and provided on-going case consultation throughout the pilot
Community Partners	● Local organizations that helped with volunteer recruitment and provided Extended Community Supports
Resource Parent Curriculum	● A course developed by the National Child Traumatic Stress Network that provides support and helpful tips and tools for caregivers who are raising children who are in, or have been in, the child welfare system or institutional care
	● Focuses on the needs of traumatized children and aims to increase resiliency and well-being
	● Emphasis on increasing the mitigating factors that impact child traumatic stress reactions. In particular, the importance of assisting children to feel safe, capable, and lovable
	● Used in Encompass to guide one-on-one peer trauma coaching and skill enhancement peer support groups
Peer Trauma Coach	● An experienced foster parent trained in the Resource Parent Curriculum and the Encompass program goals
	● Provides weekly one-on-one peer trauma coaching and leads group-based skill enhancement peer support programs
One-on-One Peer Trauma Coaching	● One-on-one trauma-focused skills training designed to promote the caregiver's role in supporting a child's well-being and permanency
	● Provided by a Peer Trauma Coach
Skill Enhancement Peer Support Program	● Six bi-weekly 1-hour long support groups designed to expand upon trauma-informed parenting techniques, increase informal support, and facilitate networking among caregivers
	● Facilitated by two Peer Trauma Coaches
	● Held online via Zoom
Extended Community Supports (i.e. volunteers)	● Time and tangible goods, including meal delivery, care packages for tangible needs, and online or in-person tutoring or enrichment activities with foster youth
	● Donated by trained volunteers and community partners
Volunteer Coordinator	● Recruits, trains, matches, and oversees Community Support Volunteers
	● Fosters relationships with community partners in the Greater Worcester area and facilitates care box drives and donations
External Community Volunteer (i.e. respite care provider)	● Provides short-term, temporary relief and help with fostering needs to full-time foster caregivers.
	● Trained, compensated, and supported by DCF

natural support care, and perceived knowledge of and confidence in trauma-informed fostering. We hypothesized that: (1) foster caregivers would increase their use of external community supports; and (2) foster caregivers would increase their perceived knowledge of and confidence in trauma-informed caregiving.

2. Methods

2.1. Study design and sample

We used a two-pronged, longitudinal, mixed-methods approach to evaluate the Encompass pilot program. First, we used a pre- and post-test survey design to quantitatively evaluate the preliminary efficacy of the Encompass program on foster caregivers (*i.e.,* the caregiver survey). We also collected qualitative interview data from caregivers at the conclusion of the pilot period. All procedures were reviewed and determined to be exempt by the Institutional Review Board (IRB) at Boston University Medical Campus.

Participants in the caregiver survey and qualitative interviews were Encompass caregivers. Twenty-nine caregivers signed up to participate in Encompass, but 11 changed their minds before participating in any trauma coaching or skill enhancement sessions. The primary reason given when people changed their mind was that they were too busy to commit to all aspects of the program, or that programming did not fit into their schedules. Of the 18 Encompass caregivers that did participate in the program, 1 opted not to complete an evaluation survey or interview, leaving an analytic sample of N = 17. Of the 17 participating families, 3 spoke Spanish only and completed the online survey and interview in Spanish. All participants were invited to participate in a qualitative interview following completion of the Encompass program and post-test survey. Of the 17 participating families, 15 participated in qualitative interviews; 2 were unresponsive to email requests. All Encompass families were served by Worcester East or Worcester West DCF Area offices or the Central ADLU (Regional Adoption Unit) in Massachusetts.
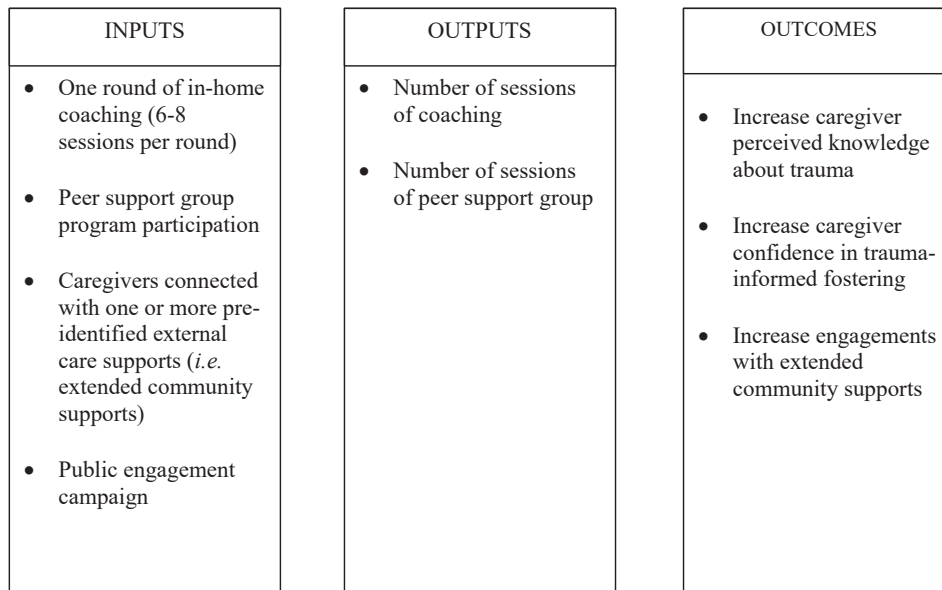
INPUTS	OUTPUTS	OUTCOMES
• One round of in-home coaching (6-8 sessions per round) • Peer support group program participation • Caregivers connected with one or more pre-identified external care supports (*i.e.* extended community supports) • Public engagement campaign	• Number of sessions of coaching • Number of sessions of peer support group	• Increase caregiver perceived knowledge about trauma • Increase caregiver confidence in trauma-informed fostering • Increase engagements with extended community supports

Fig. 2. Logic model.

2.2. Program enrollment and research recruitment

The Encompass program began enrolling caregivers in March 2021. Caregivers learned about the opportunity to participate in Encompass from their DCF worker or from a representative of the Encompass program who made outreach calls using contact information provided by DCF. After enrolling in the Encompass program, caregivers had the opportunity to consider participating in the evaluation research study. The Encompass program representative alerted all Encompass caregivers that a research team member would be emailing them to invite them to participate in the caregiver survey and interview. Caregivers were told that they could choose not to have their contact information shared with the research team; however, no family opted out of the research recruitment contact. Evaluation research team members emailed each Encompass family member an invitation to participate in the evaluation with a link to the online consent form. Messages from the research team were in English or in Spanish, based on family preference as described by the Encompass representative. Caregivers who reviewed the consent form and agreed to participate were automatically routed to the online pre-test. After completing the pre-test, the research team emailed an electronic Amazon.com gift card worth $20 to the participant. Enrollment in the Encompass program occurred over a period of approximately 10 weeks between March and May 2021, so the pre-test data collection occurred over a 10-week period. In September 2021, which was approximately 4–6 months after the pre-test, each participant received a new email message with a link to the online post-test survey and was asked to complete it. Each participant also received a message asking them to sign up for a Zoom-based interview with a research team member. After completing the post-test survey and interview, each participant received a second $20 Amazon.com gift card via email.

2.3. Measures

2.3.1. Pre and post-test surveys
Caregiver and foster children demographics: The pre-test self-report survey took respondents approximately 30 minutes to complete. It included seven demographic questions, including town of residence, age, gender, primary language, race/ethnicity, number of biological children living in the home, number of foster children, foster caregiver role (*e.g.*, kinship caregiver, unrestricted or Departmental caregiver, comprehensive caregiver, emergency caregiver, pre-adoptive

caregiver), and current employment status. Participants were asked 12 demographic and situational questions about each foster child, including: child's age, gender, race/ethnicity, number of prior foster care placements, if the child has an individualized education plan (IEP) or 504 plan in school, if the child has any diagnosed mental or physical disabilities, history of externalizing or internalizing behaviors, and how often the child has contact with their biological parent(s).

External support care: Participants were asked 7 questions about their use of external support care (*i.e.*, volunteers). This was not a scale; it was a series of discrete questions. A sample item is: "Approximately how many total hours of external support care have trained external support providers provided to you in the past month?"

Perceived knowledge and confidence in trauma-informed fostering: Participants were asked 21 questions about their understanding of trauma. Questions were adapted from the Duke University evaluation of the *National Child Traumatic Stress Network's Caring for Children Who have Experienced Trauma: A Workshop for Resource Parents Demographic Survey* (The National Child Traumatic Stress Network). A sample item is: "I routinely think about how a child could be physically safe in my home, but might not feel safe." Response options ranged from 1 (strongly disagree) to 4 (strongly agree). The Cronbach's alpha for this scale was 0.95 in this sample.

2.3.2. Qualitative interviews
To understand what participants thought about the Encompass program in more detail, we conducted qualitative interviews after participants completed the post-test. Questions were designed to uncover what participants found most helpful and least helpful about the Encompass program, what they might change about the program, how the program impacted their understanding of trauma, their interactions with their foster children, and their interactions with DCF. Each interview comprised 18 questions and took approximately 20–30 minutes to complete. Interviews were audio-recorded and transcribed. Interviews were in English or in Spanish.

2.4. Data analysis

Pre- and post-test survey data were compared using chi-squares for dichotomous variables and paired t-tests for continuous variables. P-values were set to the level 0.10 for statistical significance, given the small sample size of this pilot study (Lee et al., 2014; Thiese et al., 2016).

Qualitative interview data were analyzed using a content-based analysis approach (Williamson et al., 2018).

3. Results

3.1. Sample demographics

A total of 17 caregivers completed the pre-test (Table 2). All (100%) caregivers were female. Caregiver ages ranged from 26 to 68 years old (mean age = 44 years old). The majority (71%) were English speakers, and 29% were Spanish speakers. The majority identified as white (53%), with 35% identifying as Hispanic or Latina, 6% as African American, and one person as another race. Caregivers were fostering between 1 and 3 children at pre-test, with an average of 1.5 children in their home. Most were not employed. Forty-one percent were employed part-time or full-time, with 41% reporting they were out of work and not looking for work.

The majority (71%) of caregivers were unrestricted or departmental caregivers, 35% were pre-adoptive caregivers, and 29% were kinship caregivers. Some participants indicated being more than one type of caregiver: Approximately one-third (29%) were pre-adoptive and unrestricted caregivers, and 6% were kinship and pre-adoptive caregivers. The caregivers were generally experienced with providing foster care. On average, they had nearly 5 years of experience as foster caregivers (range: less than one year to 16 years).

Table 2
Caregiver demographics (N = 17).

	% (n)
Caregiver age (years)	
Mean + SD	43.9 ± 10.8
Range	26–68
Caregiver gender	0% (0) 100%
Male	(17)
Female	
Primary language spoken at home	71%
English	(12) 29%
Spanish	(5)
Caregiver race/ethnicity	6%
African American or Black	(1) 35%
Hispanic or Latino	(6) 53%
White (non-Hispanic/European American)	(9) 0%
Multiracial	(0) 6%
Other	(1)
Number of biological children under 18 living in home	0.94 ± 1.1
Mean + SD	0–3
Range	
Caregiver employment status	29%
Full-time	(5) 12%
Part-time	(2) 41%
Out of work but not currently looking for work	(7) 6%
Unable to work	(1) 6%
Retired	(1) 6%
Prefer not to say	(1)
Foster parent role*	29%
Kinship caregiver	(5) 71%
Unrestricted or departmental caregiver	(12) 0%
Comprehensive caregiver	(0) 6%
Hotline/Emergency caregiver	(1) 0%
Respite caregiver	(0) 35%
Pre-adoptive caregiver	(6) 6%
Kinship and Pre-adoptive caregiver	(1) 29%
Pre-adoptive and Unrestricted caregiver	(5) 6%
Other	(1)
Years fostering	4.9 ± 5.1
Mean + SD	0.22–16.1
Range	
Number of foster children in home	1.5 ± 0.70
Mean + SD	1–3
Range	

* Note: percentages add up to over 100% because participants were given the option to select more than one response.

Caregivers were fostering a total of 25 children. Their ages ranged from 5 months old to 18 years old; on average, children were approximately 8 years old. The majority were male (68%), and 28% were female. One-third (36%) of children were White (that is, non-Hispanic and of European descent), 24% were Hispanic/Latinx, and 4% were African or Caribbean Islander. Approximately one-third (36%) of the children were experiencing their first foster placement, and 36% were in their second placement. Approximately 16% were in their third, fourth, or fifth foster care placement. One-third (36%) of the children had been diagnosed with a mental or physical disability.

3.2. Quantitative results

3.2.1. External support care

Participants were 8.4 times more likely to report having utilized an external care provider in the past month at post-test as compared to pre-test. At pre-test 8% reported having used one or more external care providers in the past month, and at post-test 67% reported the same (p <.001). There was also a meaningful, but not statistically significant, difference between the percentage of caregivers who were connected with at least one external support provider (*i.e.*, respite provider) through DCF from 21% at pre-test to 47% at post-test (p = 0.25). There was no difference in the number of external support providers that caregivers reported that they *knew*, but the number of hours of external support care that they received did increase from an average of 0 hours in the past month to 2.46 hours in the past month. The difference from pre-test to post-test in the number of hours of external support care received was driven by two of the 15 respondents (Table 3).

3.2.2. Perceived knowledge and confidence in trauma-informed foster care provision

We observed a positive change from pre- to post-test in caregivers' perceived knowledge about the impact of traumatic events on children and confidence in their capacity to provide TIC to foster children (p =

Table 3
External support care.

	Pre-test % (n)	Post-test % (n)	Chi-sq/Fisher's exact or *t*-test, p-value
Since becoming a foster parent, has been connected with at least one external support provider (aka respite provider) through DCF	21.4% (3)	47% (7)	2.40, p = 0.25
The number of external support providers available to help with foster parenting needs (i.e., you know their name and phone number and can call on them to help you)?			
Mean (SD)	0.57 ± 0.79	1.0 ± 1.9	0.58, p = 0.29
Range	0–2	0–6	
Have utilized one or more external care providers to provide temporary external support or care for your foster child(ren) outside of the home in the past month	8% (1)	67% (10)	1.63, p =.00
The number of times in the past month utilized an external care provider for temporary care of your foster child(ren) outside of the home:			
Mean (SD)	0.17 ± 0.58	0.25 ± 0.62	0.34, p = 0.37
Range	0–2	Range: 0–2	
The number of hours of external support care that trained external support providers provided in the past month			
Mean (SD)	0 ± 0	2.46 ± 6.49	1.31, p =.10
Range	0	0–10	

0.07) (Table 4). There were several items on the survey about trauma-informed fostering that particularly stood out as reflecting positive change. These included: "I understand why traumatic events impact the way a child's brain works, well enough that I could explain it to someone else" (pre-test mean = 2.62, post-test mean = 3.12; p = 0.03); "I routinely think about how a child could be physically safe in my home,

Table 4
Perceived knowledge and confidence in trauma-informed fostering (N = 15).

	Pre-test	Post-test	*t*-test, p-value
	Mean (SD)	Mean (SD)	
Total scale score (summary of all items below)	**2.84 (0.59)**	**3.11 (0.33)**	**1.52, p =.07****
I understand why traumatic events impact the way a child's brain works (well enough that I could explain it to someone else).	2.62 (0.77)	3.13 (0.64)	1.95, p =.03**
I routinely think about how a child could be physically safe in my home, but might not feel safe	2.64 (1.08)	3.20 (0.68)	1.68, p =.05**
An important part of my role as a parent is to identify trauma reminders (i.e., "triggers") in the lives of the children I foster.	3.23 (0.83)	3.64 (0.50)	1.39, p =.09**
I know how to make a child feel better when they are experiencing a traumatic reaction to something	2.71 (0.91)	3.0 (0.70)	1.17, p =.13
A child's past experiences impact how I respond to their misbehavior	3.00 (0.78)	3.33 (0.72)	1.19, p =.12
In my opinion. praises and rewards should outnumber commands and consequences	3.14 (0.86)	3.33 (0.62)	0.69, p =.25
There is always a reason for misbehavior	3.0 (0.83)	3.29 (0.61)	0.78, p =.22
Bedtimes and mealtimes are stressful for children who have been in traumatic situations	2.93 (0.73)	3.47 (0.64)	2.11, p =.02**
When a child has intense feelings that don't seem to make sense, I understand how those feelings might be related to his/ her past	3.08 (0.76)	3.20 (0.68)	0.45, p =.33
When a child is having a tantrum or meltdown, I should remove other children from the room.	2.86 (0.86)	2.93 (0.46)	0.30, p =.38
When a child is having a tantrum or meltdown, it is okay for me to step out, or remove myself from the room for a little while, provided I don't believe my child is a danger to him/herself or others	2.93 (0.83)	3.27 (0.59)	1.27, p =.11
There are many times when I don't know what to do as a parent.*	2.57 (0.76)	2.47 (0.52)	−0.44, p =.67
I feel confident about my ability to handle challenging behaviors	2.79 (0.70)	3.07 (0.46)	1.29, p =.10**
I know strategies to help my child express a variety of emotions	2.64 (0.93)	3.07 (0.70)	1.39, p =.09**
I feel confident in my ability to care for a child who curses at me or says mean and hurtful things to me	2.79 (0.89)	2.93 (0.59)	0.53, p =.30
I feel confident in my ability to care for a child who rejects me	2.64 (0.84)	3.00 (0.65)	1.28, p =.11
I feel confident in my ability to care for a child with inappropriate sexual behavior	2.29 (0.73)	2.60 (0.74)	1.16, p =.13
I feel sure of myself as a parent of a child who has experienced trauma	2.71 (0.91)	2.73 (0.80)	0.06, p =.47
I know I am doing a good job as a foster parent	2.92 (0.83)	3.13 (0.35)	0.88, p =.19
I know things about being a foster parent that would be helpful to other parents	2.79 (0.89)	3.21 (0.58)	1.51, p =.07**
I feel confident in my ability to solve most problems between my foster child (or children) and me	3.14 (0.77)	3.21 (0.58)	0.28, p =.39

Note: Participants responded to each statement on a 4-point scale where 1 was "strongly disagree," 2 was "disagree," 3 was "agree" and 4 was "strongly agree." A higher score is desired, unless marked with an asterisk.

* = a lower score is desirable.

** = significant at alpha level of 0.1.

but not feel safe" (pre-test mean = 2.64, post-test mean = 3.20; p = 0.05); "An important part of my role as a parent is to identify trauma reminders (i.e., "triggers") in the lives of the children I foster" (pre-test mean = 3.23, post-test mean = 3.64; p = 0.09); "Bedtimes and meal-times are stressful for children who have been in traumatic situations" (pre-test mean = 2.93, post-test mean = 3.47; p = 0.02); "I feel confident about my ability to handle challenging behaviors" (pre-test mean = 2.79, post-test mean = 2.93; p = 0.10); "I know strategies to help my child express a variety of emotions" (pre-test mean = 2.64, post-test mean = 3.07; p = 0.09); and "I know things about being a foster parent that would be helpful to other parents" (pre-test mean = 2.79, post-test mean = 3.21; p = 0.07).

3.3. Qualitative results

Qualitative feedback about the Encompass program was collected from 15 caregivers. We detected seven themes in their comments related to: (1) satisfaction with the program and (2) suggestions to improve programming.

3.3.1. Satisfaction with Encompass programming

First, participants generally enjoyed the Encompass program, were satisfied with the peer supports and believed it was a valuable service, especially for new foster parents. In the words of one participant:

> "Really, in foster care, the Encompass Program was the only support I have right now. So, I don't really have outside support of any kind. DCF is kind of just in the background when I need them. So, I think the Encompass Program has been a highlight of my year."

Another participant commented:

> "Before I started the Encompass Program I felt really alone with foster care because we had come into fostering when it was the height of the pandemic. So, I felt really alone because most services were not available. So, the Encompass Program just gave me something virtually that I could do, I felt connected with other foster parents, and then that trauma piece, which I am learning more and more about as a foster parent, was also extremely helpful."

Second, participants appreciated the material supports (*e.g.,* school supplies and meals) because it freed up time and money that could then be used for other needs that their child had. One participant commented:

> "I really liked the help they gave us with the school supplies. That was of great help because sometimes money is tight. And the thing that I liked the most, honestly, was the [Lasagna Love] program. Because sometimes everyday life, stress, and the situations you have to face with the children, having one day off cooking is fantastic."

Third, participants found the one-on-one peer coaching particularly useful:

> "Because we're new to this whole situation, and it is hard and traumatic for everyone. And so just for [the Trauma Coach to offer] insight into kind of what's normal and what's not normal, and who to talk to, and what to do…[the Trauma Coach is] someone who's experienced it. So, I would say the most valuable was the one-on-one trauma coaching."

Fourth, the Skill Enhancement Peer Support Program was helpful for those able to attend because it facilitated relationship building between caregivers:

> "The support group was helpful because you got to speak to people kinda going through the same thing or if they'd gone through the same thing that you're going through as far as fostering kids and stuff like that. I think that was maybe the most helpful thing."

3.3.2. Suggestions to improve Encompass programming

Some participants felt the support groups were less than optimally

valuable because they did not offer didactic information nor guidance on how to handle specific troubling situations with their children. One participant explained:

"I wanted more guidance on how to deal with certain situations that I see with someone that's experiencing trauma."

Additionally, participants felt frustrated with the rules and regulations required by DCF and expressed a desire for help navigating system-related challenges. Although this was beyond the scope of the program as initially designed, participants suggested that it may be a valuable addition to future iterations of the program. One participant explained that unfamiliarity with the rules and regulations was the greatest challenge they experienced as a foster parent:

"Because we just had zero experience with DCF at all and we didn't know. I didn't know what the rules were, I didn't know what our rights were, I didn't know what [my foster child's] rights were. I didn't know anything."

Finally, participants suggested that during recruitment, Encompass staff should clarify what the program entails, and that additional information might boost enrollment:

"And maybe, just communicating, like, okay, it's gonna be this way. Like, when I did it, we were just doing the weekly visits, but I had no idea how long it was gonna go for or when it was switching. So, I was just going with the motions. So, maybe just letting people know what the structure is. Because maybe [others] just didn't wanna sign up because they didn't know what it was and how long it would be, and how much it would take out of their time."

Another caregiver said:

"I guess I would like to understand more, I felt that I wasn't really explained just what the program does. So, I think just understanding the knowledge of it better, of having somebody really explain more of what Encompass is there for you for and to be able to utilize their services. I think it would be more helpful to be able to have it explained better than just saying, 'Oh, utilize these guys. Use just this.'"

4. Discussion

This pilot evaluation found support for the continued testing of the Encompass foster caregiver program. Specifically, we observed positive changes overall in confidence in trauma-informed foster care provision, and the use of external support care. Qualitative evidence suggests that participants enjoyed the emotional and material support offered by the program, but felt the details of the program could have been more explicit during recruitment. For example, some participants felt that Encompass could offer more in terms of helping caregivers navigate challenges related to working with DCF, yet that was not one of the objectives of Encompass and could have been clarified upfront. Our findings are consistent with prior research that finds that training in trauma-informed parenting using the Resource Parent Curriculum may increase foster caregivers' knowledge on the impact of traumatic experiences on foster children, and caregivers' perceived self-efficacy related to parenting a child that has experienced trauma (Konijn et al., 2020; Murray et al., 2019; Sullivan et al., 2016). Prior research has also demonstrated that training in trauma-informed fostering may increase foster caregivers' tolerance of children's behaviors (Murray et al., 2019; Sullivan et al., 2016) and decrease caregiver self-reported stress (Konijn et al., 2020). Evidence also suggests that foster children who display emotional or behavioral problems are more likely to experience placement instability than foster children who do not struggle with emotional or behavioral problems (Barth et al., 2007). When foster caregivers lack a trauma-informed perspective of children's trauma-related behavioral challenges, and experience high levels of parental stress and perceived parental inadequacy as a result, they may be more likely to request a placement change (Sullivan et al., 2016). Thus, increasing caregivers'

knowledge, tolerance, and perceived ability to respond to foster children's trauma-related behaviors may have a positive impact on placement stability and caregiver retention. Notably, changes in caregiver confidence in TIC were more modest than hypothesized. This may be the result of a ceiling effect at baseline; caregiver confidence was moderate to high at baseline leaving relatively little room for increases at post-test. Although we adjusted our significance level to reflect the small sample size, modest changes may also be the result of low power leading to a weakened ability to detect a large effect size.

These findings are novel in that they suggest that community engagement and support for foster caregivers, including community volunteer support and peer support, may also have a positive impact on foster caregiver and children outcomes. While a number of evidence-based interventions show promise in improving foster parenting practices and placement stability (Fisher et al., 2009; Leve et al., 2012; Murray et al., 2019; Sullivan et al., 2016), few of these interventions prioritize community and peer engagement and support. Evidence from this evaluation suggests that providing foster caregivers with peer support and material resources delivered by other local foster caregivers and community volunteers may have an impact on foster caregivers' willingness to reach out to external community supports for extra assistance when needed. Nevertheless, foster caregivers in this study described persistent challenges related to traversing the child welfare system and interacting with DCF, which underscores the significance of challenges that are beyond the scope of what this program was designed to address. While our findings suggest that a community-based intervention that delivers emotional, informational, and material support can improve caregiver satisfaction and knowledge, efforts to address major systemic issues associated with caregiver turnover, case worker training, communication between agency staff and foster parents, and resource restraints are necessary to maximize caregiver retention, placement stability, and improved child outcomes. In the meantime, community-based interventions centered on providing social support to foster caregivers may consider including or identifying other supports specifically related to navigating the complexities of the child welfare system broadly.

There are several limitations of this pilot evaluation. First, we did not use a control group or comparison group for the caregiver survey. It is possible that all foster caregivers increase their confidence in trauma-informed foster care provision over time. However, that possibility seems unlikely because most foster caregivers are not exposed to information about trauma, its impact on a child's behavior and trauma-informed parenting. Second, the Encompass intervention group was small. Although participation in the evaluation study was excellent (94%), there were only 17 respondents. Low engagement in the program is likely the result of caretakers' limited time, as well as a lack of clear communication about the services and potential benefits the Encompass program offers, the structure of the program and the time commitment required for participation. It is also possible that participants felt that they already had adequate support, were already receiving similar supports elsewhere, or did not feel that the supports being offered met their needs. Future evaluation of Encompass using a larger sample is needed, and research designed to understand how to increase engagement and enrollment among busy, burnt out caregivers is a worthwhile endeavor. Third, our findings may lack external validity as a result of selection bias; the Encompass Project Coordinator received contact information for 110 families, yet only 29 elected to participate in the programming and evaluation. The Encompass Project Coordinator did not collect demographic information on the 110 families that they contacted for potential enrollment. Thus, demographic information on the 81 families that elected not to participate in the program is not available, and the extent and nature of possible selection bias could not be formally evaluated. An examination of the characteristics of caregivers who chose not to engage in the program should be considered during a full-scale evaluation of the program in order to assess potential selection bias and possible resulting spuriousness. Finally, out of

necessity, we used original measures to assess caregivers' use of external and natural supports. However, our measure had good face validity as determined by clinical experts, and had good reliability in this sample.

This pilot evaluation will inform a number of recommendations for the next phase of programming. First, awareness and information about the program and how foster families can be involved should be more widely disseminated, especially to social workers who interact with foster families regularly. Second, programming should be modified as possible to reflect suggestions provided by families that participated in this pilot study, especially with respect to helping families navigate challenges relative to interacting with DCF, or identifying other resources to help families with this challenge. While it is beyond the scope of this study to examine systemic challenges associated with the child welfare system in Massachusetts, results from this study suggest that there is a need to consider the ways in which the system can better support foster caregivers, and how large-scale improvements to the system can be made. Third, the Encompass program staff will continue to build community engagement and support in order to continue to recruit volunteers and Peer Trauma Coaches. Fourth, bolstering strategies to reduce research attrition will strengthen the validity of future evaluations.

5. Conclusion

Overall, evidence from this pilot evaluation suggests that the Encompass program may have a positive impact on caregiver knowledge about trauma, capacity to provide trauma-informed foster care to children, and use of community-based supports. Continued evaluation of the full-scale implementation of the Encompass program during 2022–2024 will be informative about program effectiveness.

CRediT authorship contribution statement

Julia K. Campbell: Conceptualization, Methodology, Formal analysis, Investigation, Writing – original draft, Writing – review & editing. **Sandra P. Soria Jiménez:** Methodology, Formal analysis, Investigation, Writing – review & editing. **Sarah Ahola:** Writing – review & editing. **Megan Hempstead:** Writing – review & editing, Funding acquisition. **Amie Shei:** Writing – review & editing, Funding acquisition. **Emily F. Rothman:** Conceptualization, Formal analysis, Investigation, Writing – review & editing, Funding acquisition, Supervision.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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